

Installation Materials 2021/2022

For Professional Market



Installation Materials 2022/2023

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Etman

Etman is a brand of electrical products for professional market, which is established in 1990, and aims to be a professional manufacturer and supplier for electrical products. For 30 years, taking technology, safety, environmental protection and energy saving as its own duty, Etman has become famous in the Northern Europe electric industry by virtue of dedicated and practical style, professional and innovative electric products and efficient leading technology.

Today, Etman has 6 sales subsidiaries, 10 electrical outlets, and nearly 500 employees working all over Europe and China. Etman International ASA is a Norwegian holding group and its subsidiaries are located in China, Norway, Sweden and Finland. Etman Electric (Changzhou) Co., Ltd. is the manufacturing base of the group and is located in Changzhou, which is approximately 180km west of Shanghai, one of the China's most attractive areas for production. Our company is ISO9001, ISO14001 and ISO45001 certified and has hundreds approved items by Semko, VDE, GS, etc.

It is our commitment to provide safer, more energy-efficient and more intelligent electrical products for more professional consumers and end users.



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© H07V-R

Building wires are widely used for fixed electrical installations.
Flexible cords are also used for most domestic electric appliances.

Standards

International: IEC 60227-1

Certificate(s): VDE, CE

Construction characteristics

Conductor flexibility: Stranded class 2

Insulation: PVC

Conductor material: Bare copper

Electrical characteristics

Rated Voltage U_0/U (Um): 450 / 750 V

Mechanical characteristics

Mechanical resistance to impacts: Low

Cable flexibility: Rigid

Usage characteristics

Max. conductor temperature in service: 70°C

Short-circuit max. conductor temperature: 160°C

Operating temperature range: -5°C to 60°C

Weather resistance: Good

Flame retardant: C2, NF C 32-070

Chemical resistance: Accidental

Water proof: Low



Packed in plastic reel

Art. No.	Description/Remark	Packing
80700110	1.5mm ² , blue	150M
80700210	1.5mm ² , black	150M
80700310	1.5mm ² , yellow/green	150M
80700410	1.5mm ² , brown	150M
80700510	1.5mm ² , white	150M
80700610	1.5mm ² , grey	150M
80700710	1.5mm ² , orange	150M
80701110	2.5mm ² , blue	100M
80701210	2.5mm ² , black	100M
80701310	2.5mm ² , yellow/green	100M
80701410	2.5mm ² , brown	100M
80701510	2.5mm ² , white	100M
80701610	2.5mm ² , grey	100M
80701710	2.5mm ² , orange	100M
80702110	4.0mm ² , brown	150M
80702210	4.0mm ² , blue	150M
80702310	4.0mm ² , yellow/green	150M
80703110	6.0mm ² , brown	150M
80703210	6.0mm ² , blue	150M
80703310	6.0mm ² , yellow/green	150M



LV Installation Wire



Etlne

Art.No.	Type	Description/Remark	Packing
80706100	ETM361S	3x1.5mm ² (brown, blue, yellow/green)	100M / box
80706200	ETM362S	3x2.5mm ² (brown, blue, yellow/green)	100M / box
80706300	ETM363S	3x4.0mm ² (brown, blue, yellow/green)	50M / box
80706400	ETM364S	3x6.0mm ² (brown, blue, yellow/green)	50M / box
80706500	ETM365S	4x1.5mm ² (brown, blue, black, yellow/green)	50M / box
80706600	ETM366S	4x2.5mm ² (brown, blue, black, yellow/green)	50M / box

Pre-load in flexible tube

Type	Description/Remark
80702021	Cable H07V-R 2C1.5 with 16mm conduit (Blue , White) 50M/Roll
80702022	Cable H07V-R 2C1.5 with 16mm conduit (Blue, Yellow/Green) 50M/Roll
80706001	Cable H07V-R 2C1.5 with 20mm conduit (Blue, Yellow/Green) 50M/Roll
80703020	Cable H07V-R 3C1.5 with 16mm conduit (Brown, Blue , Yello/Green) 50M/Roll
80703024	Cable H07V-R 3C1.5 with 16mm conduit (Black , Blue , yellow/Green) 50M/Roll
80704010	Cable H07V-R 4C1.5 with 16 mm conduit (Brown, Blue , Black, Yello/Green) 50M/Roll
80703120	Cable H07V-R 3C2.5 with 16mm conduit (Brown, Blue , Yello/Green) 50M/Roll
80706010	Cable H07V-R 5C1.5 with 20mm conduit (Brown, Blue, Black, Grey, Yello/Green) 50M/Roll
80707010	Cable H07V-R 6C1.5 with 20mm conduit (Brown, Blue , Black, Orange, White, White) 50M/Roll
80707011	Cable H07V-R 6C1.5 with 20mm conduit (Brown, Blue , Yello/Green, Orange, White, White) 50M/Roll
80708010	Cable H07V-R 5C2.5 with 20mm conduit (Brown, Blue, Black, Grey, Yello/Green) 50M/Roll

* Other combinations are feasible



LV Installation Wire



© H07Z1-R

Name:

Single core cables, insulated with halogen-free thermoplastic compound, for fixed wiring

TYPE: H07Z1-R 1x1.5...6.0mm²

Conductors:

Rigid stranded, copper, round

Insulated material:

FR-PEX

LSZH (IEC 61034, IEC 60754-2)

Operating temperature: Maximum 70 °C. Minimum bending 0 °C

Colours:

Blue, Black, Green/Yellow, Brown, White, Grey, Orange

The product is in conformity with the provisions of the following European directive(s):

LVD

RoHS 2.0

Certificate(s): Semko, CE

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN50525-3-31

Voltage Ratings: 450/750 volts grade

Minimum bending radius:

Diameter up to 10-4×overall diameter

Diameter above 25mm-5×overall diameter

Product info:

For electric power, lighting and internal wiring

H07Z1-R (FQ, S07Z1-R) is a halogen-free, Flame retardant insulated installation line of extremely low friction material with a round rigid stranded copper conductor. The cable is designed in accordance with EN 50525-3-31 where applicable. The conductor has thread count and resistance according to EN60228 class 2. AVCP (Assessment and Verification of Constancy of Performance): System 3. The cable meets fire class Dca-s2,d0,a1 according to CPR, harmoniserad standard EN50575. The conductor insulation must be protected against direct UV light which can occur, for example, in lighting fixtures and light signs.



LV Installation Wire



Packed in plastic reel

Art. No.	Description/Remark	Packing
80708110	1.5mm ² , Blue	150M
80708210	1.5mm ² , Black	150M
80708310	1.5mm ² , Yellow/Green	150M
80708410	1.5mm ² , Brown	150M
80708510	1.5mm ² , White	150M
80708610	1.5mm ² , Grey	150M
80708710	1.5mm ² , Orange	150M
80709110	2.5mm ² , Blue	100M
80709210	2.5mm ² , Black	100M
80709310	2.5mm ² , Yellow/Green	100M
80709410	2.5mm ² , Brown	100M
80709510	2.5mm ² , White	100M
80709610	2.5mm ² , Grey	100M
80709710	2.5mm ² , Orange	100M
80710110	4.0mm ² , brown	150M
80710210	4.0mm ² , blue	150M
80710310	4.0mm ² , yellow/green	150M
80720110	6.0mm ² , brown	150M
80720210	6.0mm ² , blue	150M
80720310	6.0mm ² , yellow/green	150M



Pre-load in flexible tube

Type	Description/Remark
80702050	Cable H07Z1-R 2C1.5 with 16mm conduit (Blue, White) 50M/Roll
80702051	Cable H07Z1-R 2C1.5 with 16mm conduit (Blue, Yellow/Green) 50M/Roll
80702052	Cable H07Z1-R 2C1.5 with 20mm conduit (Blue, Yellow/Green) 50M/Roll
80703050	Cable H07Z1-R 3C1.5 with 16mm conduit (Brown, Blue, Yello/Green) 50M/Roll
80703051	Cable H07Z1-R 3C1.5 with 16mm conduit (Black, Blue, yellow/Green) 50M/Roll
80704050	Cable H07Z1-R 4C1.5 with 16 mm conduit (Brown, Blue, Black, Yello/Green) 50M/Roll
80703052	Cable H07Z1-R 3C2.5 with 16mm conduit (Brown, Blue, Yello/Green) 50M/Roll
80705050	Cable H07Z1-R 5C1.5 with 20mm conduit (Brown, Blue, Black, Grey, Yello/Green) 50M/Roll
80706050	Cable H07Z1-R 6C1.5 with 20mm conduit (Brown, Blue, Black, Orange, White, White) 50M/Roll
80706051	Cable H07Z1-R 6C1.5 with 20mm conduit (Brown, Blue, Yello/Green, Orange, White, White) 50M/Roll
80708050	Cable H07Z1-R 5C2.5 with 20mm conduit (Brown, Blue, Black, Grey, Yello/Green) 50M/Roll



* Other combinations are feasible

LV Installation Wire



© H07Z1-U

Name:

Single core cables, insulated with halogen-free thermoplastic compound, for fixed wiring

TYPE: H07Z1-U 1×1.5...6.0mm²

Conductors:

Rigid solid, copper, round

Insulated material:

FR-PEX

LSZH (IEC 61034, IEC 60754-2)

Operating temperature: Maximum 70 °C. Minimum bending 0 °C

Colours:

Blue, Black, Green/Yellow, Brown, White, Grey, Orange

The product is in conformity with the provisions of the following European directive(s):

LVD

RoHS 2.0

Certificate(s): Semko, CE

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN50525-3-31

Voltage Ratings: 450/750 volts grade

Minimum bending radius:

Diameter up to 10-4×overall diameter

Diameter above 25mm-5×overall diameter

Product info:

For electric power, lighting and internal wiring

H07Z1-U (EQ, S07Z1-U) is a halogen-free, Flame retardant insulated installation line of extremely low friction material with a round rigid solid copper conductor. The cable is designed in accordance with EN 50525-3-31 where applicable. The conductor has thread count and resistance according to EN60228 class 1. AVCP (Assessment and Verification of Constancy of Performance): System 3. The cable meets fire class Dca-s2,d0,a1 according to CPR, harmoniserad standard EN50575. The conductor insulation must be protected against direct UV light which can occur, for example, in lighting fixtures and light signs.



LV Installation Wire



Packed in plastic reel

Art. No.	Description/Remark	Packing
80708160	1.5mm ² , Blue	150M
80708260	1.5mm ² , Black	150M
80708360	1.5mm ² , Yellow/Green	150M
80708460	1.5mm ² , Brown	150M
80708560	1.5mm ² , White	150M
80708660	1.5mm ² , Grey	150M
80708760	1.5mm ² , Orange	150M
80709160	2.5mm ² , Blue	100M
80709260	2.5mm ² , Black	100M
80709360	2.5mm ² , Yellow/Green	100M
80709460	2.5mm ² , Brown	100M
80709560	2.5mm ² , White	100M
80709660	2.5mm ² , Grey	100M
80709760	2.5mm ² , Orange	100M
80710160	4.0mm ² , brown	150M
80710260	4.0mm ² , blue	150M
80710360	4.0mm ² , yellow/green	150M
80720160	6.0mm ² , brown	150M
80720260	6.0mm ² , blue	150M
80720360	6.0mm ² , yellow/green	150M



Pre-load in flexible tube

Type	Description/Remark
80702060	Cable H07Z1-U 2C1.5 with 16mm conduit (Blue, White) 50M/Roll
80702061	Cable H07Z1-U 2C1.5 with 16mm conduit (Blue, Yellow/Green) 50M/Roll
80702062	Cable H07Z1-U 2C1.5 with 20mm conduit (Blue, Yellow/Green) 50M/Roll
80703060	Cable H07Z1-U 3C1.5 with 16mm conduit (Brown, Blue, Yello/Green) 50M/Roll
80703061	Cable H07Z1-U 3C1.5 with 16mm conduit (Black, Blue, yellow/Green) 50M/Roll
80704060	Cable H07Z1-U 4C1.5 with 16 mm conduit (Brown, Blue, Black, Yello/Green) 50M/Roll
80703062	Cable H07Z1-U 3C2.5 with 16mm conduit (Brown, Blue, Yello/Green) 50M/Roll
80705060	Cable H07Z1-U 5C1.5 with 20mm conduit (Brown, Blue, Black, Grey, Yello/Green) 50M/Roll
80706060	Cable H07Z1-U 6C1.5 with 20mm conduit (Brown, Blue, Black, Orange, White, White) 50M/Roll
80706061	Cable H07Z1-U 6C1.5 with 20mm conduit (Brown, Blue, Yello/Green, Orange, White, White) 50M/Roll
80708060	Cable H07Z1-U 5C2.5 with 20mm conduit (Brown, Blue, Black, Grey, Yello/Green) 50M/Roll



* Other combinations are feasible

LV Installation Wire



TP90

Portable 90 °C double insulated cable for indoor low-voltage installations.

Example: Halogen lamps, down-light, solar system, speaker cable.

Standards

Construction: EN 50525

Flame retardant: IEC 60332-1

Halogen free: No

Certificate(s): CE

Characteristics

Maximum operating temperature: 90 °C

Operating voltage, U₀ / U: 300 / 500V

Cenelec designation: N05ZVH2-R

Conductor: Stranded tinned copper

Insulation: Cross-linked Polyethylene (PEX)

Sheath: PVC

Colour: White

Marking: designation, dimension, meter

Packing: Etlne box

**Type designation**

Art.No.	Cross Section(mm ²)	Dimension	Delivery Length (m)
81009015	2x1.5	4.8x7.8	100
81009025	2x2.5	5.6x9.3	100



Rubber Cables



© H07RN-F

H07 is an oil and grease resistant flexible cable, durable against high temperature, moisture and frost. It may be used for temporary installation indoors and outdoors and is suitable to connect machines and other materials that require a flexible cable. This cable can be used in refrigerating installations. The cable can also be buried but with extra mechanical protection.

Standard: EN50525-2-21

Max continuous operating conductor temperature in normal use:

+60°C (in every case of mobile installation)

+85°C (fixed protected installation)

+200°C (in short circuit)

Permissible current rating is measured for an ambient temperature of 30°C and a maximum operating and conductor temperature of 85°C. For other temperature please refer to correction factors.

Certificate(s): VDE

Construction characteristics

Conductor material: Copper

Conductor shape: Circular

Conductor flexibility: Flexible class 5

Outer sheath: Rubber compound

Halogen free: No

Electrical characteristics

Rated Voltage U_0/U (Um): 450 / 750 V

Mechanical characteristics

Mechanical resistance to impacts: Good

Cable flexibility: Flexible

Usage characteristics

Ambient installation temperature range: -35°C to 55°C

Maximum operating temperature: 85°C

Short-circuit max. conductor temperature: 200°C

Chemical resistance: Oil resistant

Flame retardant: IEC 60332-1

UV resistance: Yes

Weather resistance: Very good

Type designation

Art.No.	Cross section (mm ²)	Sheath colour
80601010	3G1.5	Black
80601110	3G2.5	Black
80601210	4G2.5	Black
80601310	4G4.0	Black
80601410	4G6.0	Black
80601510	5G1.5	Black
80601610	5G2.5	Black
80606010	3G1.5	Red
80606110	3G2.5	Red
80606210	4G2.5	Red
80606310	4G4.0	Red
80606410	4G6.0	Red
80606510	5G1.5	Red

Rubber Cables



© H05RR-F

H05 is an oil and grease resistant flexible cable, durable against high temperature, moisture and frost. It may be used for temporary installation indoors and outdoors and is suitable to connect machines and other materials that require a flexible cable. This cable can be used in refrigerating installations. The cable can also be buried but with extra mechanical protection.

Standard: EN50525-2-21

Max continuous operating conductor temperature in normal use:

+60°C (in every case of mobile installation)

+85°C (fixed protected installation)

+200°C (in short circuit)

Permissible current rating is measured for an ambient temperature of 30°C and a maximum operating and conductor temperature of 85°C. For other temperature please refer to correction factors.

Certificate(s): VDE.

Construction characteristics

Conductor material: Copper

Conductor shape: Circular

Conductor flexibility: Flexible class 5

Outer sheath: TRS (Tough rubber sheath)

Halogen free: No

Electrical characteristics: Rated Voltage U_0/U (Um): 300 / 500 V

Mechanical characteristics

Mechanical resistance to impacts: Good

Cable flexibility: Flexible

Usage characteristics

Ambient installation temperature, range: -35°C to 55°C

Maximum operating temperature: 85°C

Short-circuit max. conductor temperature: 200°C

Chemical resistance: Oil resistant

UV resistance: Yes

Flame retardant: IEC 60332-1

Weather resistance: Very good

Type designation

Art.No.	Cross section (mm ²)	Sheath colour
80600010	3G1.5	Black
80600110	3G2.5	Black
80605010	3G1.5	Red
80605110	3G2.5	Red



© Cat 5e Cable

Category 5e cables are the standard 100MHz. Manufactured in accordance with TIA 568-B and IEC 61156-5, they are suitable for basic voice & data installations.

U/UTP construction

Complies to latest cat 5e standards

Supports Gigabit Ethernet

Guaranteed performance to 100MHz

Single foil offers EMC performance

Standards

International: ISO/IEC 11801

Certificate(s): UL

Performance

Category 5e cables are compliant with the requirements of the TIA 568-B and IEC 61156-5.



Electrical Performance

All values are specified at 20°C

Frequency	Attenuation dB/100m	NEXT dB	ACR dB/100m	PS NEXT (*) dB	ELFEXT dB/100m	PSELFEXT dB/100m	RL dB
4	4.1	56.3	52.2	53.3	51.7	49.0	23.0
10	6.5	50.3	43.8	47.3	43.8	41.0	25.0
16	8.3	47.2	38.9	44.3	39.7	36.9	25.0
20	9.3	45.8	36.5	42.8	37.7	35.0	25.0
31.25	11.7	42.9	31.2	39.9	33.9	31.1	23.6
62.5	17.0	38.4	21.4	35.4	27.9	25.1	21.5
100	22.0	35.3	13.3	32.3	23.8	21.0	20.1

(*) Dual cable versions additionally comply to the additional PSNEXT requirements for multi-unit cables as specified in the relevant TIA and IEC cable standards.

Type designation

Art.No.	Type of cable	Sheath colour	Length(m)	Packing
80101210	U/UTP	Grey	305	Box



© Cat 6 Cable

Cat 6 cables are manufactured and tested according to the latest category 6 specifications.

Unshielded construction

Complies to the latest Category 6 standards

Central cross maintains geometry and performance

Supports Class E applications up to 250 MHz.

Standards

International: ISO/IEC 11801

National: TIA/EIA-568-B.2

Certificate(s): UL,CE

Design

The conductors are 24 AWG solid copper wires complying with IEC 60228. The PE central cross filler keeps the pairs in place and reduces the risks of losing performance when bending the cable.

Performance

Cat 6 cables are compliant with the requirements of the TIA 568-B.2-1 and ISO/IEC 11801.

Installation

Thanks to their small nominal outer diameter, Cat 6 cables are as easy to be installed as their Cat 5e equivalent.



Channel Performance

Values given for 2-connector channel, built with Essential-6 cable, outlet and patch panel.

Frequency	Insertion Loss dB/100m	NEXT dB	PS NEXT (*) dB	ACR dB/100m	PS ACR dB/100m	ELFEXT dB/100m	PSELFEXT dB/100m	Return Loss dB
1	4.0	65.0	62.0	65.0	62.0	63.3	60.3	19.0
4	4.2	63.0	60.5	63.0	60.5	51.2	48.2	19.0
10	6.6	56.6	54.0	56.6	47.4	43.3	40.3	19.0
16	8.3	53.2	50.6	53.2	42.3	39.2	36.2	18.0
20	9.3	51.6	49.0	51.6	39.7	37.2	34.2	17.5
31.25	11.7	48.4	45.7	48.4	34.0	33.4	30.4	16.5
62.5	16.9	43.4	40.6	43.4	23.7	27.3	24.3	14.0
100	21.7	39.9	37.1	39.9	15.4	23.3	20.3	12.0
155	27.6	36.7	33.8	36.7	6.2	19.5	16.5	10.1
200	31.7	34.8	31.9	34.8	0.1	17.2	14.2	9.0
250	35.9	33.1	30.2	33.1	-5.8	15.3	12.3	8.0

All values are specified at 20°C.

Type designation

Art.No.	Type of cable	Sheath colour	Length(m)	Packing
80101310	U/UTP	Orange	305	Box
80101320	U/UTP	Grey	305	Box

Art.No.	Type of cable	Sheath colour	Length(m)	Packing
80709010	U/UTP	Orange	50	with 16mm conduit 50M/Roll
80709020	U/UTP	Grey	50	with 16mm conduit 50M/Roll



Coaxial Cable



◎ RG-6

RG-6 is often used to carry baseband video in closed-circuit television, previously used for cable television(CATV). Generally it has poor shielding but will carry an HQ HD signal or video over short distances.

Construction characteristics

Conductor shape: Single wired
 Conductor material: Copper-clad steel
 Insulation: Foamed PE
 Outer core type: Aluminium tape and aluminium braid
 Outer sheath: PVC
 Colour: White

Dimensional characteristics

Conductor diameter: 1.0mm
 Diameter over insulation: 4.8mm
 Nominal outer diameter: 7.0mm
 Average sheath thickness: 0.66mm
 Approximate weight: 3.1kg/100m

Electrical characteristics

Characteristic impedance: 75Ohm

Transmission characteristics

Attenuation, max. 55 MHZ: 6.1dB/100m
 Attenuation, max. 250 MHZ: 13.0dB/100m
 Attenuation, max. 450 MHZ: 17.8dB/100m
 Attenuation, max. 865 MHZ: 25.7dB/100m

Usage characteristics

Laying operation bending radius: 35mm
 Packaging: Reel
 Ambient installation temperature range: -10°C to 50°C
 Operating temperature range: -15°C to 70°C

Type designation

Art.No.	Type of cable	Sheath colour	Length(m)	Packing
80200010	RG-6	White	100	Reel



Coaxial Cable



◎ SAT

SAT is often used to transmit TV signal, video observation system and others.

Construction characteristics

Conductor shape: Single wired
 Conductor material: Copper
 Insulation: Foamed PE
 Outer core type: Aluminium tape and aluminium braid
 Outer sheath: PVC
 Colour: White

Dimensional characteristics

Conductor diameter: 1.0mm
 Diameter over insulation: 4.8mm
 Nominal outer diameter: 7.0mm
 Average sheath thickness: 0.85mm
 Approximate weight: 2.5kg/100m

Electrical characteristics

Characteristic impedance: 75Ohm

Transmission characteristics

Attenuation, max. 55 MHZ: 13.0dB/100m
 Attenuation, max. 250 MHZ: 17.8dB/100m
 Attenuation, max. 450 MHZ: 25.7dB/100m
 Attenuation, max. 865 MHZ: 35.6dB/100m

Usage characteristics

Laying operation bending radius: 40mm
 Packaging: Reel
 Ambient installation temperature, range: -10°C to 50°C
 Operating temperature range: -15°C to 70°C

Type designation

Art.No.	Type of cable	Sheath colour	Length(m)	Packing
80200610	SAT	White	100	Reel



Speaker Wires



Speaker Wires

Speaker wire is used to make the electrical connection between loudspeakers and audio amplifiers.

Conductors insulated by transparent PVC. Multi stranded copper conductors

Construction characteristics

Conductor flexibility: Flexible class 5

Conductor material: Bare annealed copper

Outer sheath: PVC

Screen: No

Halogen free: No

Dimensional characteristics

Numbers of cores: 2

Usage characteristics

Packaging: Reel

Ambient installation temperature range: 0°C to 50°C

Operating temperature range: 0°C to 70°C



Maximum wire lengths for two conductor copper wires

Cross section (mm ²)	2Ωload	4Ωload	6Ωload	8Ωload
0.75	1.5 M	3 M	4.5 M	6 M
1.0	2.4 M	14.9 M	7.3 M	9.7 M
1.5	3.6 M	7.3 M	11 M	15 M

Type designation

Art.No.	Cross section (mm ²)	Packing
80300010	2×1.5	100M/reel
80300500	2×2.5	100M/reel
80300600	2×4.0	100M/reel

Telecom Wires



Telecom Wires

Flat, PP-insulated, PVC-sheathed cable with fire performance according to IEC 60332-1 is used for connection of telecoms terminals like phones and modems.

Standards

International: IEC 60332-1

Construction characteristics

Conductor flexibility: Flexible class 5

Conductor material: Bare annealed copper

Insulation: PP (polypropylene)

Outer sheath: PVC

Screen: No

Halogen free: No

Dimensional characteristics

Average sheath thickness: 0.5mm

Approximate weight: 1.6kg/100m

Conductor cross-section: 0.14mm²

Outer Diameter (mm): 4.8 x 2.3

Numbers of cores: 4

Electrical characteristics

Max. DC-resistance of the conductor at 20° C: 1450hm/km

Ohmical resistance of the insulation: 100M0hm.km

Maximum operating voltage: 100V

Usage characteristics

Length: 100m

Packaging: Reel

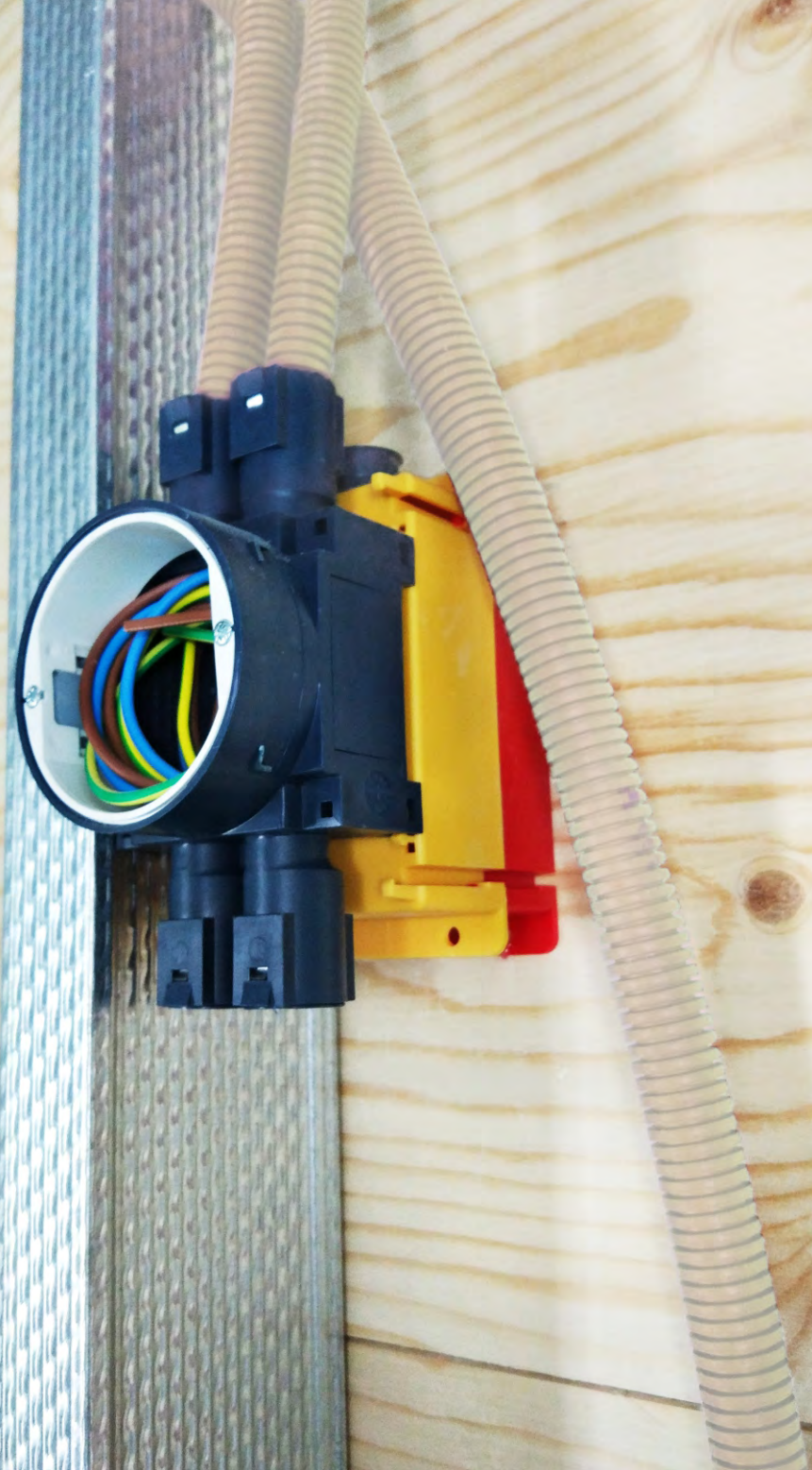
Ambient installation temperature, range: -10°C to 50°C

Operating temperature, range: -15°C to 70°C



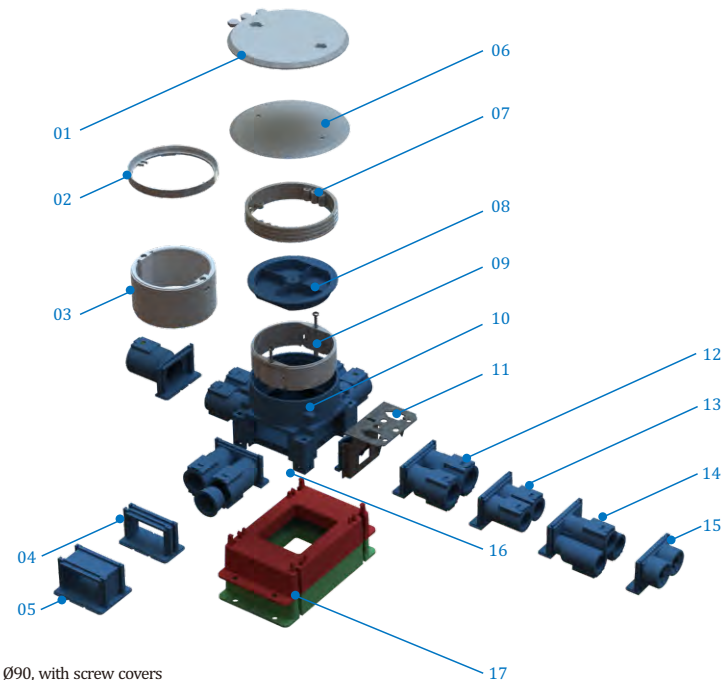
Type designation

Art.No.	Description/Remark	Packing
80500110	1x4x0.14	100M



Universal Series 

© Flush mounting wall boxes for accessories, 60mm



- 01 Cover, Ø90, with screw covers
- 02 Extension ring, H=6mm
- 03 Extra inner ring, H=37mm
- 04 ETM332s constructed for c-c distance of 71 mm between the boxes
- 05 ETM333S for c-c distance of 84 mm
- 06 Cover, Ø90
- 07 Extension ring, H=12mm. It can be stacked to height of 24mm
- 08 Plastic lid inclusive
- 09 Turn able inner ring with fixing centre 60mm and M3
- 10 For single (12-13mm) or double (24-26mm) gypsum
- 11 Steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions
- 12 Double extension, with two combined Ø16/20mm conduit entries, with locking springs and sealing plugs
- 13 Double extension, with 2xØ16mm entries, with locking springs and sealing plugs
- 14 Triangle extension, with 3xØ16mm entries, with locking springs and sealing plugs
- 15 Coupling bushes with tension reliefs for MMJ and EKK cables: 3G1.5mm² and 3G2.5mm², the outside diameters for those two are 9mm and 10mm
- 16 It can be used to fix wall boxes into wooden stanchions with 3.5*3.5 square nail
- 17 Spacer, five height spacers, 22, 25, 34, 18, 30mm. It can be stacked to height of 66, 70, 95, 120mm to adjust different heights of wooden stanchion

Universal Series



© Flush mounting wall boxes for accessories, 60mm

Main material: PP, halogen free

Colour: Blue

IP-Class: IP30

Fire hazard test: 850°C (IEC60695 - 2 - 11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE, Semko

The product complies with the standard(s):

IEC 60670-1

Technical info:

For single (12-13mm) or double (24-26mm) gypsum plates.

Ø71mm depth 60mm.

Modular system: Boxes can be ganged in comprehensive accessories.

Conduit entries: 2-way compatible Ø 20mm or Ø 16mm conduit, with locking springs and sealing plugs.

Plastic lid inclusive.

Two or more boxes can be connected by using different connecting pieces.: ETM332s constructed for c-c distance of 71 mm between the boxes and ETM333S for c-c distance of 84 mm.

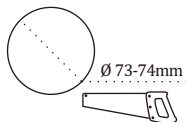
With or without Steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions.

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Type designation:

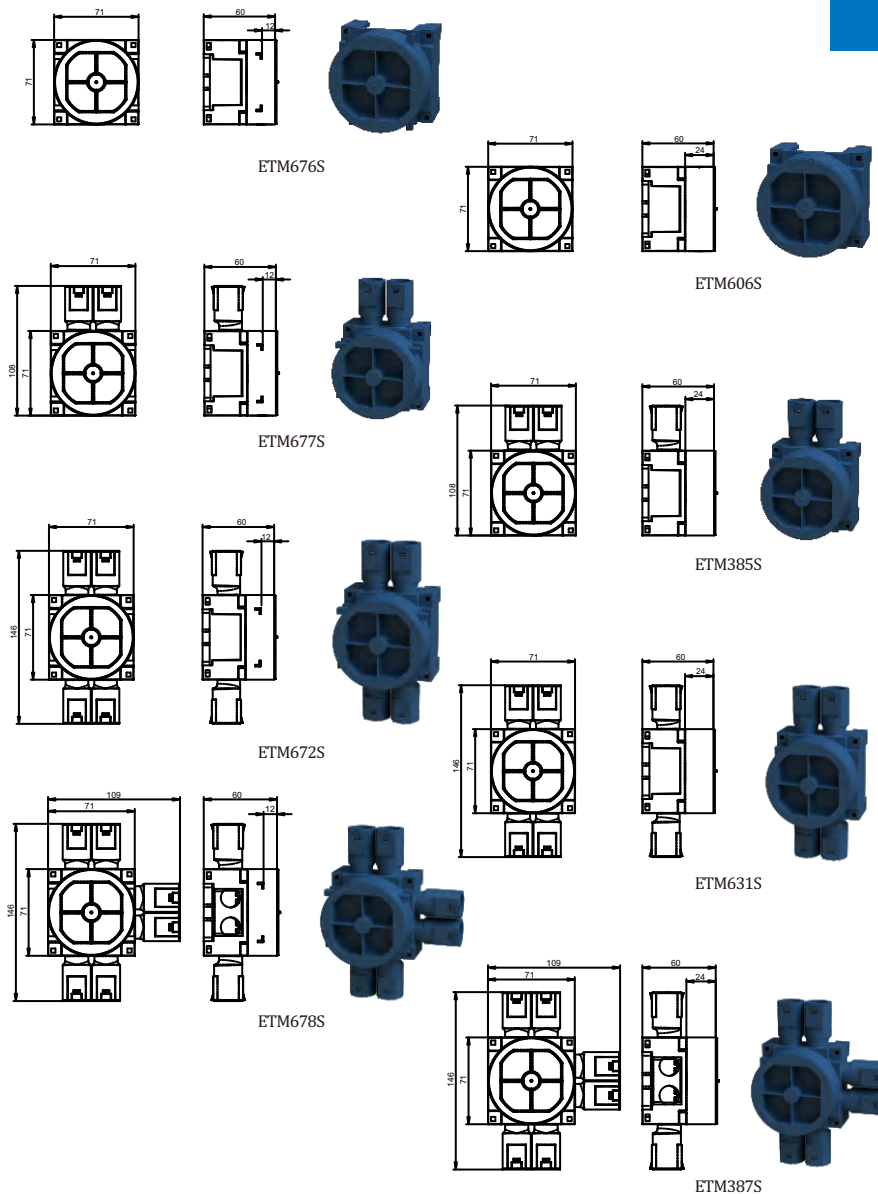
Type	Description/Remark
Without steel plate	
ETM676S	For single wall plate
ETM606S	For double wall plate
ETM677S	For single wall plate and 1x2 combined 16/20mm inlets
ETM385S	For double wall plate and 1x2 combined 16/20mm inlets
ETM672S	For single wall plate and 2x2 combined 16/20mm inlets
ETM631S	For double wall plate and 2x2 combined 16/20mm inlets
ETM678S	For single wall plate and 3x2 combined 16/20mm inlets
ETM387S	For double wall plate and 3x2 combined 16/20mm inlets



Universal Series



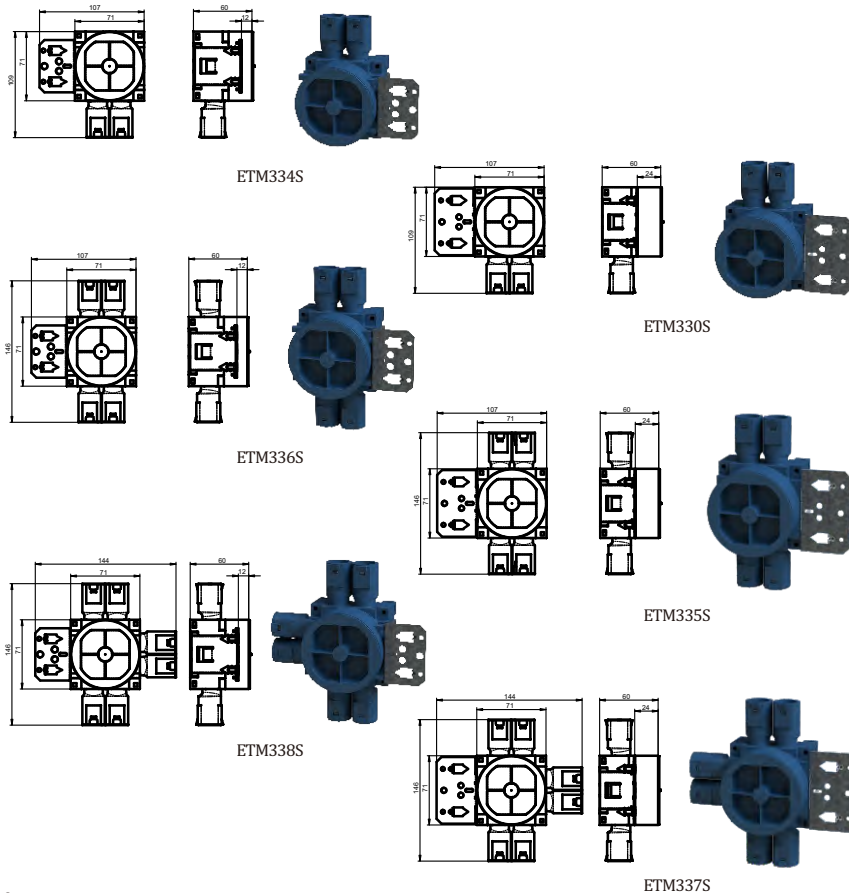
Drawing:



Universal Series



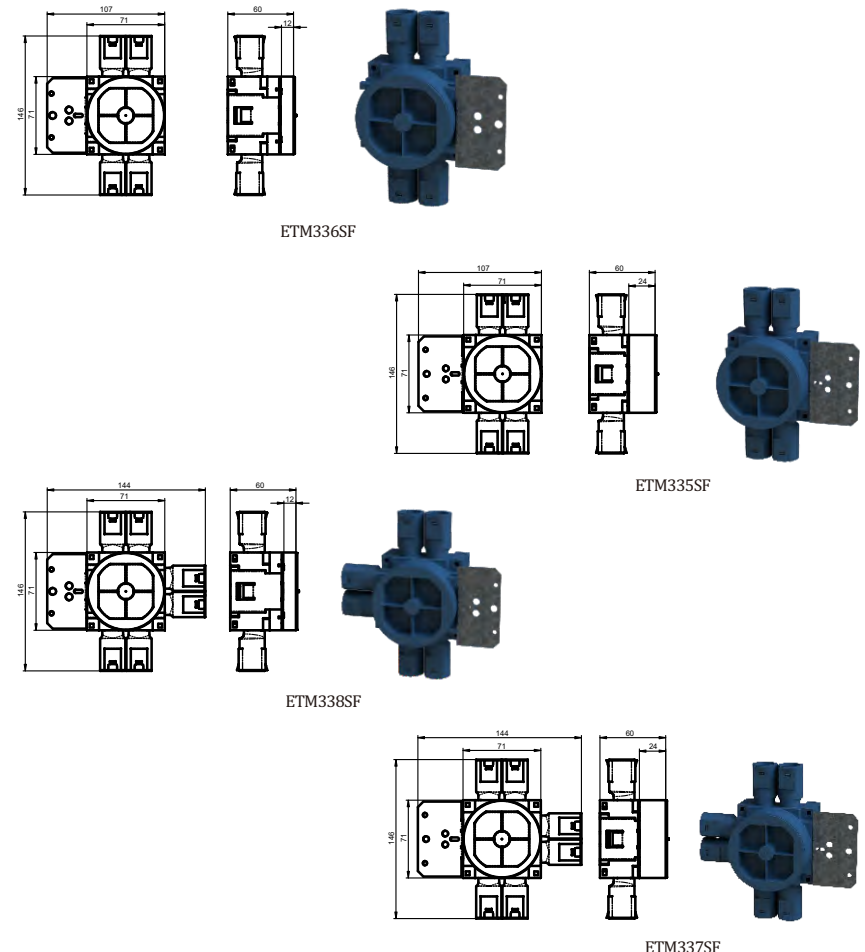
Type	Description/Remark
With steel plate for wood stanchions	
ETM334S	For single wall plate and 1x2 combined 16/20mm inlets
ETM330S	For double wall plate and 1x2 combined 16/20mm inlets
ETM336S	For single wall plate and 2x2 combined 16/20mm inlets
ETM335S	For double wall plate and 2x2 combined 16/20mm inlets
ETM338S	For single wall plate and 3x2 combined 16/20mm inlets
ETM337S	For double wall plate and 3x2 combined 16/20mm inlets



Universal Series



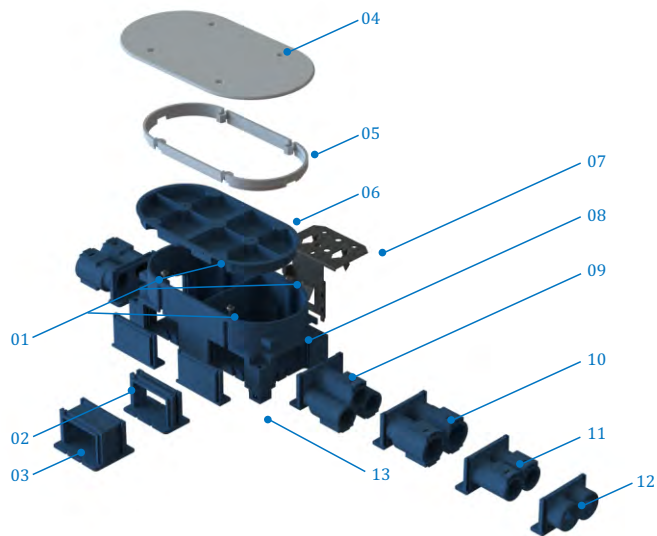
Type	Description/Remark
With steel plate for steel stanchions only	
ETM336SF	For single wall plate and 2x2 combined 16/20mm inlets
ETM335SF	For double wall plate and 2x2 combined 16/20mm inlets
ETM338SF	For single wall plate and 3x2 combined 16/20mm inlets
ETM337SF	For double wall plate and 3x2 combined 16/20mm inlets



Universal Series



© Double flush mounting wall boxes, Universal series



- 01 Fixing Centre-c 60mm and M3 screws, 71 mm gang distance
- 02 ETM332s constructed for c-c distance of 71 mm between the boxes
- 03 ETM333S for c-c distance of 84 mm
- 04 Cover
- 05 Extension ring, H=6mm. It can be stacked to height of 12,24mm
- 06 Plastic lid inclusive
- 07 Steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions
- 08 For single (12-13mm) or double (24-26mm) gypsum plates
- 09 Triangle extension, with 3xØ16mm entries, with locking springs and sealing plugs
- 10 Double extension, with two combined Ø16/20mm Conduit entries, with locking springs and sealing plugs
- 11 Double extension, with 2xØ16mm entries, with locking springs and sealing plugs
- 12 Coupling bushes with tension reliefs for MMJ and EKK cables. 3G1.5mm² and 3G2.5mm². the outside diameters for those two are 9mm and 10mm
- 13 It can be used to fix wall boxes into wooden stanchions with 3.5*3.5 square nail

Universal Series



© Double flush mounting wall boxes for accessories, 60mm

Main material: PP, halogen free

Colour: Blue

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60670-1

Technical info:

For single (12-13mm) or double (24-26mm) gypsum plates.

71*142mm depth 60mm.

Modular system: Boxes can be ganged in comprehensive accessories.

One side with 2-way compatible Ø 20mm or Ø 16mm conduit entries, with locking springs and sealing plugs.

Another side with 3-way Ø 16mm conduit entries, with locking springs and sealing plugs
Plastic lid inclusive.

Boxes can be connected with single, one and half or another double box by use of different connecting pieces: ETM332s constructed for c-c distance of 71 mm between the boxes and ETM333S for c-c distance of 84 mm.

With or without steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions.

Fixing centre c-c 60mm and M3 screws, 71 mm gang distance.

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C



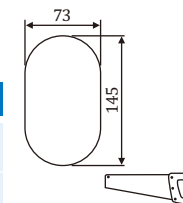
ETM638S, ETM639S



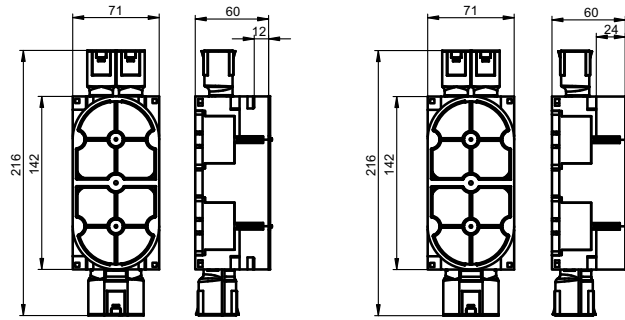
ETM610S, ETM611S

Type designation:

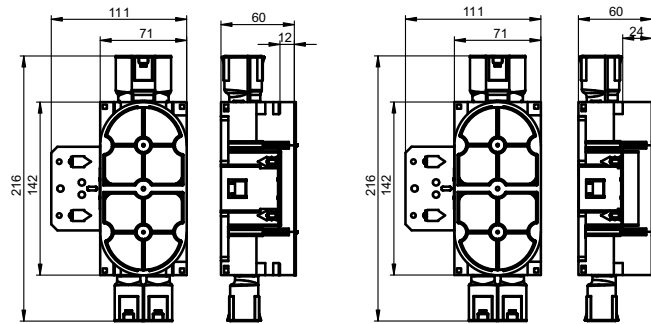
Type	Description/Remark
ETM674S	Without steel plate, for single wall plate, with 2 combined 16/20mm inlets and 3x16mm inlets
ETM639S	Without steel plate, for double wall plate, with 2 combined 16/20mm inlets and 3x16mm inlets
ETM610S	W/steelplate for single wall plate, with 2 combined 16/20mm inlets and 3x16mm inlets
ETM611S	W/steelplate for double wall plate, with 2 combined 16/20mm inlets and 3x16mm inlets



Drawing:



ETM638S, ETM639S

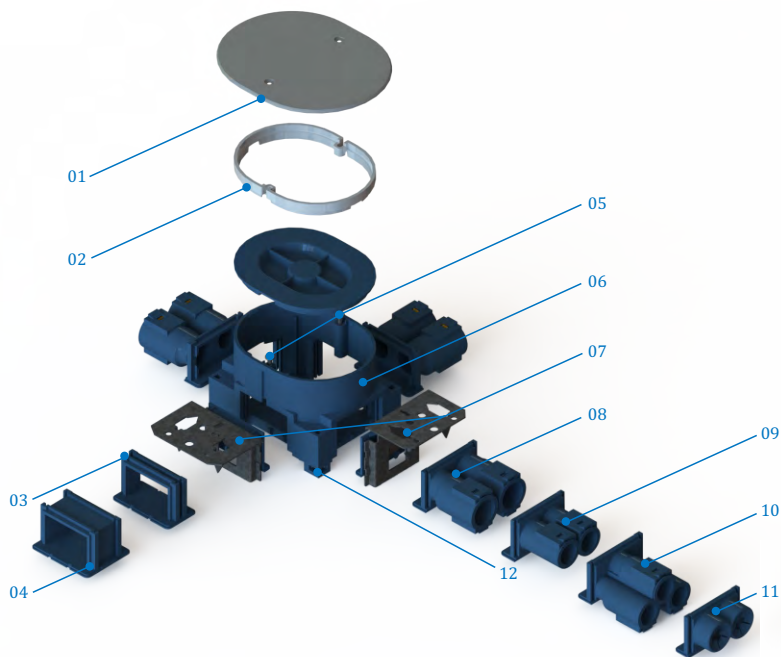


ETM610S, ETM611S

Universal Series



◎ One and half flush mounting wall boxes for accessories, 60mm



- 01 Cover
- 02 Extension ring, H=6mm. It can be stacked to height of 12,24mm
- 03 ETM332S constructed for c-c distance of 71 mm between the boxes
- 04 ETM333S for c-c distance of 84 mm.
- 05 Fixing centre c-c 60mm and M3
- 06 For single (12-13mm) or double (24-26mm) gypsum plates
- 07 Steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions
- 08 Double extension, with two combined $\varnothing 16/20$ mm conduit entries, with locking springs and sealing plugs
- 09 Double extension, with 2x $\varnothing 16$ mm entries, with locking springs and sealing plugs
- 10 Triangle extension, with 3x $\varnothing 16$ mm entries, with locking springs and sealing plugs
- 11 Coupling bushes with tension reliefs for MMJ and EKK cables: 3G1.5mm² and 3G2.5mm². the outside diameters for those two are 9mm and 10mm.
- 12 It can be used to fix wall boxes into wooden stanchions with 3.5*3.5 square nail

Universal Series



◎ One and half flush mounting wall boxes for accessories, 60mm

Main material: PP, halogen free

Colour: Blue

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60670-1

Technical info:

One and half box is a very flexible wall box and designed for the low model double Schuko socket outlets in "P" series.

For single (12-13mm) or double (24-26mm) gypsum plates.

71*90mm depth 60mm.

Modular system: Boxes can be ganged in comprehensive accessories.

With 2x2-way compatible $\varnothing 20$ mm or $\varnothing 16$ mm conduit entries, with locking springs and sealing plugs.

Plastic lid inclusive.

Boxes can be connected with single, one and half or double box by use of different connecting pieces: ETM332s constructed for c-c distance of 71 mm between the boxes and ETM333S for c-c distance of 84 mm.

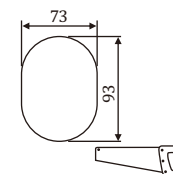
With steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions.

Fixing centre 60mm and M3 screws.

By double plaster used 6mm Extension ring (ETM617S) that can be built on top of each other.

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C



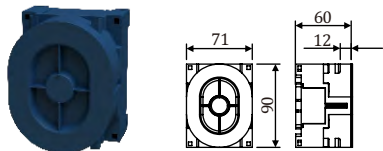
Type designation:

Type	Description/Remark
Without steel plate	
ETM600S	For single wall plate, without inlets
ETM637S	For double wall plate, without inlets
ETM673S	For single wall plate, with 2x2 combined 16/20mm inlets, vertical
ETM633S	For double wall plate, with 2x2 combined 16/20mm inlets, vertical
ETM675S	For single wall plate, with 2x2 combined 16/20mm inlets, horizontal
ETM635S	For double wall plate, with 2x2 combined 16/20mm inlets, horizontal

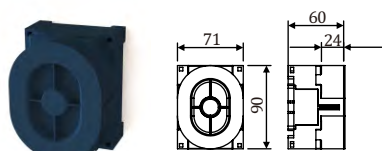
Universal Series



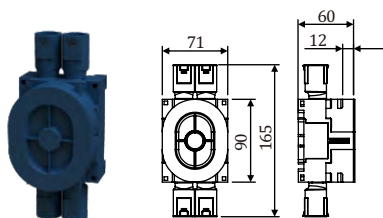
Drawing:



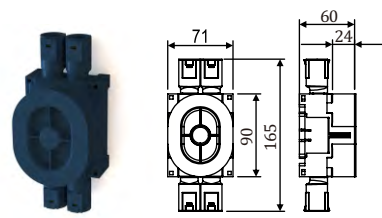
ETM600S



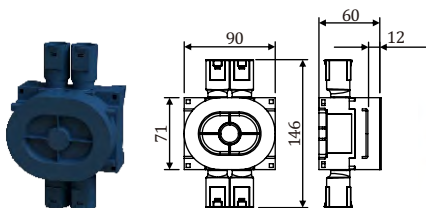
ETM637S



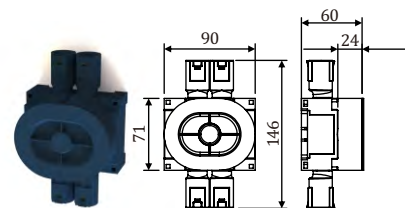
ETM673S



ETM633S



ETM675S



ETM635S

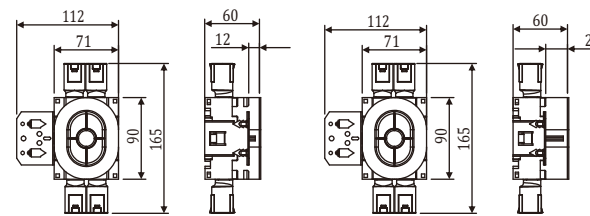
Universal Series



Type designation:

Type	Description/Remark
<i>With steel plate for wood stanchions</i>	
ETM613S	For single wall plate, with 2x2 combined 16/20mm inlets, vertical
ETM614S	For double wall plate, with 2x2 combined 16/20mm inlets, vertical
ETM615S	For single wall plate, with 2x2 combined 16/20mm inlets, horizontal
ETM616S	For double wall plate, with 2x2 combined 16/20mm inlets, horizontal

Drawing:

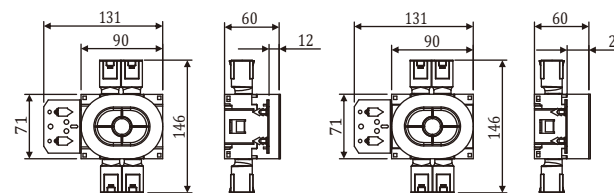


ETM613S

ETM614S



ETM613S, ETM614S



ETM615S

ETM616S



ETM615S, ETM616S

Universal Series



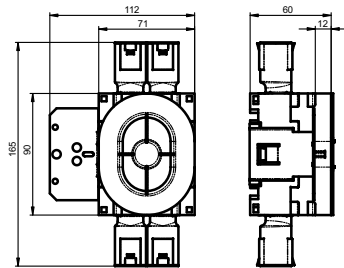
Type designation:

Type	Description/Remark
With steel plate for steel stanchions	
ETM613SF	For single gypsum with 2x2 combined Ø16/20mm inlets
ETM614SF	For double gypsum with 2x2 combined Ø16/20mm inlets
ETM615SF	For single gypsum with 2x2 combined Ø16/20mm inlets
ETM616SF	For double gypsum with 2x2 combined Ø16/20mm inlets,

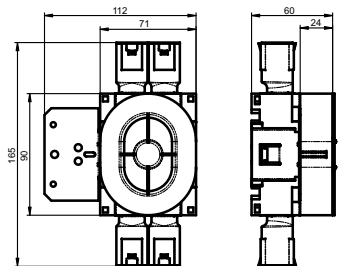
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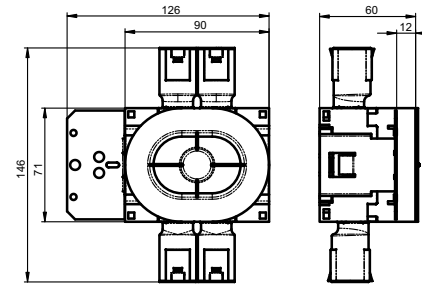
ETM613SF



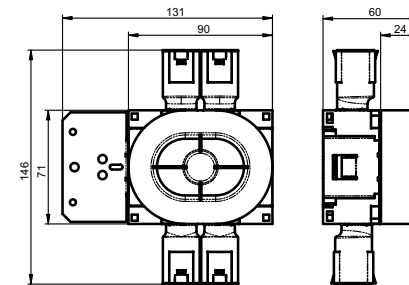
ETM614SF



Universal Series



ETM615SF

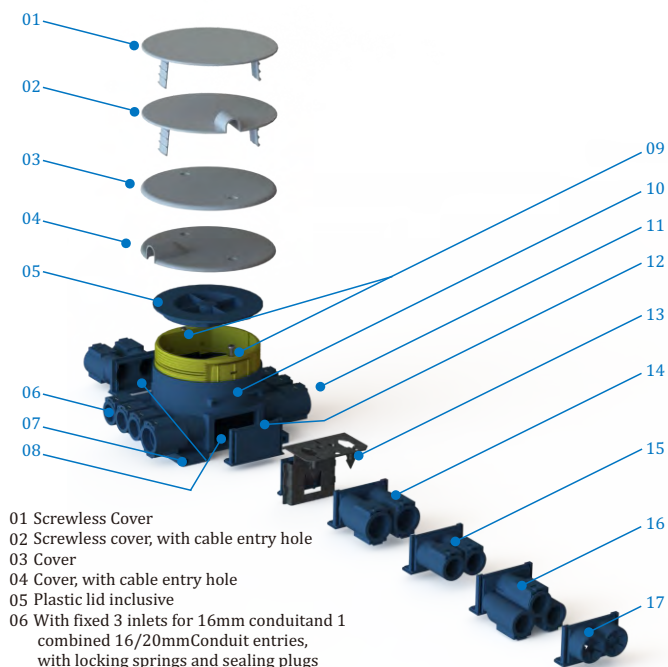


ETM616SF

Universal Series



© Flush mounting junction boxes, c-c 67mm, Universal series



- 01 Screwless Cover
- 02 Screwless cover, with cable entry hole
- 03 Cover
- 04 Cover, with cable entry hole
- 05 Plastic lid inclusive
- 06 With fixed 3 inlets for 16mm conduit and 1 combined 16/20mm Conduit entries, with locking springs and sealing plugs
- 07 It can be used to fix wall boxes into wooden stanchions with 3.5*3.5 square nail
- 08 ETM332s constructed for c-c distance of 83 mm between the boxes ETM333s for c-c distance of 96 mm.
- 09 Turn able inner ring with fixing centre 67mm and M3 screws (Pozidriv), the inner ring will be locked by locker when tightened up the screws.
- 10 For single (12-13mm) or double (24-26mm) gypsum plates
- 11 With fixed 1 inlets for 16mm conduit and 2 combined 16/20mm Conduit entries, with locking springs and sealing plugs
- 12 Standard configuration products with blind extension two side
- 13 Steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions
- 14 Double extension, with two combined Ø16/20mm conduit entries, with locking springs and sealing plugs
- 15 Double extension, with 2xØ16mm entries, with locking springs and sealing plugs
- 16 Triangle extension, with 3xØ16mm entries, with locking springs and sealing plugs
- 17 Coupling bushes with tension reliefs for MMJ and EKK cables: 3G1.5mm2 and 3G2.5mm2. the outside diameters for those two are 9mm and 10mm.

Universal Series



© Flush mounting junction boxes, 67 mm

Main material: PP, halogen free

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

The product complies with the standard(s):

EN60670-1

Certificate(s): CE

Technical info:

For single (12-13mm) or double (24-26mm) gypsum plates.

Ø83mm depth 60mm.

Modular system: Boxes can be ganged in comprehensive accessories.

Steel fastening plate is available for order, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions.

Turn able ring with fixing centre 67mm and M3 screws (Pozidriv), the inner will be locked by locker when tightened up to the screws.

Circular flush mounting box for accessory, insulated material.

With 4 inlets for 16mm conduit and 3 combined 16/20mm conduit entries, with locking springs and sealing plugs.

Only used for electrical wiring.

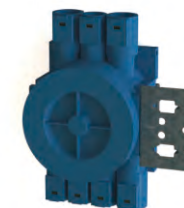
Plastic lid inclusive.

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C



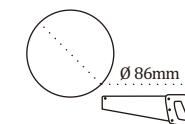
ETM394S, ETM395S



ETM398S, ETM399S

Type designation:

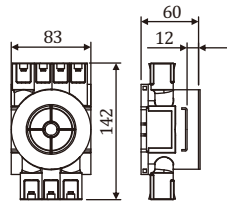
Type	Description/Remark
ETM394S	For single wall plate, without steel plate
ETM395S	For double wall plate, without steel plate
ETM398S	For single wall plate, with steel plate for wood stanchions
ETM399S	For double wall plate, with steel plate for wood stanchions



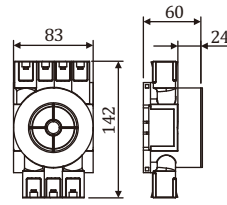
Universal Series



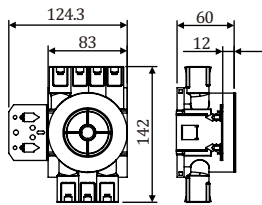
Drawing:



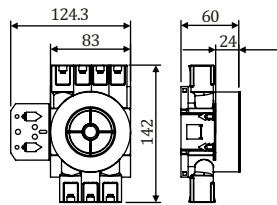
ETM394S



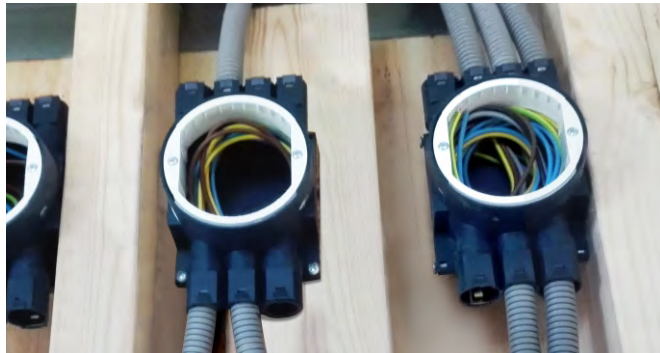
ETM395S



ETM398S



ETM399S



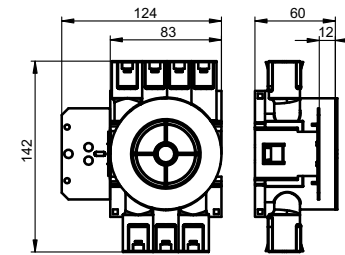
Universal Series



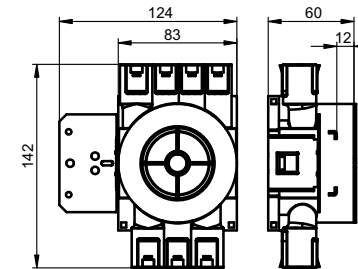
Type designation:

Type	Description/Remark
ETM398SF	c-c 67mm, 12mm, , with steel plate for steel stanchions.
ETM399SF	c-c 67mm, 24mm, , with steel plate for steel stanchions.

Drawing:



ETM398SF

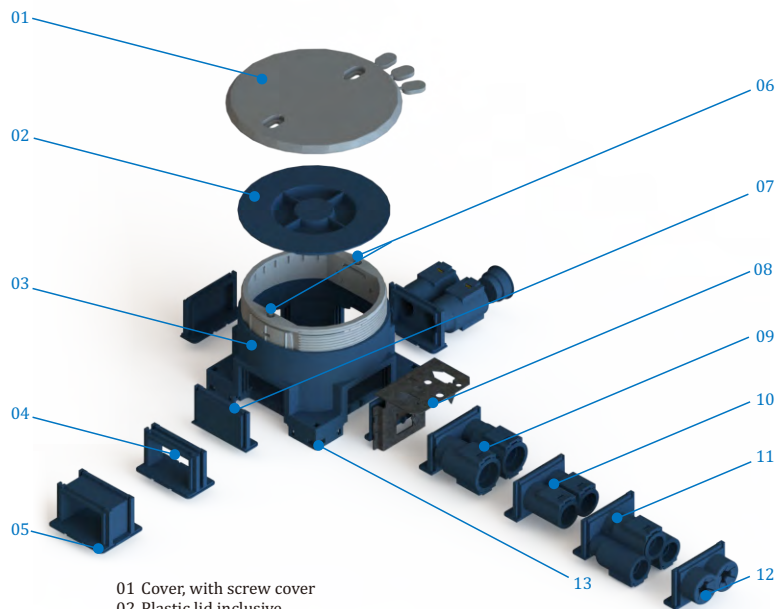


ETM399SF

Universal Series



© Flush mounting junction boxes, c-c 78mm, Universal series



- 01 Cover, with screw cover
- 02 Plastic lid inclusive
- 03 For double (24-26mm) gypsum plates
- 04 ETM332s constructed for c-c distance of 95 mm between the boxes
ETM333S for c-c distance of 108mm.
- 05 Turn able inner ring with fixing centre 67mm and M4
- 06 screws (Pozidriv), the inner ring will be locked by locker when tightened up the screws.
- 07 Standard configuration products with blind extension each side
- 08 Steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions
- 09 Double extension, with two combined $\varnothing 16/20\text{mm}$ Conduit entries, with locking springs and sealing plugs
- 10 Double extension, with 2x $\varnothing 16\text{mm}$ entries, with locking springs and sealing plugs
- 11 Triangle extension, with 3x $\varnothing 16\text{mm}$ entries, with locking springs and sealing plugs
- 12 Coupling bushes with tension reliefs for MMJ and EKK cables: 3G1.5mm2 and 3G2.5mm2, the outside diameters for those two are 9mm and 10mm.
- 13 It can be used to fix wall boxes into wooden stanchions with 3.5*3.5 square nail

Universal Series



© Flush mounting junction boxes, 78mm

Main material: PP, halogen free

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60670-1

Technical info:

Fixing centre 78mm and M4 screws.

For double (24-26mm) gypsum plates.

$\varnothing 95\text{mm}$ depth 60mm.

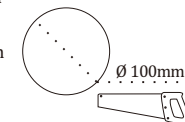
Modular system: Boxes can be ganged in comprehensive accessories. The accessories for mounting box can be used in junction box except extension inner ring.

Steel fastening plate is available for order, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions.

Plastic lid inclusive.

Working temperature: -25°C to +60°C

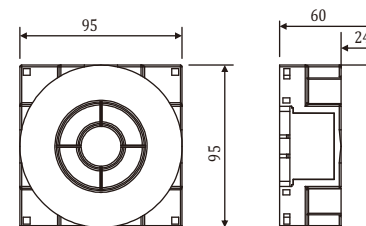
Installation temperature: -5°C to +25°C



Type designation:

Type	Description/Remark
ETM601S	Body for double wall plate

Drawing:



ETM601S

Universal Series



© Multi boxes

Main material: PP, halogen free

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60670-1

Technical info:

For use in prefabricated walls or hollow walls where installation works can be conducted from the outside of the wall and when you need an extra flush wall box. It requires a minimum panel-thickness is 6 mm.

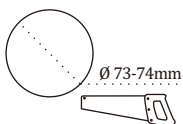
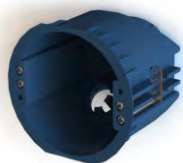
Choice Ø73 mm milling-cutter for drilling hole for the multi box in a panel.

With 2 fixed Ø16mm entries. Locking springs, sealing plugs and plastic lid are included.

Box screw distance c-c 60 mm and M3 screws.

Working temperature: -25°C to +60°C

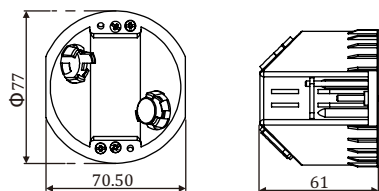
Installation temperature: -5°C to +25°C



Type designation:

Type	Description/Remark
ETM220S	Multibox for prefabricated walls, Ø71mm depth 60mm

Drawing:



ETM220S

Universal Series



© Multi boxes, 90 degree entries

Main material: PP, halogen free

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60670-1

Technical info:

For use in prefabricated walls or hollow walls where installation work can be conducted from the outside of the wall and when you need an extra flush wall box. Especially used when tight and pipes come from above.

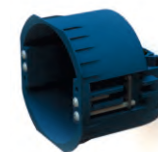
Depth: 65 mm. It requires a minimum panel-thickness of 6 mm. Multi box has 3 fixed entries for Ø16 mm plastic conduits.

With one Ø16 mm and one Ø20 mm knockout, you can open it when you need.

Choosing Ø73 mm milling-cutter for drilling hole for the multi box in a panel.

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C



ETM546S

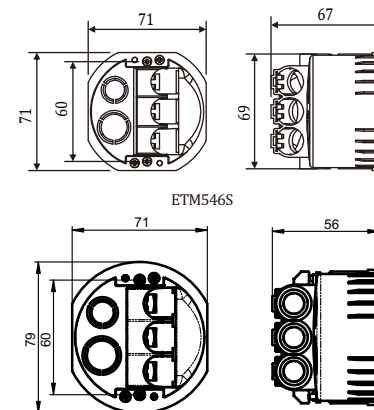


ETM647S

Type designation:

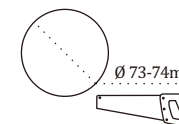
Type	Description/Remark
ETM546S	Multi box, 90 degree inlets
ETM647S	Low multi box 48mm, 90 degree inlets

Drawing:



ETM546S

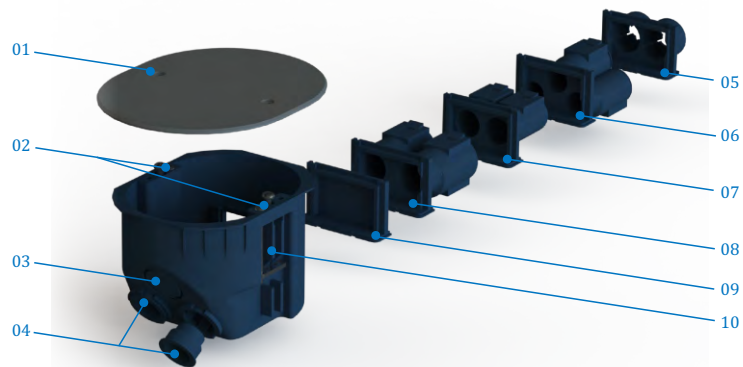
ETM647S



Universal Series



© One and half multi boxes, Universal series



- 01 Cove
- 02 FixingCentrec-c 60mm and M3
- 03 Ø20mm knockout
- 04 fixed 2*Ø16mm inlets
- 05 Coupling bushes with tension reliefs for MMJ and EKK cables:
3G1.5mm² and 3G2.5mm², the outside diameters for those two are 9mm and 10mm.
- 06 Triangle extension, with 3xØ16mm entries, with locking springs and sealing plugs
- 07 Double extension, with 2xØ16mm entries, with locking springs and sealing plugs
- 08 Double extension, with two combined Ø16/20mm conduit entries, with locking springs and sealing plugs
- 09 Standard configuration products with blind extension
- 10 Requires a minimum panel-thickness of 6 mm.

Universal Series



© One and half multi boxes

Main material: PP, halogen free

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60670-1

Technical info:

One and half multi box is a very flexible wall box and is designed for the low model double Schuko socket outlets in "P" series.

For use in prefabricated walls or hollow walls where installation work can be conducted from the outside of the wall and when you need an extra flush wall box.

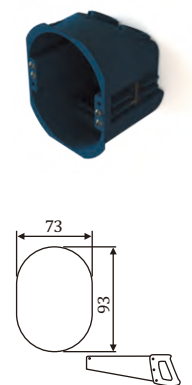
Multibox 1.5 offers inside enough space for fittings.

Depth: 60 mm. It requires a minimum panel-thickness of 6 mm.

One side with fixed 2*16mm inlets and one Ø20 knockout. Another side on standard products is with blind cover, but it can fit into all the accessories in the universal assortment.

Working temperature: -25°C to +60°C

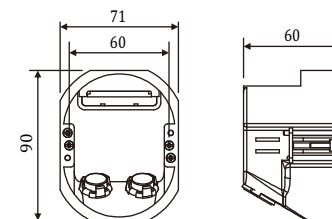
Installation temperature: -5°C to +25°C



Type designation:

Type	Description/Remark
ETM548S	1.5 multi-box

Drawing:

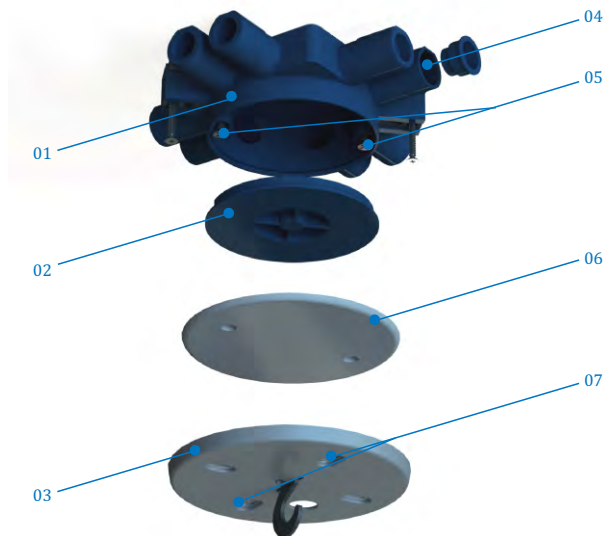


ETM548S

Universal Series



© Flush mounting Roof box, c-c 70mm



- 01 For single (12-13mm) or double (24-26mm) gypsum plates
- 02 Plastic lid inclusive
- 03 Adjustable centre distance 59-71mm, screws: M3
- 04 The box has 8 conduit entries: 8 X Ø 16 mm, locking springs, sealing plugs and plastic lid is included. Possible to enter 20 mm Ø conduit by use Ø 20 mm sleeve ETM238S on the outside of the entries
- 05 Mounting screws: M4. Distance 70 mm between inside mounting screws. Max load 15 kg
- 06 Cover
- 07 Cover, with hook, max load 15kg

Universal Series



© Flush mounting roof boxes

Main material: HDPE

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):
LVD, RoHS, WEEE

Certificate(s):

Semko, CE

The product complies with the standard(s):

IEC 60670-1

Technical info:

Ø82mm depth 32mm-40mm.

Mounting screws: M4.

Distance 70 mm between inside mounting screws.

The box has 8 conduit entries: 8 X Ø16 mm, locking springs, sealing plugs and plastic lid are included. Possible to enter Ø20 mm conduit by using of Ø20 mm sleeve ETM238S on the outer of the entries.

Plastic lid inclusive.

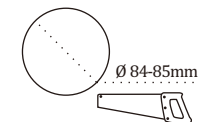
Max load 15 kg.

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C



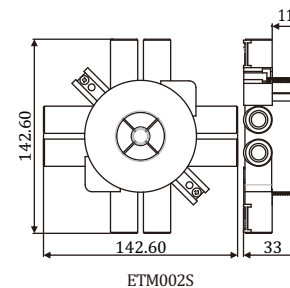
ETM002S, ETM002S-2,
ETM002S-3



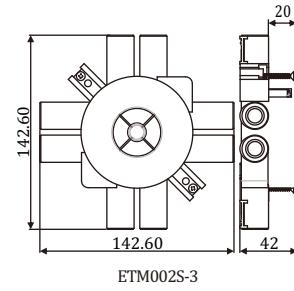
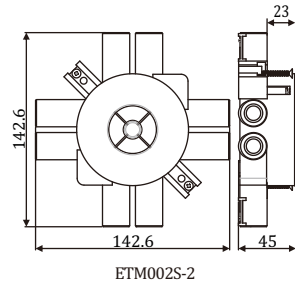
Type designation:

Type	Description/Remark
ETM002S	8-way roof box, w/screw, H=32mm
ETM002S-2	8-way roof box, w/screw, H=45mm
ETM002S-3	8-way roof box, w/screw, H=40mm

Drawing:



Drawing:



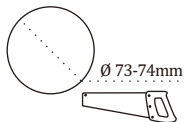
Universal Series



© Flush mounting big wall boxes for accessories, universal series



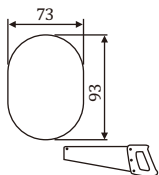
ETM660S, ETM661S



Ø 73-74mm



ETM662S, ETM663S



Colour: Blue
Main material: PP, halogen free
IP-Class: IP30
Fire hazard test: 850°C (IEC60695-2-11)
The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE
Certificate(s): CE
The product complies with the standard(s):
 IEC 60670-1

Technical info:
 Big Box. The new unique box meets the needs of more and more electronics which will share the space for installations. Big box should remedy this through a generous space for example, dimmers, relays and transformers, and will likely mean a future industry standard.

Big box offer a double box with room for a device and thus handle these increased space requirements. The box is available for both single and double drywall installation and in one-or 1 ½ - version for under recoveries require.

Modular system: Boxes can be ganged in comprehensive accessories, including blind extension (ETM384S), connecting pieces 71mm (ETM332S) and 84mm (ETM333S), double conduit entries 2xØ16/Ø20mm (ETM331S), double conduit entries 2xØ16 (ETM393S), and triangle conduit entries 3xØ16 (ETM389S).....

With Steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions
 Fixing centre c-c 60mm and M3 screws.
 All conduit entries with locking springs and sealing plugs

Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C

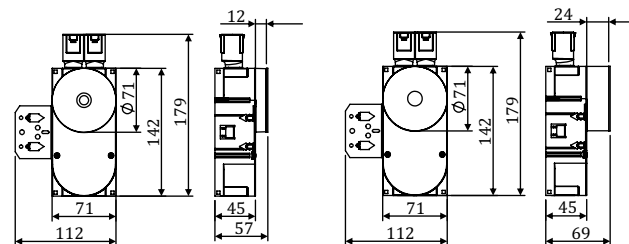
Type designation:

Type	Description/Remark
ETM660S	Single, 12mm
ETM661S	Single, 24mm
ETM662S	One and half, 12mm
ETM663S	One and half, 24mm

Universal Series

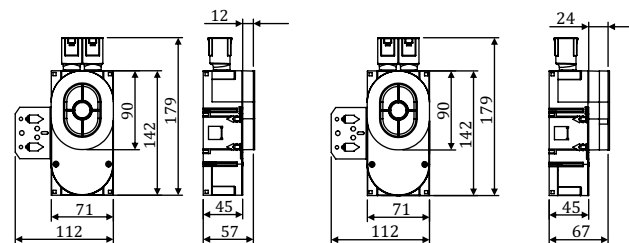


Drawing:



ETM660S

ETM661S



ETM662S

ETM663S



Suitable for more technical "bits and pieces" inside the wall, such like: box dimmer, receiver.....

Universal Series



© Flush mounting big wall boxes for accessories, universal series

Colour: Blue

Main material: PP, halogen free

IP-Class: IP30

Fire hazard test: 850°C(IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD RoHS WEEE REACH

Halogen: free

Certificate(s): CE

The product complies with the standard(s): IEC 60670-1

Technical info:

Big Box. The new unique box meets the needs of more and more electronics will share the space for installations. Big box should remedy this through a generous space for example, dimmers, relays and transformers, and will likely mean a future industry standard.

The demands on space for electronics in installations has increased markedly in recent years , with the phasing out of incandescent and increased use of, for example LED fixtures provides part of the explanation. To handle all the electronics, such as transformers, dimmers , etc, require a larger installation space than was previously the case .

Big box offer a double box with room for a device and thus handle these increased space requirements. The box is available for both single and double gypsum installation and in one version for under recoveries require.

Modular system: Boxes can be ganged, comprehensive accessories, included blind extension(ETM384S), connecting pieces 71mm(ETM332S)and 84mm(ETM333S), double conduit entries 2×Ø16/Ø20mm(ETM331S), double conduit entries 2xØ16(ETM393S), and triangle conduit entries 3×Ø16(ETM389S).....

Two or more boxes can be connected by use of different connecting pieces: ETM332s constructed for cc distance of 71 mm between the boxes and ETM333S for cc distance of 84 mm

Can be connected with single universal boxes on 3 sides.

With Steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions fixing center c-c 60mm and M3 screws.

Turn able inner ring with fixing center 60mm and ST2.9 screws with long pitch

All conduit entries with locking springs and sealing plugs

Plastic lid inclusive

Type designation:

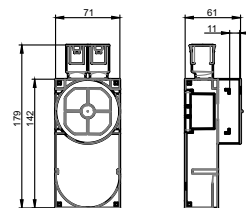
Type	Description/Remark
ETM664S	Flush mounting big wall box, turnable inner ring, for single wall plate 12mm, with 1x2-way compatible Ø 20mm or Ø 16mm conduit entries, without steel fastening plate.
ETM665S	Flush mounting big wall box, turnable inner ring, for double wall plate 24mm, with 1x2-way compatible Ø 20mm or Ø 16mm conduit entries, without steel fastening plate.
ETM666S	Flush mounting big wall box, turnable inner ring, for single wall plate 12mm, with 1x2-way compatible Ø 20mm or Ø 16mm conduit entries, with steel plate for wooden stanchions
ETM667S	Flush mounting big wall box, turnable inner ring, for double wall plate 24mm, with 1x2-way compatible Ø 20mm or Ø 16mm conduit entries, with steel plate for wooden stanchions
ETM666SF	Flush mounting big wall box, turnable inner ring, for single wall plate 12mm, with 1x2-way compatible Ø 20mm or Ø 16mm conduit entries, with steel plate for steel stanchions.
ETM667SF	Flush mounting big wall box, turnable inner ring, for double wall plate 24mm, with 1x2-way compatible Ø 20mm or Ø 16mm conduit entries, with steel plate for steel stanchions.



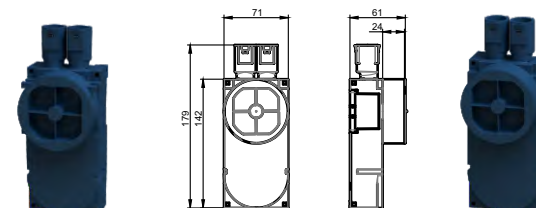
Universal Series



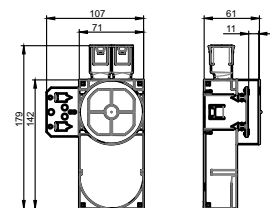
Drawing:



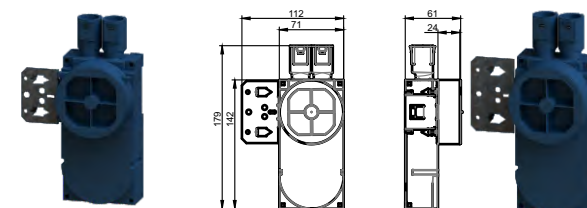
ETM664S



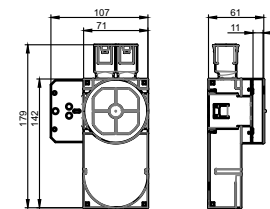
ETM665S



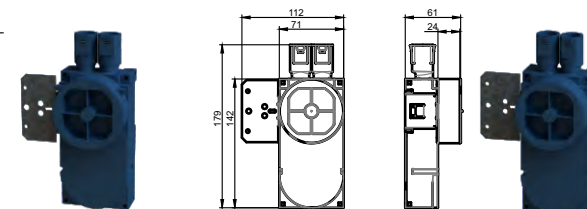
ETM666S



ETM667S



ETM666SF



ETM667SF

Universal Series

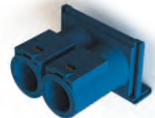


© Accessories for universal boxes

Type	Description/Remark
ETM612S	Coupling bushes with tension reliefs for MMJ-type cables
ETM393S	Two way extension 2xØ16
ETM389S	Triangle extension 3xØ16
ETM331S	Double extension 2xØ16 / Ø20mm
ETM646S	Conduit entry 25mm
ETM820S	Conduit entry 32mm
ETM821S	Conduit entry 40mm



ETM612S



ETM393S



ETM389S



ETM331S



ETM646S



ETM820S



ETM821S

Type	Description/Remark
ETM642S	Steel plate for single wall plate with normal plastic connecting plate
ETM643S	Steel plate for double wall plate with normal plastic connecting plate
ETM644S	Steel plate for single wall plate with plastic connecting plate for long side of one and half wall box
ETM645S	Steel plate for double wall plate with plastic connecting plate for long side of one and half wall box



ETM642S



ETM643S



ETM644S



ETM645S

Universal Series



Type	Description/Remark
ETM384S	Blind extension
ETM332S	Frame extension (71mm)
ETM333S	Frame extension (84mm)
ETM332SC	Frame extension (71mm), closed
ETM333SC	Frame extension (84mm), closed



ETM384S



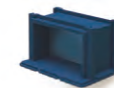
ETM332S



ETM333S



ETM332SC



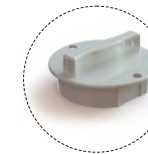
ETM333SC

Type	Description/Remark
ETM339S	Extra inner ring, H=37mm



ETM339S

Type	Description/Remark
ETM670S	Tooling for turn inner ring of wall boxes



ETM670S

Type	Description/Remark
ETM397S	Plastic piece to FIX that box falls out from a wall + Fix bigger gluing part + FIX thinner wall plates



ETM397S

Universal Series



© Spacer for wall box

Type	Description/Remark
ETM640S	Height 21mm, green
ETM396S	Height 25mm, red
ETM641S	Height 34mm, yellow
ETM649S	Height 17mm, grey
ETM650S	Height 30mm, black



ETM640S



ETM396S



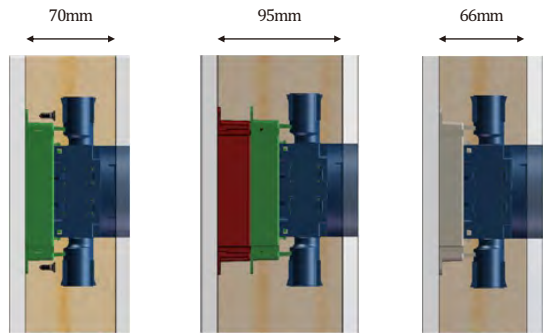
ETM641S



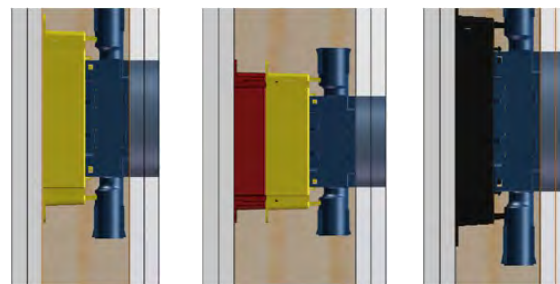
ETM649S



ETM650S



Single
gypsum

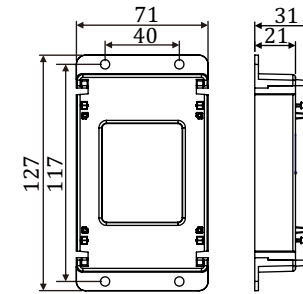


Double
gypsum

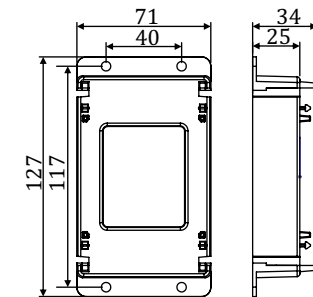
Universal Series



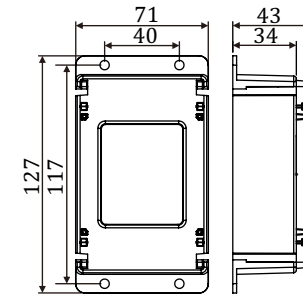
Drawing:



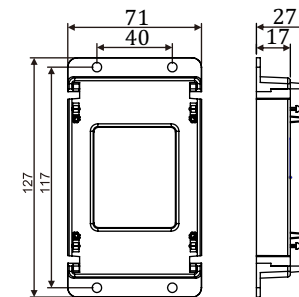
ETM640S



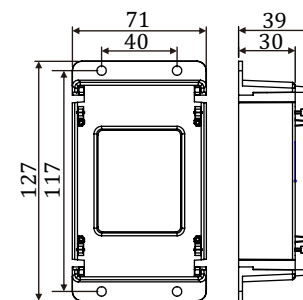
ETM396S



ETM641S



ETM649S



ETM650S

Universal Series



© Flush mounting wall boxes for concrete, pre-fabricated house factory, universal series



Colour: White (box body)

Main material: PP, halogen free

IP-Class: IP30

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD RoHS WEEE

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60670-1

Technical info:

Ø71mm depth 60.5mm.

Two or more boxes can be connected by use of different connecting pieces: ETM791S constructed for cc distance of 71 mm between the boxes.

Turn able ring with fixing centre 60mm and M3 screws.

All conduit entries with locking springs and sealing plugs.

Suitable for installation into concrete with a maximum temperature during the casting process of +90 °C.

Possible fastened to the mold with magnets.

The bottom of our boxes has ring for direct use of the plastic bracket (BULO).

Modular system: Boxes can be ganged.

ETM780S: without lid. Box with one 2xØ20mm (ETM793S) inlet mounted on top, open from box to inlet, no lid, plugs in end of inlets. Always minimum 1 inlet used, therefore open between box and inlet on one side, three other sides closed with possibility to mount inlets.

ETM781S: without lid. Box with two 2xØ20mm (ETM793S) inlet mounted on top, open from box to inlet, no lid, plugs in end of inlets. Always minimum 2 inlet used, therefore open between box and inlet on two side, two other sides closed with possibility to mount inlets.

Comprehensive accessories, included:

ETM791S: Connection piece of boxes for concrete with opened hole, with hole, wires can be go through by the hole.

ETM793S: Inlets of boxes for concrete, 2xØ20mm, distance and height same as inlet from ELKO, plugs in end of inlets, with clip.

Pre-fabricated house factory only uses Ø20mm flexible tubes (no Ø16mm flexible tubes), therefore no need to have insert in inlets for Ø16/20mm.

ETM794S: Lid of boxes for concrete, with rib for removal, without hole for magnet, In some few cases, Pre-fabricated house factory need lid on box, therefore lid as separate accessory.

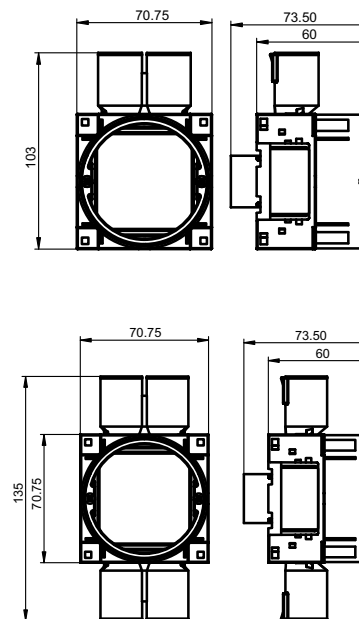
Universal Series



Type designation:

Type	Description/Remark
ETM780S	Boxes for concrete, Pre-fabricated house factory pre-installed version, without lid, 1x2xØ20mm inlets
ETM781S	Boxes for concrete, Pre-fabricated house factory pre-installed version, without lid, 2x2xØ20mm inlets
ETM791S	Connection piece of boxes for concrete with opened hole
ETM793S	Inlets of boxes for concrete, 2xØ20mm, plugs in end of inlets, with clip, special for Finja
ETM794S	Lid of boxes for concrete, flat, with rib for removal

Drawing:

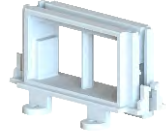


ETM780S

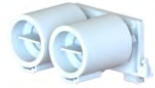
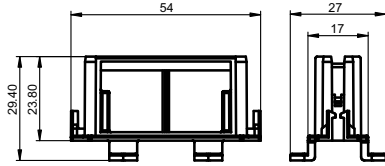


ETM781S

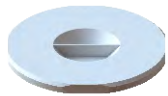
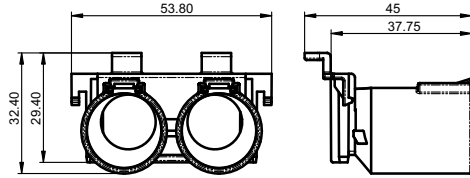
Universal Series



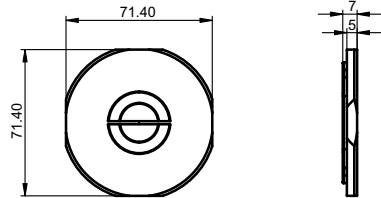
ETM791S



ETM793S



ETM794S



Universal Series



Universal Series



© Flush mounting wall boxes for concrete, professional market, universal series



Colour: Blue (box body)

Main material: PP, halogen free

IP-Class: IP30

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C(IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD RoHS WEEE

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60670-1

Technical info:

Ø71mm depth 60.5mm.

Two or more boxes can be connected by use of different connecting pieces: ETM791S constructed for cc distance of 71 mm between the boxes.

Turn able ring with fixing centre 60mm and M3 screws.

All conduit entries with locking springs and sealing plugs.

Suitable for installation into concrete with a maximum temperature during the casting process of +90 °C.

Can be mounting with magnet, and then available for embedding in prefabricated walls.

When attaching the boxes to plywood plates in construction sites, they can either be nailed by 3.4x3.4mm nail or screwed by ST3.4mm screw.

When attaching the boxes to plywood plates in construction sites, boxes can be nailed by use ETM789S nail of boxes for concrete.

Can be mounting with magnet, and then available for embedding in steel prefabricated walls.

Modular system: Boxes can be ganged.

ETM787S: Box for concrete. Mounted with plugged inlet ETM788S - 2x16/20, 1 in top and 1 in bottom and box open in top and bottom against the inlet. Mounted LID ETM790S, including mounted nail and plastic fastening - nail plug in back.

ETM785S: Box for concrete. Mounted with plugged inlet ETM788S - 2x16/20, in top and box open in top against the inlet. Mounted LID ETM790S, including mounted nail and plastic fastening - nail plug in back.

ETM783S: Box for concrete. Without inlet and box open in top. Mounted LID ETM790S. Including mounted nail and plastic fastening - nail plug in back.

ETM792S: Inlets of boxes for concrete 2xØ20 mm, plugs in end of inlets, with clip, Pre-fabricated house factory only uses Ø20mm flexible tubes (no Ø16mm flexible tubes), therefore no need to have insert in inlets for Ø16/20mm.

ETM788S: 2xØ16/Ø20mm inlet for Etman, plugged, based on ETM792S

ETM791S: Connection piece of boxes for concrete with opened hole, with hole wires can be go through by the hole

ETM789S: nail and plastic fastening nail plug, in some few cases, Pre-fabricated house factory need lid on box, therefore lid as separate accessory

ETM794S: Lid of boxes for concrete, with rib for removal, without hole for magnet, In some few cases, Pre-fabricated house factory need lid on box, therefore lid as separate accessory

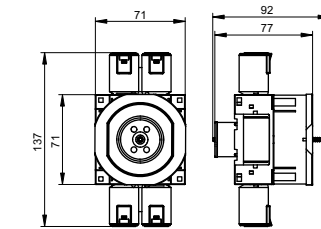
Universal Series



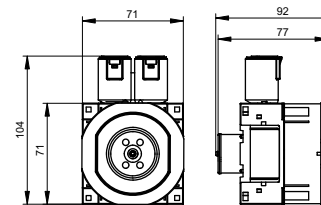
Type designation:

Type	Description/Remark
ETM787S	Box for concrete. Mounted with two plugged inlets ETM788S - 2x16/20, Mounted LID ETM790S, including mounted nail
ETM785S	Box for concrete. Mounted with one plugged inlet ETM788S - 2x16/20, Mounted LID ETM790S, including mounted nail
ETM783S	Box for concrete. Without inlet. Mounted LID ETM790S. Including mounted nail
ETM792S	Inlets of boxes for concrete, 2xØ20mm, plugs in end of inlets, with clip
ETM788S	Inlets of boxes for concrete, 2xØ16/Ø20mm inlet for Etman, plugged
ETM791S	Connection piece of boxes for concrete with opened hole
ETM789S	Nail and fastening plug of concrete boxes
ETM794S	Lid of boxes for concrete, flat, with rib for removal

Drawing:



ETM787S



ETM785S

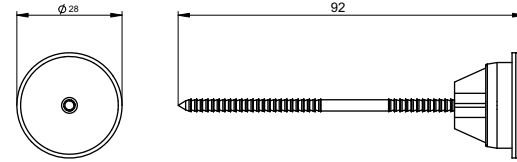
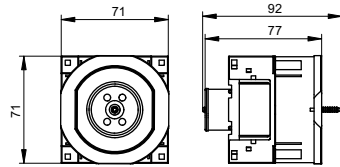
Universal Series



Drawing:



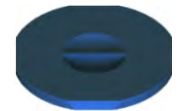
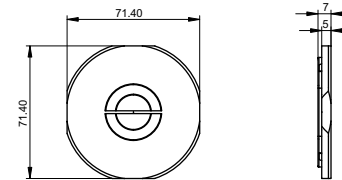
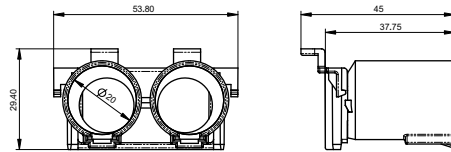
ETM783S



ETM789S



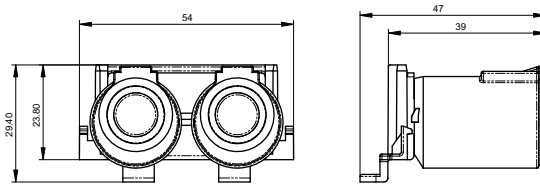
ETM788S



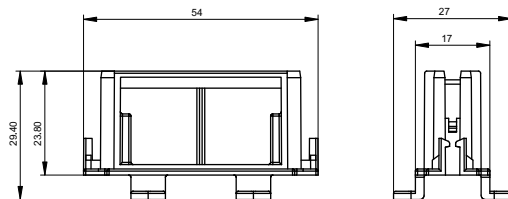
ETM794S



ETM792S



ETM791S



Universal Series



© Flush mounting wall boxes for accessories, 60mm

Colour: Blue

Main material: PP (Halogen free)

IP-Class: IP30

Fire hazard test: 850 °C (IEC60695-2-11)

The product complies with the standard(s): IEC 60670-1

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

Product information:

Box ETM680, 681S, Halogen free PP, for flush mounting in brick, concrete, Ytong, Leca and other solid materials.

Single version, connectable without special adapters, c / c 71 mm

ETM680S delivered with 1 extension mounted ETM682S - 1 × Ø16 / 20mm.

ETM681S delivered with 2 extension mounted ETM683S - 2 × Ø16 / 20mm.

Possible to mount extension ETM682S - 1 × Ø16 / 20mm or ETM683S - 2 × Ø16 / 20 on all four sides of the box.

Extensions for both 16 and 20 mm, open and provide locking springs and sealing plugs, high locking force.

The box has threaded telescopic adjustable ring (10mm) . Self-locking inner ring when tightened up the screws.

Depth of the box, minimum = 47mm, adjustable up till max 57mm depth.

The sides and bottom are fitted with 16mm knockouts.

The box comes with a transparent plastic lid that simply is knocked out with a hammer.

The box is by itself fixed in drilled hole, stays put by itself without being plastered in. Using hole saw 82mm.

Type designation:

Type	Description/Remark
ETM680S	Flush mounting box for concrete wall, with 1 single extension 16/20 mounted
ETM681S	Flush mounting box for concrete wall, with 1 double extension 16/20 mounted
ETM682S	Single extension 1x16/20
ETM683S	Double extension 2x16/20



ETM680S



ETM681S



ETM682S

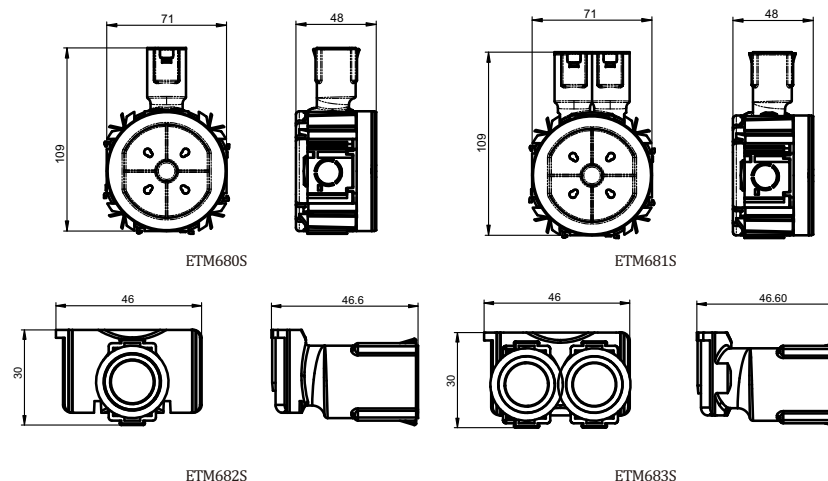


ETM683S

Universal Series

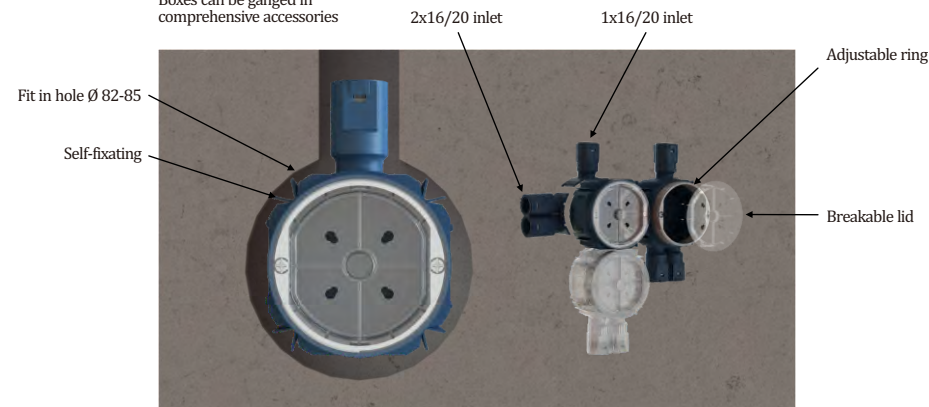


Drawing:



Modular system

Boxes can be ganged in comprehensive accessories



Simple Series



◎ Flush mounting wall boxes for accessories, 60mm

Main material: HDPE

Colour: Blue

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60670-1

Technical info:

For single (12-13mm) or double (24-26mm) gypsum plates.

Ø71mm depth 45mm-55mm.

With or without Steel fastening plate, steel plate for fastening directly to wooden stanchions or with screws to steel stanchions.

Turning able ring with fixing centre 60mm and M3 screws.

The box has 6 conduit entries: 6 x Ø16 mm, locking springs, sealing plugs and plastic lid are included. Possible to enter Ø20 mm conduit by use of Ø20 mm sleeve ETM238S on the outer of the entries.

Plastic lid inclusive.

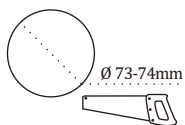
Extension rings (ETM013S) are available for the mounting boxes. It is 7 mm deep.

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Type designation:

Type	Description/Remark
ETM001S	for 12mm wall plate, H=45mm
ETM001S-2	for 12mm wall plate, H=55mm
ETM001S-4	for 24mm wall plate, H=55mm
ETM001S-1	w/steelplate for 12mm wall plate, H=45mm
ETM001S-3	w/steelplate for 12mm wall plate, H=55mm
ETM001S-5	w/steelplate for 24mm wall plate, H=55mm



ETM001S, ETM001S-2,
ETM001S-4

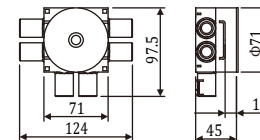


ETM001S-1, ETM001S-3,
ETM001S-5

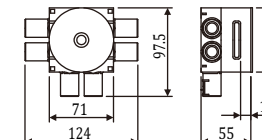
Simple Series



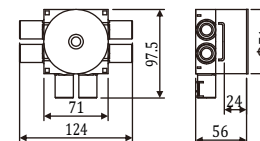
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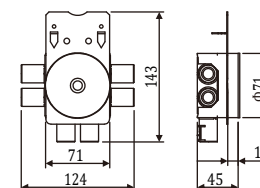
ETM001S



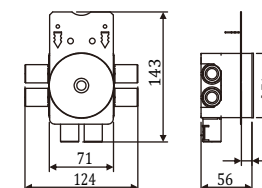
ETM001S-2



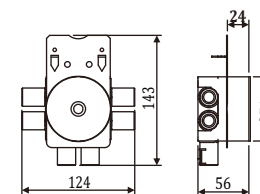
ETM001S-4



ETM001S-1



ETM001S-3



ETM001S-5

Simple Series



◎ Flush mounting wall boxes for accessories, 60mm

Main material: HDPE

Colour: Yellow and green

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

EN60670-1

Technical info:

For single (12-13mm) or double (24-26mm) gypsum plates.

Ø71mm depth 50mm.

Turn able ring with fixing centre c-c 60mm and M3 screws (Pozidriv), the inner will be locked by locker when tightened up to the screws.

Circular flush mounting box for accessories, insulated material.

With 3 inlets for 16mm conduit, with/without locking spring, one inlets opened and two inlets closed to keep box clean, you can open what you need by screwdriver.

Only used for electrical wiring.

The box can be connected each other by locker on the side.

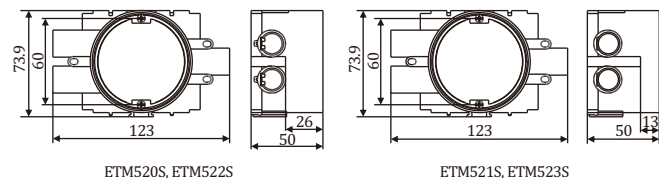
Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Type designation:

Type	Description/Remark
ETM520S	For 26mm wall plate
ETM521S	For 13mm wall plate
ETM522S	For 26mm wall plate, with locking spring
ETM523S	For 13mm wall plate, with locking spring

Drawing:



ETM520S, ETM522S

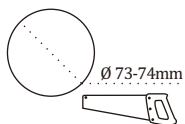
ETM521S, ETM523S



ETM520S, ETM522S



ETM521S, ETM523S



Simple Series



◎ Flush mounting junction boxes, 67mm

Main material: HDPE

Colour: Yellow and green

IP-Class: IP30

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

The product complies with the standard(s):

EN60670-1

Certificate(s): CE

Technical info:

For single (12-13mm) or double (24-26mm) gypsum plates.

Ø82mm depth 48mm.

Turn able ring with fixing centre c-c 67mm and M3 screws (Pozidriv), the inner will be locked by locker when tightened up to the screws.

Circular flush mounting box for accessories, insulated material.

ETM524S, ETM525S: With 8 inlets for 16mm conduit, with locking spring, one inlets opened and others closed to keep box clean, you can open what you need by screwdriver.

ETM524SN, ETM525SN: With 2 inlets for 20mm conduit and 8 inlets for 16mm conduit, with locking spring, one inlets opened and others closed for keep box clean, you can open what you need by screwdriver.

Only used for electrical wiring.

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Type designation:

Type	Description/Remark
ETM524S	For 26mm wall plate, 8*16mm inlets
ETM525S	For 13mm wall plate, 8*16mm inlets
ETM524SN	For 26mm wall plate, 2*20mm+8*16mm inlets
ETM525SN	For 13mm wall plate, 2*20mm+8*16mm inlets



ETM524S



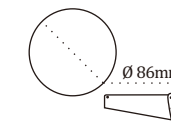
ETM525S



ETM524SN



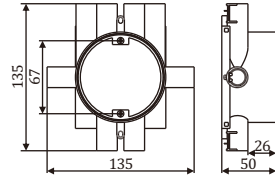
ETM525SN



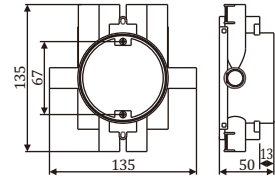
Simple Series



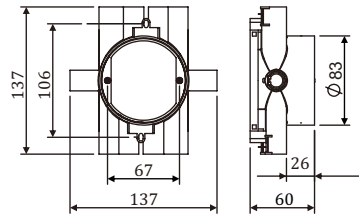
Drawing:



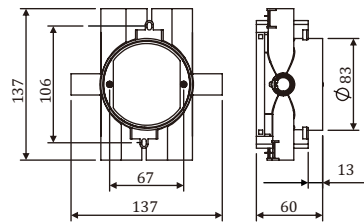
ETM524S



ETM525S



ETM524SN



ETM525SN

Simple Series



Simple Series



© Finnish outlet boxes

Colour: Yellow (box body)

Main material: PP (Halogen free)

IP-Class: IP30

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD RoHS WEEE

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60670-1

Technical info:

Suitable for both hollow walls and concrete casting.

Diameter (mm): 71, Inside Depth/Outer height (mm): 45/48

Two or more boxes can be connected by use of different connecting pieces: ETM772S constructed for cc distance of 71 mm between the boxes.

The box has 8 screw pillars, 6 on left and right, two on up and down, with PZ1, ST2.9mm screws, c-c 60mm.

With lid (ETM750S and ETM751S).

With wings, suitable 12-13mm gypsum plate directly, possible for more places after trim the wings away.

Suitable for installation into concrete with a maximum temperature during the casting process of +90 °C.

Boxes are easy to group and install, creating an efficient platform for the installation of switches, outlets and other devices.

The mounting box can be fastened to wall studs by side nailing. Suit 3.4x3.4 nails or ST3.4 screws.

5 knock-out inlets on sides possible install related accessories of Finnish boxes from Etman and ABB.

4x Ø16mm knock-outs on the bottom possible install related accessories of Finnish boxes from Etman and ABB

Use box supports ETM773S and ETM774S secure the boxes between the boards. No further fixing of the boxes is needed; they are simply placed in their final positions when the top board layer is mounted in place.

Installation plug is used together with a screw or a nail to fasten boxes to a casting mould through the center knockout in the bottom. When the mould is disassembled, the screw or nail will follow the plywood mould and does not have to be separately removed

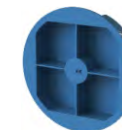


Simple Series



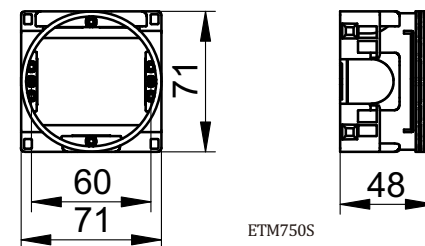
Type designation:

Type	Description/Remark
ETM750S	Outlet box without inlets
ETM751S	Outlet box with 2 inlets
ETM752S	Outlet box ETM751S with 2 inlets + 2 pcs mounted ETM543S 12mm rings
ETM750S.LID	LID Outlet boxes, Fit to ETM750S & ETM 751S
ST2.9x30-F-Z	Screw, 30mm, PZ1, FLAT Head



ETM750S.LID

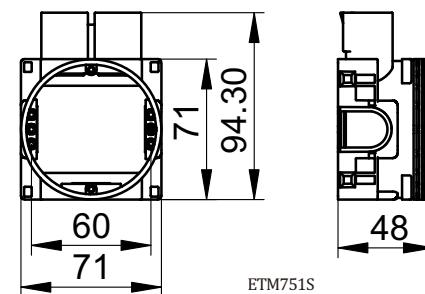
Drawing:



ETM750S



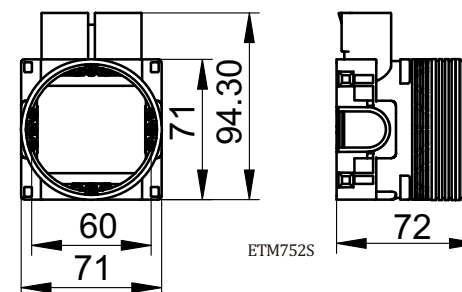
ETM750S



ETM751S



ETM751S



ETM752S



ETM752S

Simple Series



© Finnish junction boxes

Colour: Yellow (box body)

Main material: PP (Halogen free)

IP-Class: IP30

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD RoHS WEEE

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60670-1

Technical info:

hollow walls and concrete casting

Ø95mm

The box has four screw pillars, two for M4 screws and two for 3.5mm universal screws, the boxes without mounting screws.

Suitable for installation into concrete with a maximum temperature during the casting process of +90 °C.

8xØ20mm inlets on sides

4 knock-out inlets on four corners

4 knock-outs on the bottom for bottom inlets Ø16mm, 1 knock-outs on the bottom for bottom inlets Ø20mm

The boxes are suited to a variety of installations when inlets, corner knock-out inlets and bottom inlets are used. Inlet for size 20mm conduit, there are side inlets for the boxes for conduit sizes 16, 20, and 25 mm, and bottom inlets for sizes 16 and 20 mm

Without lid

The junction boxes can be mounted in ceiling by ST3.4, ST3.9screws (only height directions) or using box supports ETM773S, ETM774S

When attaching the boxes to plywood moulds, they can either be nailed or screwed

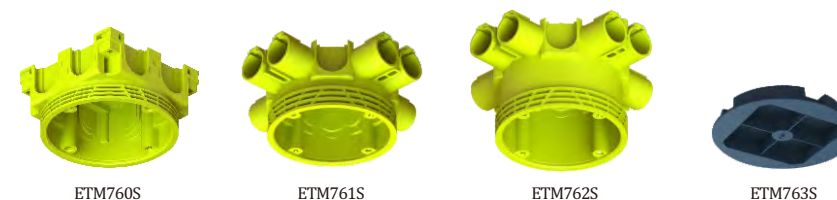
Installation plug is used together with a screw or a nail to fasten boxes to a casting through the center knockout in the bottom. When the mould is disassembled, the screw or nail will follow the plywood mould and does not have to be separately removed

Simple Series

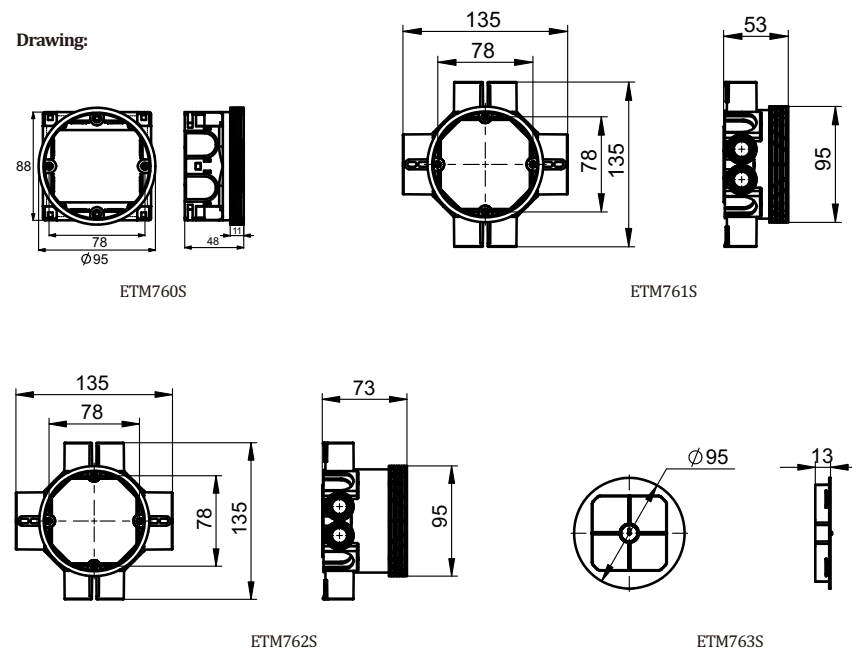


Type designation:

Type	Description/Remark
ETM760S	Junction box without inlets 48mm
ETM761S	Junction box with inlets 53mm
ETM762S	Junction box with inlets 73mm
ETM763S	LID Junction boxes, c/c78. Fit to ETM760S & ETM 761S



Drawing:



Simple Series



Type designation:

Type	Description/Remark
ETM770S	Single inlet for Ø20mm conduit, for all knock-out inlets on Finnish boxes
ETM771S	Strain relief inlet, for Ø6-11mm insulated cables, for all knock-out inlets on Finnish boxes
ETM772S	Internal connector; be used to connect mounting boxes side by side with c/c distance 71 mm
ETM773S	Box support 42-64mm , for all knock-out inlets on Finnish boxes, available length 42, 45, 64mm
ETM774S	Box support 42-95mm , for all knock-out inlets on Finnish boxes, available length 42, 45, 67, 70, 90, 95mm



ETM770S



ETM771S



ETM772S



ETM773S



ETM774S

Simple Series



© Bushing insulators

Colour: Yellow (box body)

Main material: PP (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European

directive(s): LVD RoHS WEEE

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60670-1

Technical info:

Bushing insulators are used in concrete casting, for example when cabling from the space above the suspended ceiling to walls.

The bushing is fastened by nailing it to the mould. When the mould is disassembled, the nails come loose with the mould. The casting protector included with the bushing prevents the concrete from entering the conduit.

Possible connect bushing insulators to each other

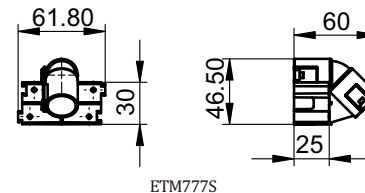
Suitable nail size 2.7x2.7mm



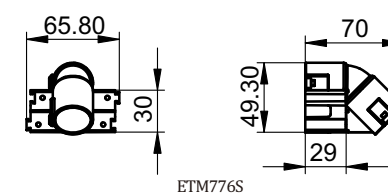
Type designation:

Type	Description/Remark
ETM777S	Bushing insulator 16mm
ETM775S	Bushing insulator 20mm
ETM776S	Bushing insulator 25mm

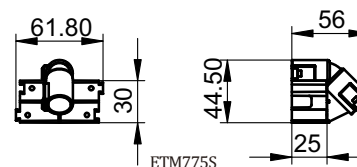
Drawing:



ETM777S



ETM776S



ETM775S

X Series



© Surface mounting frames, standard version

Colour: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD RoHS WEEE

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60670-1

Technical info:

For already completed upholstered wall need to add switch, socket, dimmer, timer or other electrical accessories.

Distance between two fixing centres is 71 mm.

Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.

With banana hoes fit to flush wall boxes.

Partition wall typed ETM437P used to separate data and power products.

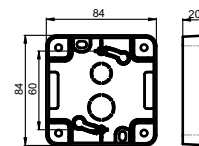
Type designation:

Type	Description/Remark
ETM239X	S, 84x84mm, Total height: 20mm
ETM430X	S+S, 84x155mm, Total height: 20mm
ETM240X	S, 84x84mm, Total height: 40mm
ETM429X	S+S, 84x155mm, Total height: 40mm
ETM409X	S+S+S, 84x226mm, Total height: 40mm

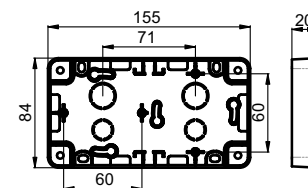
X Series



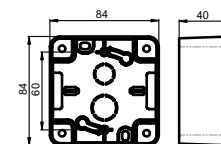
Drawing:



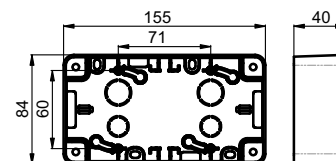
ETM239X



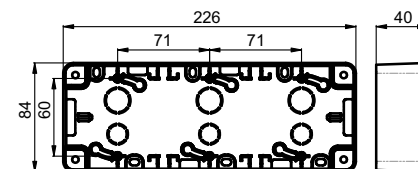
ETM430X



ETM240X



ETM429X



ETM409X



X Series



© Surface mounting frames, corner

Colour: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD RoHS WEEE

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60670-1

Technical info:

For already completed upholstered corner of wall need to add switch, socket, dimmer, timer or other electrical accessories.

Distance between two fixing centres is 71 mm.

Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.

With strain relief or construction for cable tie to fix the cable

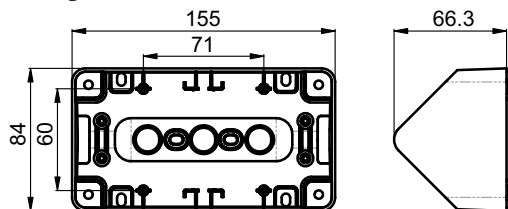
Partition wall typed ETM437P used to separate data and power products.



Type designation:

Type	Description/Remark
ETM402X	S+S, 84x155mm

Drawing:



X Series



X Series



© Surface mounting frames, 2S version

Colour: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD RoHS WEEE

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60670-1

Technical info:

For already completed upholstered wall need to add switch, socket, dimmer, timer or other electrical accessories.

Distance between two fixing centres is 71 mm.

Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.

With banana hoes fit to flush wall boxes.

Partition wall typed ETM437P used to separate data and power products.

With banana hoes fit to flush wall boxes.

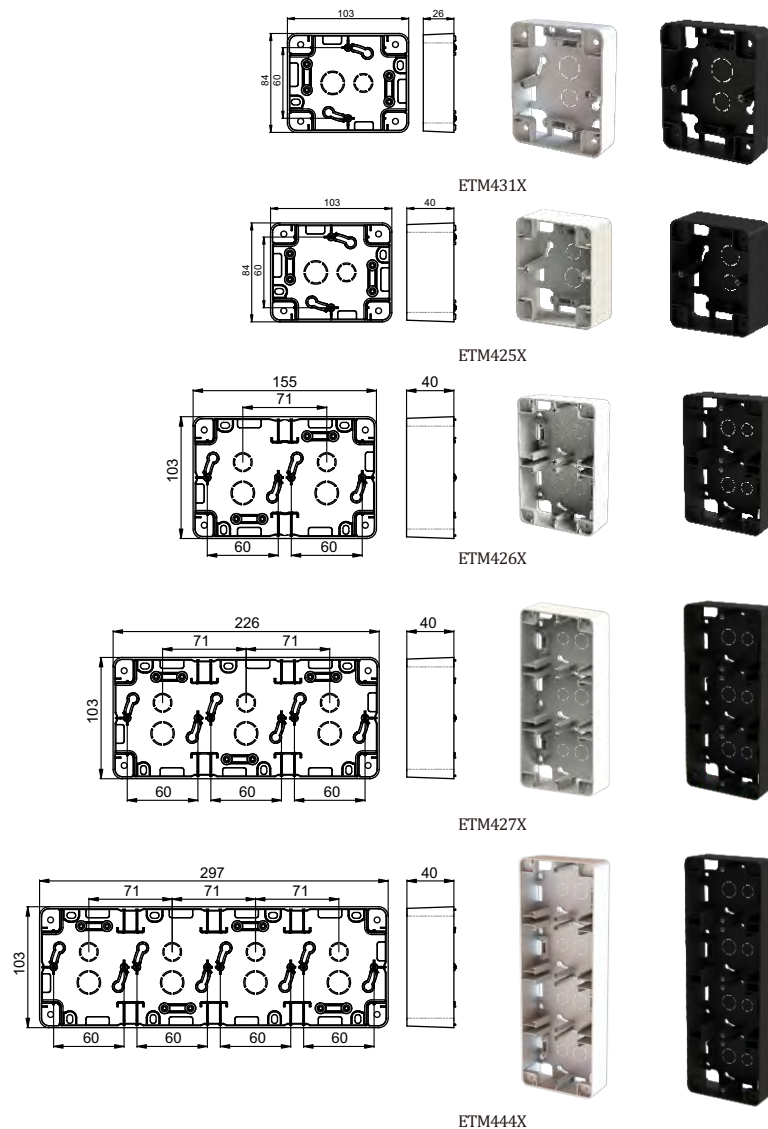
Type designation:

Type	Description/Remark
ETM431X	2S, 84x103mm, Total height: 26mm, suitable: ETM022XQ, ETM022XQF
ETM425X	2S, 84x103mm, Total height: 40mm
ETM426X	2S+2S, 103x155mm, Total height: 40mm
ETM427X	2S+2S+2S, 103x226mm, Total height: 40mm
ETM444X	2S+2S+2S+2S, 103x226mm, Total height: 40mm

X Series



Drawing:



P Series



☉ Surface mounting frames, one way

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60607-1

Technical info:

For already completed upholstered wall or corner of wall need to add switch, socket, dimmer, timer or other electrical accessories.

Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.



ETM239P

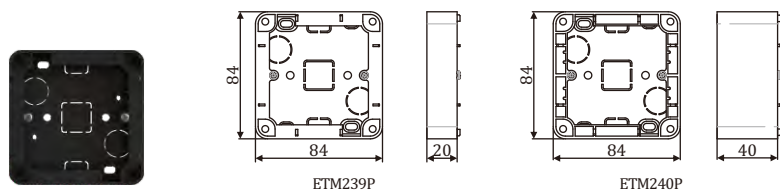


ETM240P

Type designation:

Type	Description/Remark
ETM239P	1 way, on wall frame for switch etc., H=20mm
ETM240P	1 way, on wall frame for dimmer etc., H=40mm

Drawing:



ETM239P

ETM240P

Black

P Series



☉ Surface mounting frames, two way

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60607-1

Technical info:

For already completed upholstered wall or corner of wall need to add switch, socket, dimmer, timer or other electrical accessories.

Distance between two fixing centres is 71 mm.

Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.



ETM430P

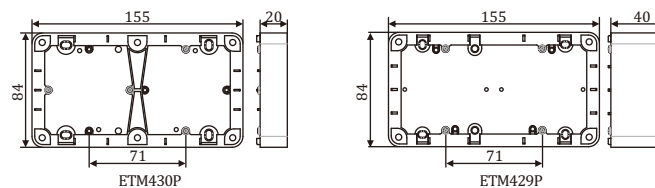


ETM429P

Type designation:

Type	Description/Remark
ETM430P	2 way, on wall frame for switch etc., H=20mm
ETM429P	2 way, on wall frame for dimmer etc., H=40mm

Drawing:



ETM430P

ETM429P



Black

P Series



☉ Surface mounting frames, three way

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60607-1

Technical info:

For already completed upholstered wall or corner of wall need to add switch, socket, dimmer, timer or other electrical accessories.

Distance between two fixing centres is 71 mm.

Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.

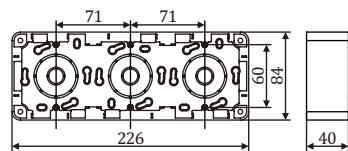


ETM409P

Type designation:

Type	Description/Remark
ETM409P	3 way, on wall frame for dimmer etc., H=40mm

Drawing:



ETM409P

P Series



☉ Surface mounting frames, corner

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60607-1

Technical info:

For already completed upholstered wall or corner of wall need to add switch, socket, dimmer, timer or other electrical accessories.

Distance between two fixing centres is 71 mm.

Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.



ETM402P

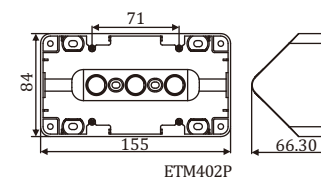


ETM407P

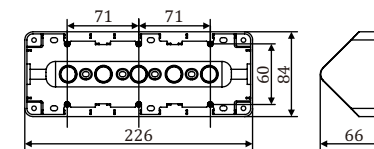
Type designation:

Type	Description/Remark
ETM402P	S+S
ETM407P	S+S+S

Drawing:



ETM402P



ETM407P



Black

P Series



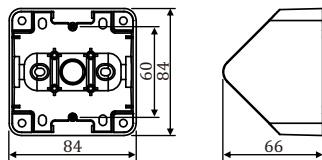
Type designation:

Type	Description/Remark
ETM696P	1S



ETM696P

Drawing:



ETM696P

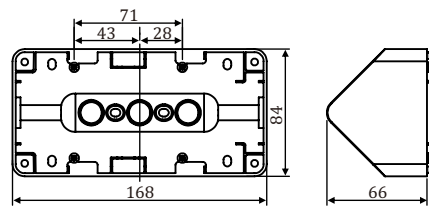
Type designation:

Type	Description/Remark
ETM695P	M+S



ETM695P

Drawing:



ETM695P

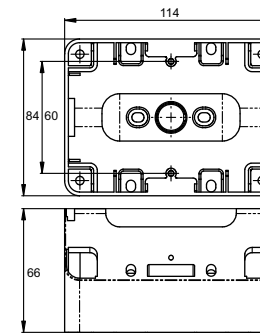
P Series



Type designation:

Type	Description/Remark
ETM694P	2S

Drawing:



ETM694P



ETM694P

P Series

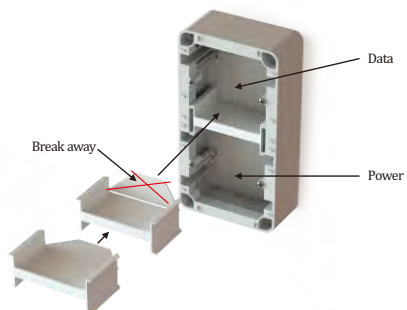
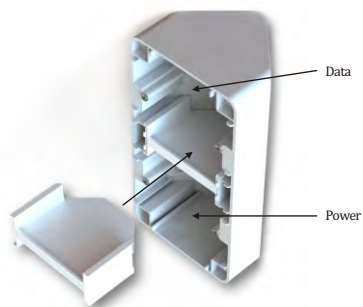


Type designation:

Type	Description/Remark
ETM437P	Partition wall for boxes



ETM437P



P Series



◎ Surface mounting frames, 30mm deep

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc.)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

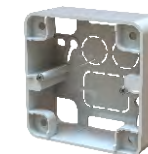
IEC 60607-1

Technical info:

For already completed upholstered wall or corner of wall need to add switch, socket, dimmer, timer or other electrical accessories.

Distance of fixing centre is 60mm and M3 screws.

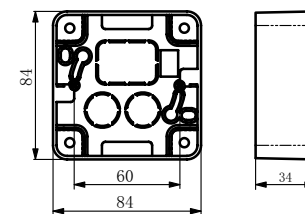
Without conduit entries.



Type designation:

Type	Description/Remark
ETM428P	1 way, 30mm deep

Drawing:



P Series



◎ Surface mounting frames

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s):

IEC 60607-1

Technical info:

For already completed upholstered wall or corner of wall need to add switch, socket, dimmer, timer or other electrical accessories.

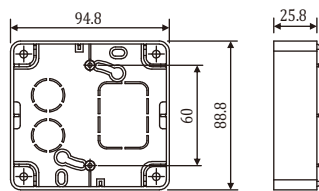
Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.

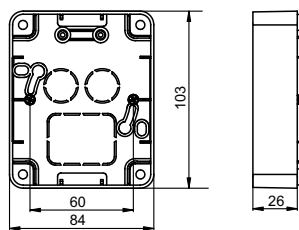
Type designation:

Type	Description/Remark
ETM431P	For double socket, 94.8 × 88.8mm
ETM431PV5	For double socket V5, 103 × 84mm

Drawing:



ETM431P



ETM431PV5



ETM431P



ETM431PV5



Black

P Series



◎ Floor installation box

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Max. Ambient temp.: 45°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s): IEC60670-1

Product info:

Usually the floor installation box is used with wooden cable trunkings (baseboard) on the floor. At the bottom, the pins will facilitate the adjustment by installation and the open space for wiring will help by coupling. The lower part of the device housing can be used as a junction box, max. 5 terminals.

Suitable for wooden cable trunkings (baseboard) size: 30x18, 40x18, 45x18, 42*12, 58*12, 70*12mm.

Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.

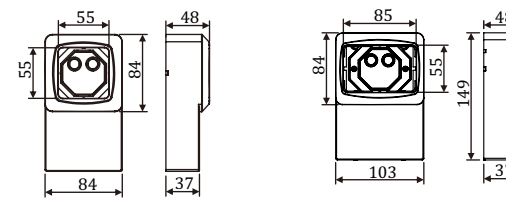
ETM691P: Fit in all standard 55x55 mm central plate equipment, such like switches, single Schuko sockets, network sockets.....

ETM692P: Fit in normal 2-way Schuko socket outlets unit typed ETM022PW or ETM022PQW

Type designation:

Type	Description/Remark
ETM691P	For 1-way devices
ETM692P	For normal 2-way Schuko socket outlets

Drawing:



ETM691P

ETM692P



ETM691P



ETM692P

P Series



© Floor installation box, universal version

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Max. Ambient temp.: 80°C

Fire hazard test: 850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

The product complies with the standard(s): EN60670-1

Product info:

Usually the floor installation box is used with wooden cable trunkings (baseboard) on the floor. At the bottom, the pins will facilitate the adjustment by installation and the open space for wiring will help by coupling. The lower part of the device housing can be used as a junction box, max. 5 terminals.

Fit in mostly standard equipment, such as switches, single Schuko sockets, double Schuko socket outlets, network sockets.....

Suitable for wooden cable trunkings (baseboard), height: 18、12mm, width: 44.5、48.5、56.5、62.5mm.

Distance of fixing centre is 60mm and M3 screws.

Without conduit entries.

Sharp corners in bottom

2*16/20mm cut outs for cable in bottom

Cut outs for cables on both sides 2*2*10mm



White

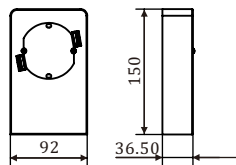


Black

Type designation:

Type	Description/Remark
ETM690P	Floor installation box, universal version

Drawing:



ETM690P

P Series



© 2-way outlet box with inlets for flex tubes for mounting above ceiling and accessories

Colour: White and blue

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 850°C (IEC60695-2-11)

The product complies with the standard(s): EN60670-1

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

Product info:

The function is mounting accessories between hard ceiling and inner ceiling for water heater and so on.

The boxes are equipped with 2x2 inlets on short sides and possible connected with 16/20 pipes/flexible pipes. You can move/add 2x2 inlets to/on long sides, the inlets with locking springs and sealing plugs.

Fixing to hard ceiling by screws with four holes on bottom part.

2*16 and 2*20mm cut outs for cable in bottom.

Equipped with 1 membrane cable entries (Ø 19 mm) on each short side.

Strain relief is available for order and mounting each short side, it can be used when connected in heavy cable, such as rubber cables: 3x1.5mm², 5x2.5mm².

Distance of fixing centre is 60mm and M3 screws.

Cover part size: 103x84mm

The box fit to double socket outlet typed ETM022PQL, and also new ETM022PQ V5.

The box fit to all standard 2S socket outlet units together with 2U frame, such as: ETM246PW, ETM246PQW, ETM022PW, ETM022PQW, ETM022PLW, ETM022PQLW, which has center plate size 85mmx55mm.

The accessories included:

- 2U frame
- Blind cover
- 4xLexCom/Actassi
- 4xRJ45
- Strain relief



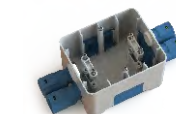
ETM438P



ETM438P+ETM022PQL



ETM438P+ETM022PQL



ETM438P+ETM435P-1

P Series



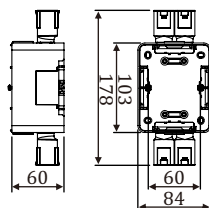
Type designation:

Type	Description/Remark
ETM438P	2-way outlet box with inlets for flex tubes for mounting above ceiling



ETM438P

Drawing:



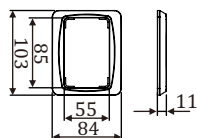
Type designation:

Type	Description/Remark
ETM442P	Frame 2U for ETM438P. Inside 85mmx55mm = 2S, outside 103mm x 84mm.



ETM442P

Drawing:



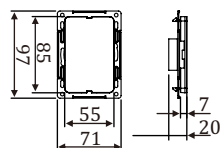
Type designation:

Type	Description/Remark
ETM439PW	Blind cover, 2S.



ETM439PW

Drawing:



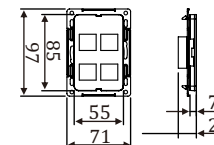
P Series



Type designation:

Type	Description/Remark
ETM440PW-2	4xLexCom/Actassi cover, 2S

Drawing:

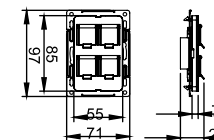


ETM440PW-2

Type designation:

Type	Description/Remark
ETM441PWR-2	4xRJ45 with dust-cover. Keystone size 15.6x19.8, red, 2S
ETM441PWB-2	4xRJ45 with dust-cover. Keystone size 15.6x19.2, black, 2S.

Drawing:



ETM441PWR-2
ETM441PWB-2

Type designation:

Type	Description/Remark
ETM435P-1	Strain relief. Upper part of strain relief, including 2pcs screws

Drawing:



ETM435P-1

Surface Mounting Junction Boxes



© Junction box IP20, 65*65

Technical Data: 380VAC

Rated Connecting Cap: 2.5[□]

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-1)

The product complies with the standard(s): IEC60670-1, IEC60670-22

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Square junction box is spacious and easy to wire. The box is equipped with an insulated 5-way connector. The transparent wire connector makes it easy to ensure sufficient wire depth. The maximum wire capacity per connector is 3 x 2,5 mm² or 4 x 1,5 mm². The box has 6 knock-outs, 2 of which are in the bottom.

Surface mounting.

The minimum and maximum temperatures during installation: -5°C - +60°C.

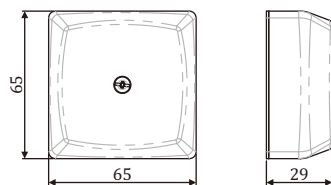


ETM219P

Type designation:

Type	Description/Remark
ETM219P	Junction box, IP20, 5-pole

Drawing:



ETM219P

Surface Mounting Junction Boxes



© Junction box IP54, 86.5*86.5

Technical Data: 400VAC

Rated Connecting Cap: Maximum 3x2.5mm²/clamp or Maximum 4x1.5mm²/clamp

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP54

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): IEC60670-1, IEC60670-22

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Square junction box is spacious and easy to wire. The box is equipped with an insulated 5-way connector. The transparent wire connector makes it easy to ensure sufficient wire depth. Equipped with 8 membrane cable entries (Ø 19 mm) in the sides. In the bottom of the box there are four knock-outs. Cables are easy to get through the inlets. The maximum wire capacity per connector is 3 x 2,5 mm² or 4 x 1,5 mm². The box has 6 knock-outs, 2 of which are in the bottom.

Surface mounting.

The minimum and maximum temperatures during installation: -5°C - +60°C.

Special strain relief is available for order. It can be used when connected in heavy cable, such as rubber cables: 3x1.5mm², 5x2.5mm².



ETM232S

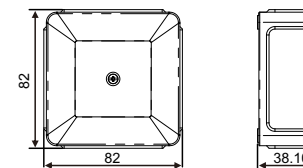


ETM435S

Type designation:

Type	Description/Remark
ETM232S	Junction box, IP54, 5-pole
ETM435S	Strain relief

Drawing:



ETM232S

Surface Mounting Junction Boxes



◎ Junction box IP20, 90*65

Technical Data: 440VAC

Rated Connecting Cap: 6[□]

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): IEC60670-1, IEC60670-22

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Junction box has two 3-pole insulate 6 mm² connectors. The base plate offers a choice of eight different connection points for the connectors. In the bottom of the box there are four knock-outs. The cover has knock-outs in the corners and on the long sides of the cover. The maximum wire capacity of per connector is 8 x 1,5 mm² or 5 x 2,5 mm².

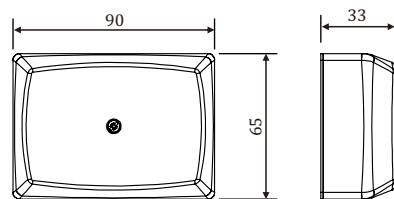
Surface mounting.

The minimum and maximum temperatures during installation: -5°C - +60°C.

Type designation:

Type	Description/Remark
ETM218P	Junction box, IP20, 6-pole

Drawing:



ETM218P

Surface Mounting Junction Boxes



◎ Connecting box IP20/44, 95*95

Technical Data: 400VAC

Rated Connecting Cap: 6[□]

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP21/44

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): IEC60670-1, IEC60670-22

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

Technical info:

Surface mounting.

The square junction box is spacious and easy to wire. The box is equipped with an insulated 5-way connectors. Equipped with two membrane cable entries (2* Ø16 mm) on one side. In the bottom of the box there are three Ø13 and five Ø5 knock-outs. Cables are easy to get through the inlets. The maximum wire capacity of per connector is 3 x 2.5 mm² or 4 x 1.5 mm². The box has 6 knock-outs, 2 of which are in the bottom.

There is enough space under the terminal of 2.0mm² cable, no need to go around the terminal.

Fixing c-c 60, 67, 70 mm for mounting.

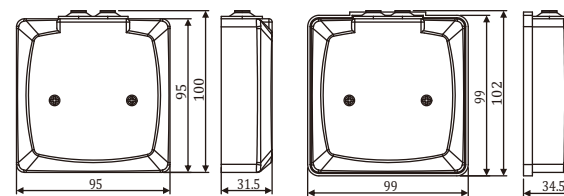
There are two IP-classes, IP20 without baseplate and IP44 with baseplate.

The minimum and maximum temperatures during installation: -5°C - +60°C.

Type designation:

Type	Description/Remark
ETM436P	Connecting box IP21
ETM436P44	Connecting box IP44

Drawing:



ETM436P

ETM436P44



ETM436P, ETM436P44



Black

Surface Mounting Junction Boxes



© Junction box IP65

Technical Data: 400VAC

Rated Connecting Cap:

ETM432S: 2.5[□] ETM233S: 2.5[□] ETM434S: 6[□]

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PP (Halogen free)

IP-Class: IP65

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C (IEC60695-2-11)

The product complies with the standard(s): IEC60670-1, IEC60670-22

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

Technical info:

The square junction box is equipped with 12 membrane cable entries on the sides, and two on the bottom. Cables are easy to be connected by simply inserting the stripped ends through the inlets. The box is locked by snapping which can be opened by inserting a screwdriver (for example) into the opening slots - no screws are needed. The box can be furnished with the strain-reliefs on the center pin.

Surface mounting.

The minimum and maximum temperatures during installation: -5°C to +60°C.

Special strain relief is available for order. It can be used when connected in heavy cable, such as rubber cables: 3x1.5mm², 5x2.5mm².



ETM432S, ETM233S,
ETM434S



ETM435P

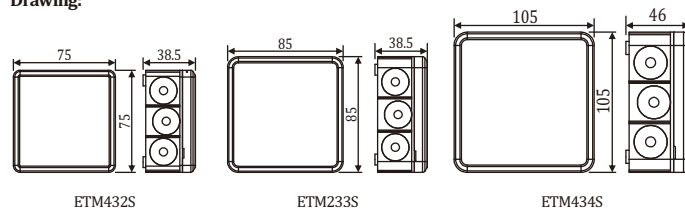


Black

Type designation:

Type	Description/Remark
ETM432S	Junction box IP65, 75*75*38, without centre pin and terminal
ETM233S	Junction box IP65, 85*85*38.5, without centre pin and terminal
ETM434S	Junction box IP65, 105*105*46, without centre pin and terminal
ETM435P	Strain relief

Drawing:



ETM432S

ETM233S

ETM434S

Surface Mounting Junction Boxes



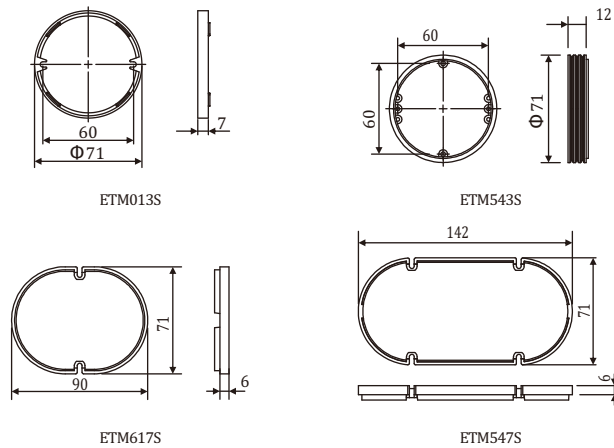
Accessories



◎ Extension ring, fixing center c-c 60mm

Type	Description/Remark
ETM013S	Extension ring for single wall box, H=6 mm
ETM543S	Extension ring for single wall box, H=12mm
ETM617S	Extension ring for one and half wall box, H=6mm
ETM547S	Extension ring for double wall box, H=6mm

Drawing:



ETM013S



ETM543S



ETM617S

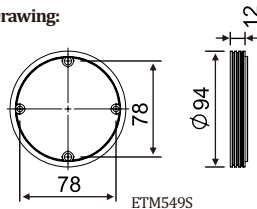


ETM547S

◎ Extension ring, fixing center c-c 78mm

Type	Description/Remark
ETM549S	Extension ring for junction boxes, H=12mm

Drawing:



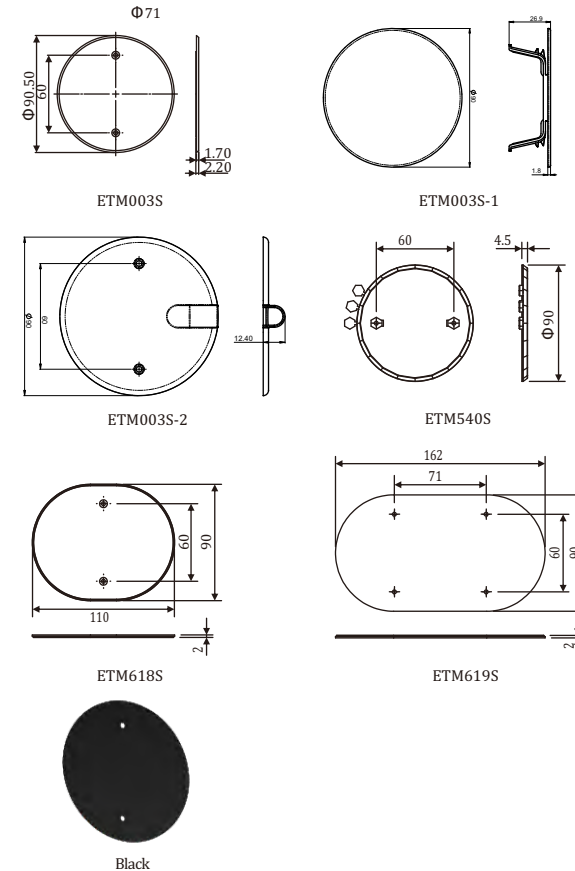
ETM549S

◎ Covers

Cover, fixing center c-c 60mm

Type	Description/Remark
ETM003S	For single wall boxes, $\Phi 90$
ETM003S-1	Plastic-cover for wall box CC 60mm, screwless version
ETM003S-2	Plastic-cover for wall box CC 60mm, with cable entry hole
ETM540S	For single wall boxes, $\Phi 90$, with screw covers
ETM618S	For one and half wall box
ETM619S	For double wall box

Drawing:



ETM003S



ETM003S-1



ETM003S-2



ETM540S



ETM618S



ETM619S

Accessories



Cover, for junction box c-c 67mm, screwless version

Type	Description/Remark
ETM526S	Ø100
ETM527S	Ø100, with cable entry hole

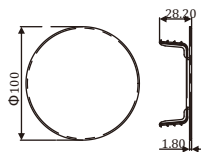


ETM526S

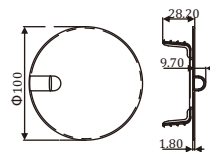


ETM527S

Drawing:



ETM526S



ETM527S



Black

Cover, fixing center c-c 67mm

Type	Description/Remark
ETM004S-1	Ø100
ETM528S	Ø100, with cable entry hole

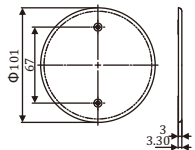


ETM004S-1

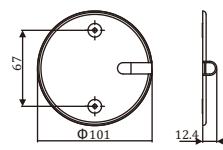


ETM528S

Drawing:



ETM004S-1



ETM528S

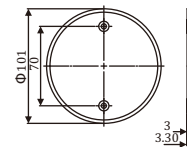
Cover, fixing center c-c 70mm

Type	Description/Remark
ETM004S	Ø100



ETM004S

Drawing:



ETM004S

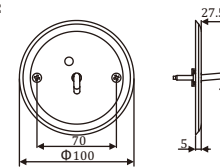
Cover, fixing center c-c 70mm

Type	Description/Remark
ETM539S	Ø100, with hook



ETM539S

Drawing:



ETM539S



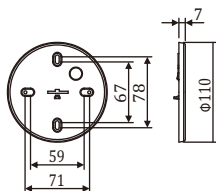
Cover, fixing center c-c 67-78mm

Type	Description/Remark
ETM005H	Ø110, with hook

Drawing:



ETM005H



ETM005H

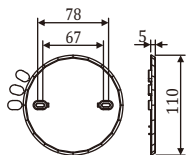
Cover, fixing center c-c 67-78mm

Type	Description/Remark
ETM541S	Ø110, with screw covers

Drawing:



ETM541S



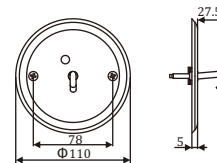
ETM541S



Cover, Fixing center c-c 78mm

Type	Description/Remark
ETM539S-1	Ø110

Drawing:



ETM539S



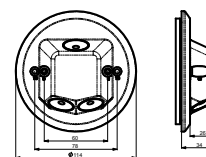
ETM539S-1

Connection cover, fixing center c-c 78mm

For cables Ø 6.0 - 15.0 mm
With strain relief

Type	Description/Remark
ETM542S44V2	Ø100, connection cover, IP44

Drawing:



ETM542S44V2



ETM542S44V2

Accessories



◎ Pliable Conduits, Flexible tube

Color: Pale yellow, white, black

Main material: PE, PP

IP-Class: IP20

Classification code: 2222

Operating temperature range: -5-90 °C

Compression resistance: 320N

The product complies with the standard(s):

EN50086-2-2

EN61386-1

EN14582

The product is in conformity with the provisions of the following European directive(s):

RoHS Directive

WEEE Directive

REACH Directive

Quality management system: ISO 9001

Environmental management system: ISO 14001

Type	Description/Remark
82401650	ø16mm tube, pale yellow, 50M
82402050	ø20mm tube, pale yellow, 50M
82402550	ø25mm tube, pale yellow, 50M
82403250	ø32mm tube, pale yellow, 50M



Type	Description/Remark
82401650	ø16mm tube, pale yellow, Halogen-free, 50M
82402050	ø20mm tube, pale yellow, Halogen-free, 50M
82402550	ø25mm tube, pale yellow, Halogen-free, 50M
82403250	ø32mm tube, pale yellow, Halogen-free, 50M



Type	Description/Remark
82411650	ø16mm tube, white, Halogen-free, 50M
82412050	ø20mm tube, white, Halogen-free, 50M
82412550	ø25mm tube, white, Halogen-free, 50M
82413250	ø32mm tube, white, Halogen-free, 50M

Accessories



Type	Description/Remark
82421650	ø16mm tube, black, 50M
82422050	ø20mm tube, black, 50M
82422550	ø25mm tube, black, 50M
82423250	ø32mm tube, black, 50M



Type	Description/Remark
82401651	ø16mm tube with pulling string, 50M
82402051	ø20mm tube with pulling string, 50M



Nylon line for pulling wire through tube

Type	Description/Remark
ETM532S	15M, Ø4mm
ETM533S	25M, Ø4mm



Clips for flexible tube

Type	Description/Remark
ETM659S	Clips for 16mm flexible tube



Clips for flexible tube

Type	Description/Remark
ETM559S	Strain - relief - 16mm



Accessories

Straight extension pipe



Type	Description/Remark
ETM237S	Ø16mm, with locker
ETM238S	Ø20mm, with locker
ETM655S	Ø25mm, with locker
ETM656S	Ø32mm, with locker
ETM657S	Ø40mm, with locker
ETM658S	Ø50mm, with locker



Type	Description/Remark
ETM237S-1	Ø16mm extension pipe, without locker

For tube-fuse box

Type	Description/Remark
ETM550S	Splitable connection pipe for repair 16 mm flexible tube with cables inside
ETM551S	Splitable connection pipe for repair 20 mm flexible tube with cables inside



ETM550S, ETM551S



ETM550S, ETM551S

For tube-fuse box

Type	Description/Remark
ETM554S	Splitable adapter 16mm to 20mm for flex pipes



ETM554S



ETM554S

Accessories

For tube-fuse box

Type	Suitable conduit size	Suitable cut-out size on cabinet
ETM235S	Ø16mm	Ø16mm
ETM236S	Ø20mm	Ø20mm
ETM651S	Ø25mm	Ø25mm
ETM652S	Ø32mm	Ø32mm
ETM653S	Ø40mm	Ø40mm
ETM653S-1	Ø40mm	Ø50mm
ETM654S	Ø50mm	Ø50mm



ETM235S



ETM236S



ETM651S



ETM652S



ETM653S



ETM653S-1



ETM654S

For tube-fuse box

Type	Description/Remark
ETM654S-1	Fitting for 50mm holes in cabinets and with 2x16mm+3x16/20mm inlets



ETM654S-1

Accessories



◎ Etman Electrical Tape

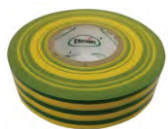
1. All-weather, highly flexible, professional grade, self-adhesive PVC electrical tape
2. UL 510 flame retardant
3. CSA 22.2
4. IEC 60454-3-1-7/F-PVCP/90
5. Quick identification of electrical phases, circuits, feeders and branches
6. Primary insulation for splices up to 1000 volts
7. Can be applied at low temperatures
8. Highly resistant to sun, water, oil, acids, corrosive chemicals
9. High UV resistance

Specifications

- Thickness:** 0.18 mm ± 0.005mm
Tensile Strength: 6.6kg/25mm
Elongation: 200%
Adhesive to Backing: 2.5N/10mm
Adhesive to Steel: 0.34kg/19mm
Voltage: 1000V
Heat: -18°C to +105°C
Dielectric Strength: 45KV/mm
Insulation: YES
Material: PVC
Shelf Life: 5 years
Standards Meet: RoHS
ELV Compliant Dir.Art.4(2): YES
Hazardous goods: NO
Flame Retardant: YES

Type designation:

Type	Description/Remark
81701018	Black
81706018	Red
81703018	Blue
81702018	White
81709118	Brown
81708018	Green/Yellow1



Accessories



◎ Cable clip with nail for flat cable (CCF)

Plastic part: PP, Halogen free, UV-stabilized, impact resistant

Metal part: Corrosion class C4, Dacromet coating hardened steel

Suitable Applications: Indoor & outdoor installations, wood & wood fiber boards, cellular concrete

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C

Type	Clip size	Color	Nail diameter	Nail totally length	Useful length of nail
ETM020SW	3x5mm	White	1.5	20	14
ETM016SW	6x9mm	White	1.5	25	15
ETM017SW	7x10mm	White	2.0	25	16



Accessories



☉ Cable clip with nail for round cable (CCR)

Plastic part: PP, Halogen free, UV-stabilized, impact resistant

Metal part: Corrosion class C4, Dacromet coating hardened steel

Suitable Applications: Indoor & outdoor installations, wood & wood fiber boards, cellular concrete

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C

Type	Size	Color	Nail diameter	Nail totally length	Useful length of nail
ETM020S/2W	3-5	White	Ø 1.2	20	15
ETM256SW	4-6	White	Ø 1.2	20	14
ETM018SW	5-7	White	Ø 1.2	20	12
ETM019SW	7-10	White	Ø 1.5	25	15
ETM019S/1W	7-10	White	Ø 1.5	30	21
ETM257S/1W	8-12	White	Ø 2	30	18
ETM257S/2W	8-12	White	Ø 2	35	23
ETM257S/3W	8-12	White	Ø 2	45	33
ETM258SW	10-14	White	Ø 2	30	18
ETM258S/1W	10-14	White	Ø 2	35	22
ETM258S/2W	10-14	White	Ø 2	45	33
ETM259SN/1W	14-20	White	Ø 2.2	35	18
ETM259SN/2W	14-20	White	Ø 2.2	45	26
ETM260SN/1W	18-22	White	Ø 2.2	45	23
ETM261SN/1W	22-26	White	Ø 2.2	45	19

Type	Size	Color	Nail diameter	Nail totally length	Useful length of nail
ETM019S/1B	7-10	Black	Ø 1.5	30	21
ETM258S/1B	10-14	Black	Ø 2	30	22
ETM259SN/1B	14-20	Black	Ø 2.2	35	18
ETM259SN/2B	14-20	Black	Ø 2.2	45	26
ETM260SN/1B	18-22	Black	Ø 2.2	45	23
ETM261SN/1B	22-26	Black	Ø 2.2	45	19

Type	Size	Color	Nail diameter	Nail totally length	Useful length of nail
ETM020S/1T	3-5	Nature	Ø 1.2	16	11
ETM020S/2T	3-5	Nature	Ø 1.2	20	15
ETM256ST	4-6	Nature	Ø 1.2	20	14
ETM018ST	5-7	Nature	Ø 1.2	20	12

Type	Size	Color	Nail diameter	Nail totally length	Useful length of nail
ETM021SSG	14-17	Grey	Ø 2.2	40	22



Accessories



☉ Cable clip with screw (CCS)

Plastic part: PP, Halogen free, UV-stabilized, impact resistant

Metal part: Corrosion class C4, Dacromet coating hardened steel

Suitable Applications: Indoor & outdoor installations, wood & wood fiber boards, plasterboard, cellular concrete (density lower than 600, need Ø 4.2 hole size plastic plug. Density higher than 600, no need pro-drill or plugs), concrete and bricks by pre-drilled Ø4mm hole (approx. Deep 30mm)

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C

Type	Clip sizes	Color	Screw diameter	Screw print	Screw total length (mm)	Useful length of Screw (mm)
ETM264SW	7-10	White	Ø 5	PH2	32±1	22.2±1
ETM265SW	8-12	White	Ø 5	PH2	32±1	21.5±1
ETM266S/1W	10-14	White	Ø 5	PH2	35±1	20.2±1
ETM267S/1W	14-18	White	Ø 5	PH2	37±1	20.5±1
ETM268SW	18-22	White	Ø 5	PH2	40±1	20.5±1
ETM279SW	22-26	White	Ø 5	PH2	45±1	21.5±1

Type	Clip sizes	Color	Screw diameter	Screw print	Screw total length (mm)	Useful length of Screw (mm)
ETM265SB	8-12	Black	Ø 5	PH2	32±1	21.5±1
ETM266S/1B	10-14	Black	Ø 5	PH2	35±1	20.2±1
ETM267S/1B	14-18	Black	Ø 5	PH2	37±1	20.5±1
ETM268SB	18-22	Black	Ø 5	PH2	40±1	20.5±1
ETM279SB	22-26	Black	Ø 5	PH2	45±1	21.5±1



Accessories



© Simple long cable clips with nail and plug, Nature (SCP)

Plastic part: PP, Halogen free, UV-stabilized, impact resistant

Metal part: Corrosion class C4, Dacromet coating hardened steel

Suitable Applications Bearing force: Indoor & outdoor installations, wood & wood fiber boards (10kg), solid concrete (10kg), cellular concrete (5kg)

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C



	Clip sizes	Nail length	Nail diameter	Plug Diameter	Plug length	for drilling
82002000	16-19	40	2.5	Ø 5.5	23	Ø 5.5
82002100	19-22	40	2.5	Ø 5.5	23	Ø 5.5

© Double long cable clips with nail and plug, Nature (DCP)

Plastic part: PP, Halogen free, UV-stabilized, impact resistant

Metal part: corrosion class C4, Dacromet coating hardened steel

Suitable Applications Bearing force: Indoor & outdoor installations, wood & wood fiber boards (10kg), solid concrete (10kg), cellular concrete (5kg)

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C



	Clip sizes	Nail length	Nail diameter	Plug Diameter	Plug length	for drilling
82002200	16-19	40	2.5	Ø 5.5	23	Ø 5.5
82002300	19-22	40	2.5	Ø 5.5	23	Ø 5.5

Accessories



© Plastic Cable clip (PCC)

Plastic part: PP, Halogen free, UV-stabilized, impact resistant

Suitable Applications: Indoor & outdoor installations,

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C



Type	Clip sizes	color	Recommended mounting screw size	
			machine thread screw	Self-tapping screw
82003100	5-7	White	M4	Ø5 mm
82003200	7-10	White	M5	Ø5 mm
82003300	10-14	White	M5	Ø5 mm
82003400	14-20	White	M6	Ø6 mm
82003500	20-26	White	M6	Ø6 mm

Accessories

◎ Steel cable clip with nail (SCC)

Nail: Electroplated Zinc coated hardened steel

Clip: Electroplated Zinc coated steel, powder-coated

Color: White

Suitable Applications: Indoor & outdoor installations, wood & wood fiber boards, cellular concrete

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C



Type	Clip sizes	Nail diameter	Nail length	Suitable tooling type
ETM252S/1	7-10	Ø 2	18	ETM290S
ETM252S	7-10	Ø 2	25	ETM290S
ETM252S/2	7-10	Ø 2	40	ETM290S
ETM254S/1	8-12	Ø 2	18	ETM243S
ETM254S	8-12	Ø 2	25	ETM243S
ETM254S/2	8-12	Ø 2	40	ETM243S
ETM293S	10-14	Ø 2	25	ETM291S
ETM293S/1	10-14	Ø 2	40	ETM291S
ETM294S	14-20	Ø 2	25	ETM292S
ETM294S/1	14-20	Ø 2	40	ETM292S

◎ Steel cable clip with screw (SCCS)

Screw: Electroplated Zinc coated hardened steel

Clip: Electroplated Zinc coated steel, powder-coated

Color: White

Suitable Applications: Indoor & outdoor installations, wood & wood fiber boards, plasterboard, cellular concrete

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C



Type	Clip sizes	Nail diameter	Nail length	Screw length	Suitable tooling type
ETM252S/S	7-10	2.7	25	15	ETM290S
ETM254S/S	8-12	2.7	25	15	ETM243S
ETM293S/S	10-14	2.7	25	15	ETM291S
ETM294S/S	14-20	2.7	25	15	ETM292S

Accessories

◎ Tool for SCC/SCCS

Plastic part: PA, Halogen free, UV-stabilized, impact resistant

Suitable Applications: Indoor & outdoor installations,

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C

Type	Clip sizes	Nail diameter
ETM290S	7-10	Blue
ETM243S	8-12	Blue
ETM291S	10-14	Blue
ETM292S	14-20	Blue



Accessories

◎ Stainless cable clip, round

Double (SCCD)

Metal: Stainless steel corrosion class C4

Suitable Applications: Indoor & outdoor installations

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C



Double(SCCD)

Clip sizes	
82201400	16mm
82201500	20mm

Single (SCCS)

Metal: Stainless steel corrosion class C4

Suitable Applications: Indoor & outdoor installations

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C



Single(SCCS)

Clip sizes	
82201600	6mm
82201700	8mm
82201000	10mm
82201100	12mm
82201200	14mm
82201300	16mm

Accessories

◎ Metal double staples (MDS)

Metal: Electroplated Zinc coated hardened steel corrosion class C4

Suitable Applications: Indoor & outdoor installations, wood & wood fiber boards, cellular concrete

Working temperature: -25°C to 45°C

Installation temperature: 0°C to 25°C

Type	Clip sizes	Nail diameter	Nail length
82109200	16	16	1.0
82109300	20	20	1.5
82109400	27	32	1.5
82109500	25	30	1.5
82109600	32	35	1.5



◎ Cable clip for concrete

Type	Size	Colour	Diameter	Nail length	Useful nail length
ETM269S	6x3.5mm	White	Ø1.2	11	5





DesignX
Made by Etman



© Flush-type wall rocker switches for fixed installation, screwless terminal



ETM201XQ, ETM352XQ

Technical Data: 16AX 250VAC
Colour: White: RAL9003 (UV stable), Black: RAL9017
Main material: PC (Halogen free)
IP-Class: IP21, on a smooth surface
Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD RoHS WEEE

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60669-1

Technical info:

Wiring diagram printed on the rear side.

The rocker and cover plate made by thermoplastic.

Standard 61x61 mm central plate.

Screwless terminals.

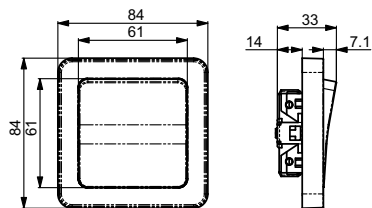
Flush wiring.

Fit into wall boxes, screw distance c-c 60 mm, cover plate c-c 84 mm.

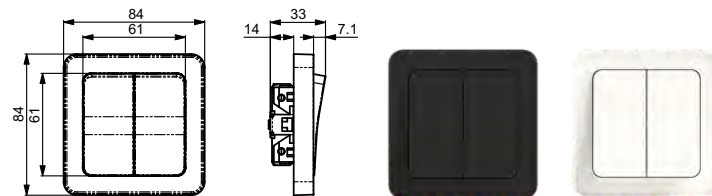
Normal switches

Type	Description/Remark
ETM201XQ	1 pole/2-way, pattern No.1/6
ETM202XQ	2 pole, pattern No.2
ETM204XQ	1 pole and 2-way, pattern No.5
ETM351XQ	1+1pole and 2-way, pattern No.6+6
ETM352XQ	Reversing switch, pattern No.7
ETM353XQ	3 gang, pattern No.1+1+1
ETM203XQ	1+2 pole, pattern No.1+2

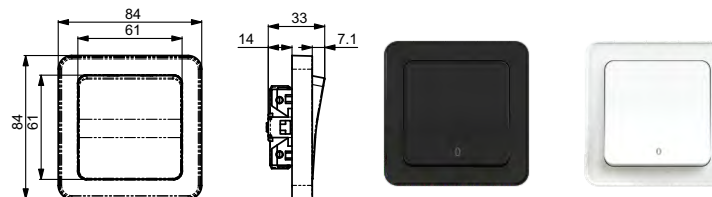
Drawing:



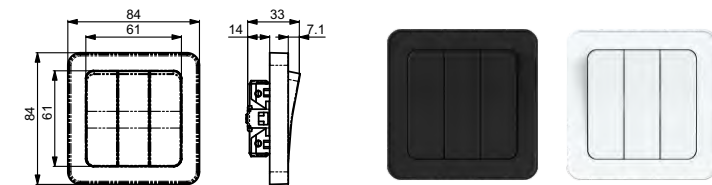
ETM201XQ, ETM352XQ



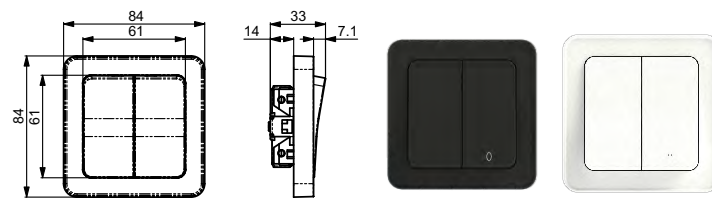
ETM204XQ, ETM351XQ



ETM202XQ



ETM353XQ



ETM203XQ

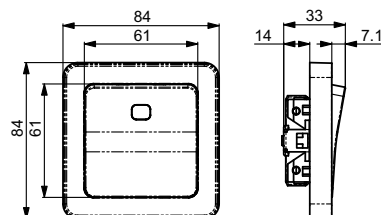
Switches, with indication lamp

Type	Description/Remark
ETM202XQL	2 pole, pattern No.2



ETM202XQL

Drawing:



Switches, push button

Type	Description/Remark
ETM201XQP	1 pole/2-way, pattern No.1/6, push button
ETM204XQP	1 pole and 2-way, pattern No.5, push button
ETM353XQP	3 gang, pattern No.1+1+1, push button
ETM351XQP	1 pole/2-way, pattern No.1/6, push button

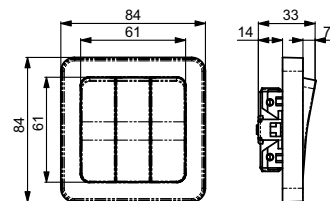
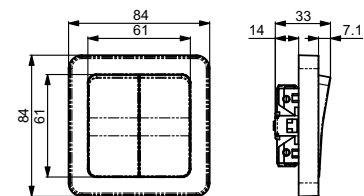
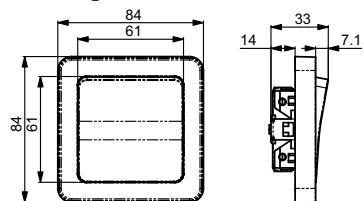


ETM201XQP



ETM204XQP ETM351XQP

Drawing:

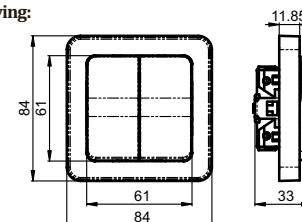


ETM353XQP

Shutter, push button

Type	Description/Remark
ETM355XQ	1 pole

Drawing:

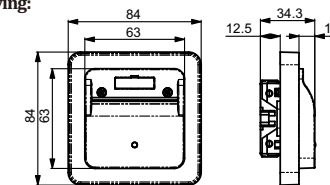


ETM355XQ

Hotel cord

Type	Description/Remark
ETM356XQ	Hotel card, 1 pole/2-way, pattern No.1/6

Drawing:



ETM356XQ



◎ **Flush-type wall socket outlet for fixed installation, screwless terminal**

Technical Data: 16A 250VAC

Colour: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C /850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): RoHS WEEE

Certificate(s): Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60884-1

Technical info:

Standard 61x61 mm central plate. It can fit into our X series standard multi way frames.

Screwless terminals.

Flush wiring.

Fit into wall boxes, screw distance c-c 60 mm,

cover plate c-c 84 mm.

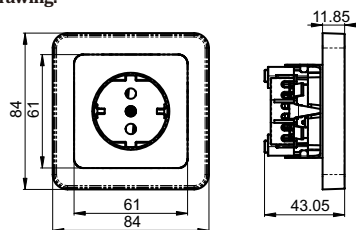
Socket outlet with thermoplastic cover.

With shutter.

Special house (ETM240X) for single and double socket outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.

Type	Description/Remark
ETM207XQ	1-way Schuko socket, earthed

Drawing:



◎ **Flush-type wall socket outlet for fixed installation, screwless terminal**

Technical Data: 16A 250VAC

Colour: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C /850°C(IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): RoHS WEEE

Certificate(s): Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60884-1

Technical info:

Screwless terminals.

Flush wiring.

Fit into wall boxes, screw distance c-c 60 mm.

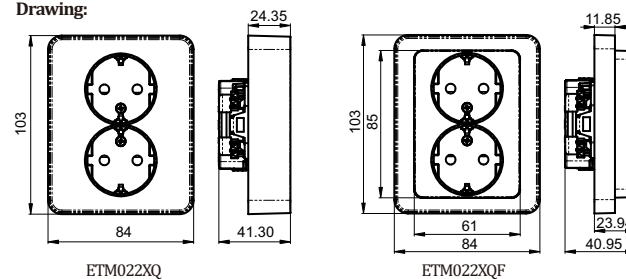
Socket outlet with thermoplastic cover.

With shutter.

Special house (ETM431X) for single and double socket outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.

Type	Description/Remark
ETM022XQ	2-way Schuko socket, earthed, normal version
ETM022XQF	2-way Schuko socket, earthed, frame version

Drawing:



X Series



ETM022XQ



ETM022XQF



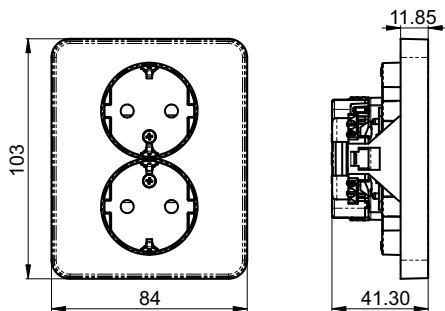
© Flush-type wall socket outlet for fixed installation, low profile, screwless terminal

Technical Data: 16A 250VAC
Colour: White: RAL9003 (UV stable), Black: RAL9017
Main material: PC (Halogen free)
IP-Class: IP21, on a smooth surface
Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C /850°C (IEC60695-2-11)
The product is in conformity with the provisions of the following European directive(s): RoHS WEEE
Certificate(s): Semko
Quality management system according to: ISO 9001
Environmental management system: ISO 14001
Occupational Health and Safety Management System: ISO 45001
The product complies with the standard(s): EN 60884-1
Technical info:
 Screwless terminals.
 Flush wiring.
 Fit into one and half wall boxes, screw distance c-c 60 mm.
 cover plate c-c 84 mm.
 Socket outlet with thermoplastic cover.
 With shutter.
 Special house (ETM240X) for single and double socket outlets - can be used when flush



Type	Description/Remark
ETM022XQL	2-way Schuko socket , earthed, low profile

Drawing:



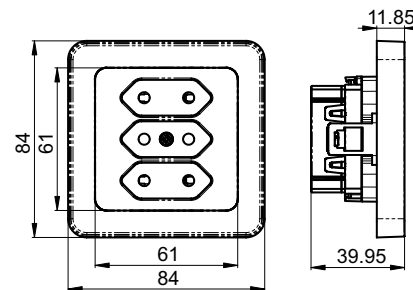
© Flush-type wall socket outlet for fixed installation, screw terminal

Technical Data: 2.5A 250VAC
Colour: White: RAL9003 (UV stable), Black: RAL9017
Main material: PC (Halogen free)
IP-Class: IP20
Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C /850°C (IEC60695-2-11)
The product is in conformity with the provisions of the following European directive(s): RoHS WEEE
Certificate(s): Semko
Quality management system according to: ISO 9001
Environmental management system: ISO 14001
Occupational Health and Safety Management System: ISO 45001
The product complies with the standard(s): EN 60884-1
Technical info:
 Screw terminals.
 Flush wiring.
 Fit into wall boxes, screw distance c-c 60 mm.
 Socket outlet with thermoplastic cover.
 With shutter.
 Special house (ETM431X) for single and double socket outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.



Type	Description/Remark
ETM405X	3-way Euro socket

Drawing:



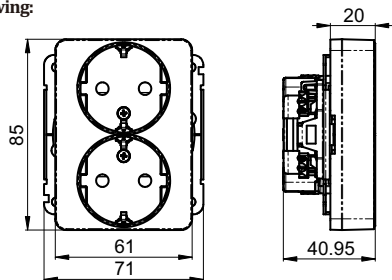
X Series 

☉ Socket outlet units

2 way Schuko socket unit, standrad
Fit into "M" and "2S" holes in X series multi way frames, 61*85mm

Type	Description/Remark
ETM022XQW	2 way Schuko socket, screwless terminals, normal version

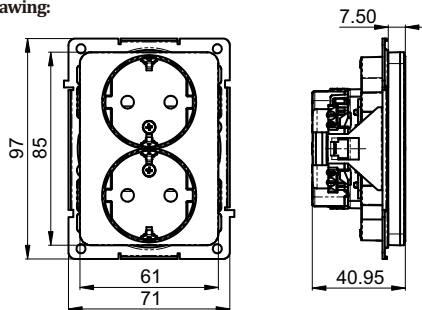
Drawing:



2 way Schuko socket unit, low profile
Fit into "2S" holes in X series multi way frames, 61*85mm

Type	Description/Remark
ETM022XQLW	2 way Schuko socket, screwless terminals, low profile

Drawing:



X Series 

☉ Coaxial outlets

Colour: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C /850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): RoHS WEEE

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Technical info:

Without unit.

Flush mounted.

Special house (ETM240X) for coaxial outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.

There has single screw (Pozidriv) in the cover plate.

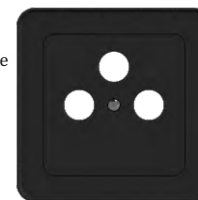
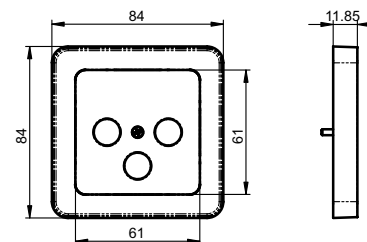
Fit into standard wall boxes, screw distance c-c 60 mm.

With end terminator (75 ohm).

Thermoplastic center plate 55*55 mm, which fits into Etman "X" series multi way frames.

Type	Description/Remark
ETM215XW	TV/Radio/Satellite, without unit

Drawing:





© RJ45, plastic

Colour: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C /850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): RoHS WEEE

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Technical info:

Flush mounted system without modular outlets

Special house (ETM240X) for modular outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.

Non-screw cover plate

Fit into wall boxes, screw distance cc 60 mm

Thermoplastic center plate 61X61 mm, which fits into Etman "X" series multi way frames.

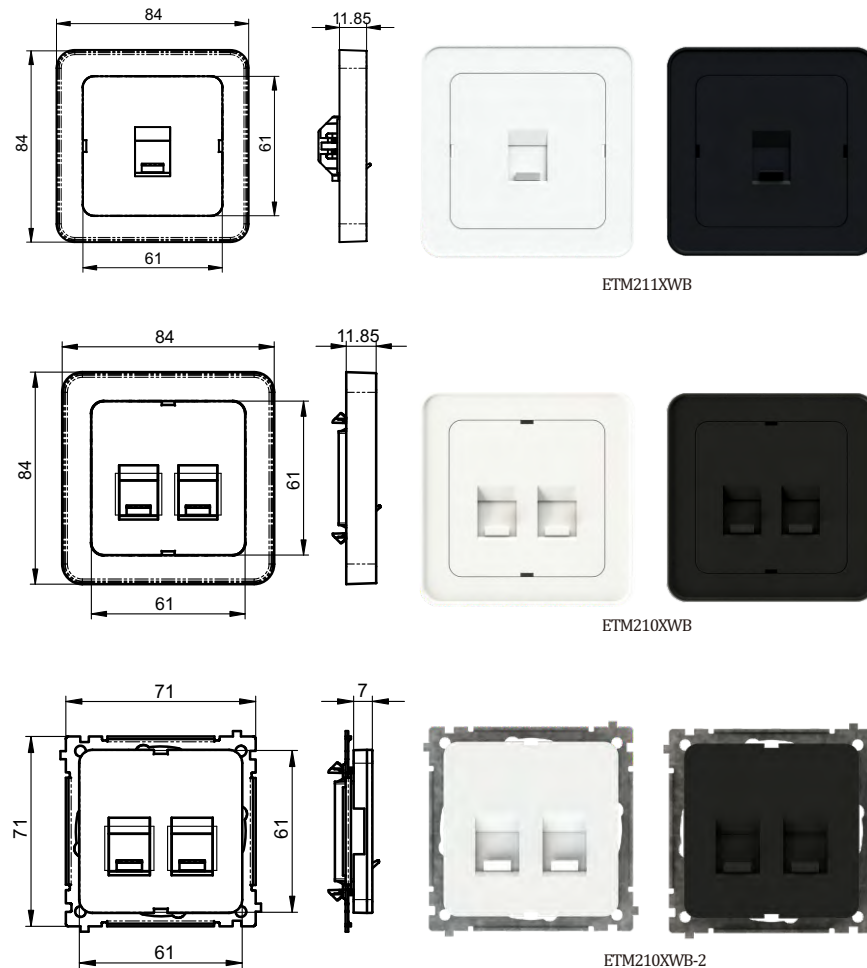
With dust cover except angled version

For keystone size 14.6x19.2mm.

With more space from each other this to make fixing possible also for some AMP connectors that are wider.

Type	Description/Remark
ETM211XWB	1xRJ452, without modular
ETM210XWB	2xRJ45, without modular
ETM210XWB-2	2xRJ45, without modular; without frame

Drawing:



◎ TV+ RJ45, plastic

Colour: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C /850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): RoHS WEEE

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Technical info:

Flush mounted system.

With 2 holes for Keystone jack and one for antenna connector (Coax/F type or F Type/F type) mounted, including 1 blind plug in Keystone hole.

Screwless cover plate, snap into combination plate.

Thermoplastic center plate 61X61 mm, which fits into Etman "X" series combination plate.

Without shutter.

Modular is not included.

Special house (ETM240X) for modular outlets - can be used when flush mounting cable. installation enters as surface mounting, covering the flush box.

Fit into wall boxes, screw distance c-c 60 mm.



ETM210XW+C

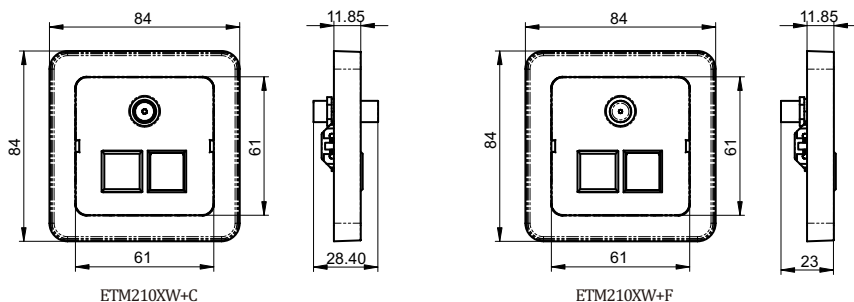


ETM210XW+F



Type	Description/Remark
ETM210XW+C	2xRJ45+ Coax/F Type
ETM210XW+F	2xRJ45+ F Type/F Type

Drawing:



◎ Flush-type, Universal dimmer for fixed installation

Color: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working Temperature: 0~+40°C

Fire hazard test: 650°C /850°C (IEC60695-2-11)

The product complies with the standard(s): EN 60669-2-1 EN 60669-1

The product is in conformity with the provisions of the following European directive(s):

LVD EMC RoHS WEEE REACH

Certificate(s): CE, Semko, EMC

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Technical info:

230VAC

Frequency: 50Hz

Load type:

- 230V incandescent lamps (ohmic load, R):4-400W
- 230V halogen lamps (ohmic load, R):4-400W
- 12V low-voltage halogen lamps with dimmable wound (Conventional) transformer (Inductive load, L): 4-400VA (max. 2 x transformers 150W; max. 3 x transformers 105W; max 5 x transformers 70W)
- 12V low-voltage halogen lamps with electronic transformer (Capacitive load, C): 4-400VA (max. 2 x transformers 150W; max. 3 x transformers, 105W; max 5 x transformers, 70W)
- Dimmable LED lamp (trailing edge, RC mode): 4-200VA
- Dimmable LED lamp (leading edge, RL mode): 4-40VA
- Dimmable LED filament: 4-200VA

Product information:

Press the knob to switch dimmer on/off, adjust the brightness of light by rotating the knob, turn the knob clockwise to brighter bulb. Dimmer is able to adjust the brightness of bulb from minimum to maximum by rotary potentiometer, push-button switch on/off which can control load power.

Neutral conductor: Required

Set the minimum brightness using the set-screw (MIN) possible just by taking away the knob.

Set the maximum brightness using the set-screw (MAX) possible just by taking away the knob.

Set the leading or trailing edge by selection switch possible just by taking away the knob.

Fit into standard wall boxes (c-c 60mm). By surface fixing, please use surface house (Typed ETM240X).

By surface fixing, in combination with a switch or others, please use double surface house (Typed ETM429X).

Thermoplastic center plate 55X55 mm, which fits into Etman "X" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

No visible screws.

Only suitable for use in indoor areas.

Built-in protection: OCP, auto reset, OTP, auto reset, Short circuit protection, auto reset.

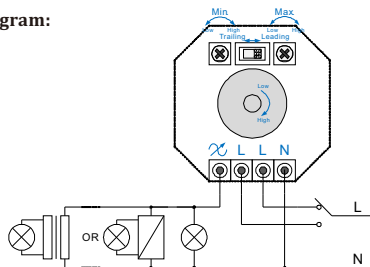
Standby: <0.1W

Possibility to mount claws ETM32XPC.





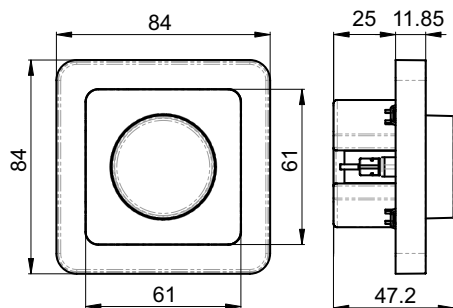
Type	Description/Remark
ETM329X	400W, Leading/Trailing edge dimmer

Installation diagram:**Note:**

- If light is flicker, or with a long time to start it, or not all lights start at the same time, please adjust the "MIN" adjustment clockwise to higher level.
- Lamp with same type can be connected in parallel, but connecting different types of lamps in parallel is not recommended in general. Mixed connection lamps suitable for leading edge and trailing edge (e.g. Inductive load and capacitive load in parallel connection) is not allowed.
- Turn off the ETM329P dimmer before changing leading edge mode and trailing edge mode.
- Make sure that the load type and dimming mode match the ETM329P dimmer before turning it on.
- Some flicker may occur when dimming LED. Try to minimize it by turning the MIN and MAX to get proper working range for better performance.

SAFETY INSTRUCTIONS:

Read these instructions carefully before commencing installation and retain for future reference. The dimmer should be installed by a licensed electrician and in accordance with local regulations. Make sure that the power is off before installation or maintenance

Drawing:

© Flush-type, 2-pole Universal dimmer for fixed installation

Color: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working Temperature: 0~+40°C

Fire hazard test: 650°C /850°C (IEC60695-2-11)

The product complies with the standard(s): EN 60669-2-1

The product is in conformity with the provisions of the following European directive(s):

LVD EMC RoHS WEEE REACH

Certificate(s): CE, Semko, EMC

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Technical Info: 230VAC

Frequency: 50Hz

Load type:

- 230V incandescent lamps (ohmic load, R):4-400W
- 230V halogen lamps (ohmic load, R):4-400W
- 12V low-voltage halogen lamps with dimmable wound (Conventional) transformer (Inductive load, L): 4-400VA (max. 2 x transformers 150W; max. 3 x transformers 105W; max 5 x transformers 70W)
- 12V low-voltage halogen lamps with electronic transformer (Capacitive load, C): 4-400VA (max. 2 x transformers 150W; max. 3 x transformers, 105W; max 5 x transformers, 70W)
- Dimmable LED lamp (trailing edge, RC mode): 4-200VA
- Dimmable LED lamp (leading edge, RL mode): 4-40VA
- Dimmable LED filament: 4-200VA

Product information:

Rotate the knob to switch dimmer on/off, adjust the brightness of light by rotating the knob, turn the knob clockwise to brighter bulb. Dimmer is able to adjust the brightness of bulb from minimum to maximum by rotary potentiometer, push-button switch on/off which can control load power.

Neutral conductor: Required

Set the minimum brightness using the set-screw (MIN) possible just by taking away the knob. Set the maximum brightness using the set-screw (MAX) possible just by taking away the knob. Set the leading or trailing edge by selection switch possible just by taking away the knob. Fit into standard wall boxes (c-c60mm). By surface fixing, please use surface house (Typed ETM240X).

By surface fixing, in combination with a switch or others, please use double surface house (Typed ETM429X).

Thermoplastic center plate 61X61 mm, which fits into Etman "X" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

No visible screws.

Only suitable for use in indoor areas.

Built-in protection: OCP, auto reset, OTP, auto reset, Short circuit protection, auto reset.

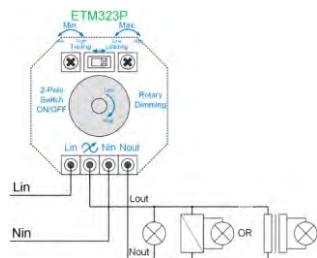
Standby: <0.1W

Possibility to mount claws ETM32XPC.





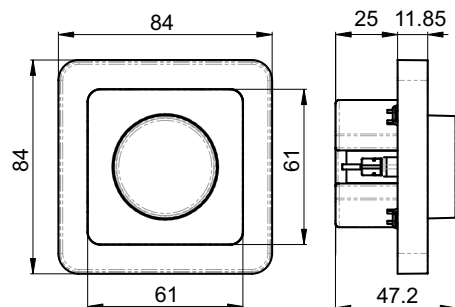
Type	Description/Remark
ETM323X	400VA, 2-pole. Leading/Trailing edge dimmer

Installation diagram:**Note:**

- If light is flicker, or with a long time to start it, or not all lights start at the same time, please adjust the "MIN" adjustment clockwise to higher level.
- Lamp with same type can be connected in parallel, but connecting different types of lamps in parallel is not recommended in general. Mixed connection lamps suitable for leading edge and trailing edge (e.g. Inductive load and capacitive load in parallel connection) is not allowed.
- Turn off the ETM323X dimmer before changing leading edge mode and trailing edge mode.
- Make sure that the load type and dimming mode match the ETM323X dimmer before turning it on.
- Some flicker may occur when dimming LED. Try to minimize it by turning the MIN and MAX to get proper working range for better performance.

SAFETY INSTRUCTIONS:

Read these instructions carefully before commencing installation and retain for future reference. The dimmer should be installed by a licensed electrician and in accordance with local regulations. Make sure that the power is off before installation or maintenance.

Drawing:

☉ Electronic time switch

Color: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Fire Hazard test: 650°C /850°C (IEC60695-2-11)

The product complies with the standards: EN 60730-1 EN 60730-2-7

The product is in conformity with the provisions of the following European directive(s):

LVD EMC RoHS WEEE REACH Ecodesign

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Technical info:

Rated voltage: 250VAC 50Hz/60Hz

Maximum current: 10A

Effect:

Resistive (R) 2500W (cosΦ=1)

Inductive (L) 360VA / 360W×cosΦ

Capacitive (C) 250VA / 260W×cosΦ

Power consumption: <0.5W

Time duration in hours: 5MIN; 10MIN; 15MIN; 30MIN; 1H; 2H; 4H; 8H

Protection: Ip21

Ambient temperature: -25~45°C

Relative humidity: <95%

Product information:

Electronic time switch for 2-poles switching of electrical appliances.

For increased safety, the electronic time switch switches off the electrical appliances connected to it after a selected time period. The practical application area is the connection of heat-producing appliances, for example coffee machines, heating blanket, etc...

The switch-off time is set to suit the usage time of the specific connoted appliance ("time" rotary switch on the unit).

Timer fit into standard wall boxes from Etman (c-c 60mm). By surface fixing, please use surface house (Typed ETM240X).

By surface fixing, in combination with a switch or others, please use double surface house (Typed ETM429X).

Thermoplastic center plate 61X61 mm, which fits into Etman "X" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

No visible screws.

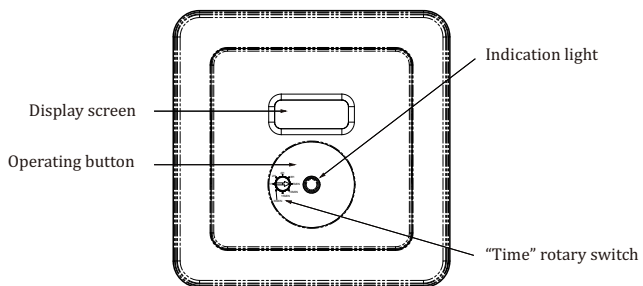
Only suitable for use in indoor areas.

Built-in protection circuit.

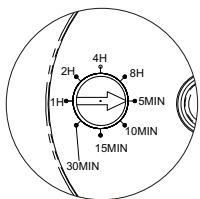


Type	Description/Remark
ETM620X	Electronic time switch

X Series



A (5:1)



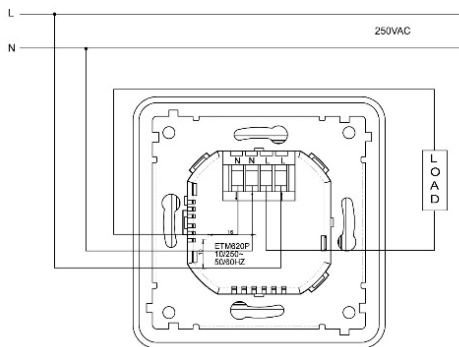
User guide:

1. Setting the switch-off time

Using "flat" screwdriver to revolve "time" rotary switch as the above picture said, you can set the switch-off time.

2. on/off switching:

When pressing "Operating button", time switch gets together and "Indication light" shows on, for example, the fixed time is 15 minutes, display screen shows "00:15", after it's on display screen will show remaining time by using countdown time. When fixed time arrives or using your hand to press the "o Operating button" again, time switch disconnects, "on/off guiding lights" off, display screen shows current time such as "00:15".



Connection diagram:

Noted: Neutral conductor must always be connected.

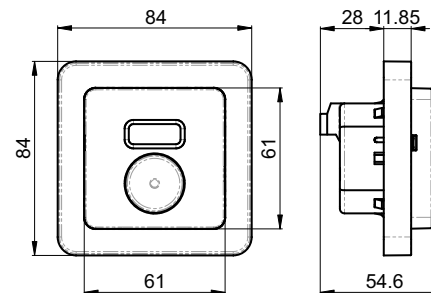
X Series

Attentions:

Check before using: (Cannot use when one of the following lists occurs)

- Input voltage exceeds range (180-250V)
- Time switch's outer cover damages
- Time switch's inside has unusual sound
- Load electrical equipment total power cannot exceed 2500W, please check load electrical equipment's using power before you use
- Liquid inflows to time switch accidentally

Drawing:



Safety information:

Never leave heat-producing appliances (e.g. heating radiator etc.) unattended. A mains failure results in switching off of the unit, the time must be restarted.



© Flush-type USB Charger for fixed installation

Color: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Fire hazard test: 650°C/850°C(IEC60695-2-1)

The product complies with the standard(s): EN62368-1

The product is in conformity with the provisions of the following European directive(s):

LVD (Low Voltage Directive)

EMC (Directive of Electromagnetic Compatibility)

RoHS Directive WEEE Directive REACH Directive Ecodesign Directive

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Technical info:

Input:

230VAC 50Hz

200mA Max

Output:

DC 5V 3.4A

Standby Power consumption: <0.1W

Power AVG EFF:>82.15%

Relative humidity: <95%

Working Temperature:-25~45°C

IP-Class: Ip20

OCP: 3.8A OTP:<110°C

OVP: <6.3V; SCP: Input Power<2W

Product information:

USB Charger makes it possible to charge rechargeable batteries of electronic devices such as mobile phones, iPad, iPod, iPhone or similar; with the charging process taking place exclusively via USB connection.

Two vertical parallel arranged USB jack 2.0 Type A.

An auto-detect feature monitors USB data line voltage, and automatically provides the correct electrical output (max2,4A) on the USB ports to charge compliant devices.

2 x 1A, 2.1A+1A, 2.4A+1A; 5V.

USB Charger fit into standard wall boxes from Etman (c-c 60mm). By surface fixing, please use surface house (Typed ETM240X).

By surface fixing, in combination with a switch or others, please use double surface house (Typed ETM429X).

Thermoplastic center plate 61X61 mm, which fits into Etman "X" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

No visible screws.

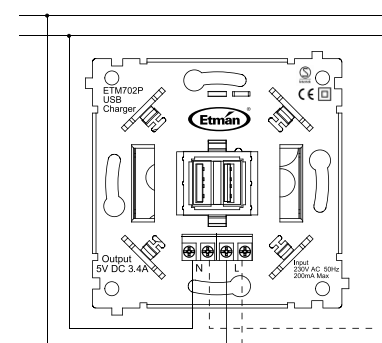
Only suitable for use in indoor areas.

Built-in protection circuit.



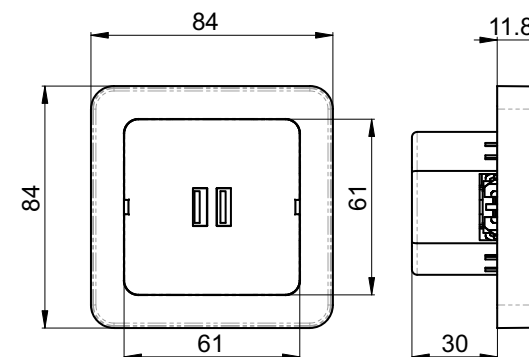
Type	Description/Remark
ETM702X	3.4A USB Charger

Connection diagram:



Noted: Neutral conductor must always be connected.

Drawing:





◎ SO with 2 USB ports

Color: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Working Temperature: 0°C-35°C

The product complies with the standard(s): EN 62368-1 IEC 60884-1

The product is in conformity with the provisions of the following European directive(s):

LVD EMC RoHS WEEE REACH

Certificate(s): TUV

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Overvoltage category: III;

High voltage insulation test: 3kVac;

Socket Data: 16A/250 ~, 50Hz MAX 3600W

USB Data:

Rated input: 230V~, 50Hz, 0.4A

Rated output:

Output Single A-port or Output Single C-port:

5.0V3.0A, 15.0W;

9.0V2.0A, 18.0W;

12.0V1.5A, 18.0W;

Output A-port + Output C-port:

5.0V3.0A, 15.0W (3.0A in total);

Standby operation: 0.10 W;

Energy efficiency: Average active efficiency: 81.4%;

Efficiency at low load (10%): 72.1%;

Characteristics

Equipped with Smart IC (intelligent device detection for optimal charging current), output overcurrent limiting, output overvoltage protection. The USB sockets are only for power supply. Data transfer does not take place.

Fits into cc60 boxes+corner boxes, not 1&2 way and 3&4 way surface frames.



Type	Description/Remark
ETM703XQ	Wall-Adapter; USB Power Output Ports



Warnings

Installation and assembly of electrical devices may only be carried out by a qualified electrician. To avoid electric shock, de-energize cables while working on the USB power supply (switch off circuit breaker).

The 250VAC connection is done by the quick terminals L and N, and earth.

Installation must be done by people having knowledge and experience in electrical connections

Improper installation can cause danger for

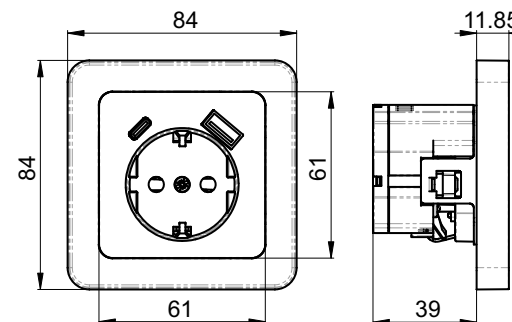
- your own life

- the life of everyone using the electrical appliance

Improper installation can cause damage of property e.g. fire

Use the USB power supply only in protected places and not outdoors.

Drawing:





☉ **USB-A&C charger**

Color: White: RAL9003 (UV stable), Black: RAL9017

Main material: PC (Halogen free)

IP-Class: IP20

Working Temperature: 0°C-35°C

The product complies with the standard(s): EN 62368-1 IEC 60884-1

The product is in conformity with the provisions of the following European directive(s):

LVD EMC RoHS WEEE REACH

Certificate(s): TUV

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Overvoltage category: III;

High voltage insulation test: 3kVac;

Socket Data: 16A/250 ~, 50Hz MAX 3600W

USB Data:

Rated input: 230V~, 50Hz, 0.4A

Rated output:

Output Single A-port or Output Single C-port:

5.0V3.0A, 15.0W;

9.0V2.0A, 18.0W;

12.0V1.5A, 18.0W;

Output A-port + Output C-port:

5.0V3.0A, 15.0W (3.0A in total);

Standby operation: 0.10 W;

Energy efficiency: Average active efficiency: 81.4%;

Efficiency at low load (10%): 72.1%;

Characteristics

Equipped with Smart IC (intelligent device detection for optimal charging current), output overcurrent limiting, output overvoltage protection. The USB sockets are only for power supply. Data transfer does not take place.



Type	Description/Remark
ETM704X	Wall-Adapter; USB Power Output Ports



Warnings

Installation and assembly of electrical devices may only be carried out by a qualified electrician. To avoid electric shock, de-energize cables while working on the USB power supply (switch off circuit breaker).

The 100-240V AC connection is done by the screw terminals L and N.

Installation must be done by people having knowledge and experience in electrical connections

Improper installation can cause danger for

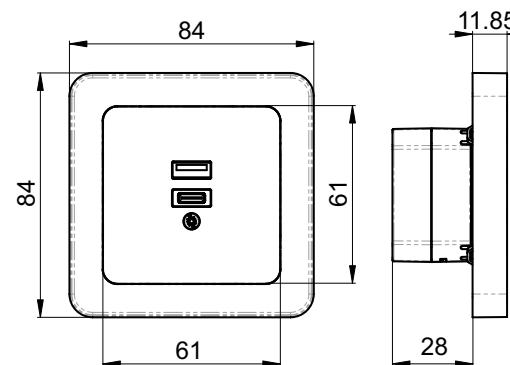
- your own life

- the life of everyone using the electrical appliance

Improper installation can cause damage of property e.g. fire

Use the USB power supply only in protected places and not outdoors.

Drawing:





◎ Flush type wall DCL sockets

Technical Data: 6A 250V~
Frequency: 50Hz
Colour: White: RAL9003 (UV stable), Black: RAL9017
Main material: PC (Halogen free)
IP-Class: IP21, on a smooth surface
Working temperature: -25°Cto +60°C
Installation temperature: -5°Cto +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):
 EN61995-1: Standard EN61995-2: Standard sheets

The product is in conformity with the provisions of the following European directive(s):
 LVD (Low Voltage Directive) RoHS Directive WEEE Directive REACH Directive

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Product info:

DCL is a new plug and socket system for the connection of fixed lighting equipment, related standard EN 61995 valid from 2009-08-24.

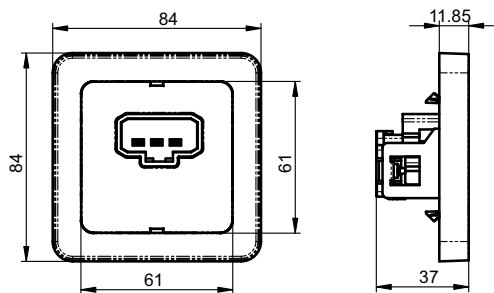
Flush, square DCL sockets for wall installation boxes and junction boxes, Collection thermoplastic has adopted newly developed operation. Fast connections for rigid conductors is up to 2.5 mm2. Support of non - leading composite material.

Fixing c-c 60 mm for mounting, External dimensions: 84 x 84mm, Thermoplastic center plate 61x61 mm, which fits into Etman "X" series combination plate. No visible screws. By surface fixing, please use surface house (Typed ETM240X). By surface fixing, in combination with a switch or other regulators/dimmers, please use double surface house (Typed ETM429X).



Type	Description/Remark
ETM713X	Flush type wall DCL sockets, 84x84

Drawing:

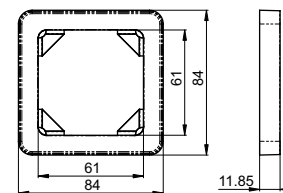


◎ Standard Frames

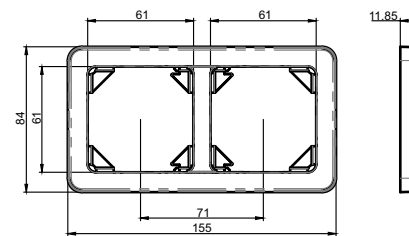
All standard 55x55 mm central plate equipment will fit into the frames, such like switches, single Schuko sockets, network sockets, switches need in addition a locking frame to fasten the combination plate to the switch-base.

Type	Description/Remark
ETM262X	1 way Frame, S
ETM205X	2 way Frame, S+S
ETM206X	3 way Frame, S+S+S
ETM234X	4 way Frame, S+S+S+S
ETM295X	5 way Frame, S+S+S+S+S

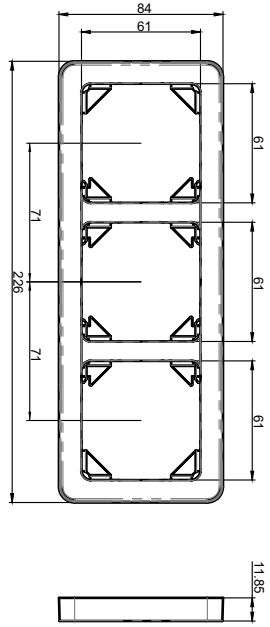
Drawing:



ETM262X



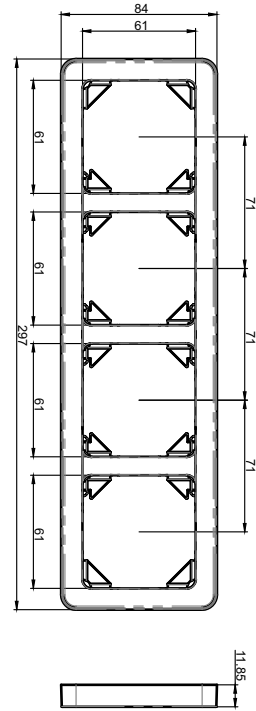
ETM205X



ETM206X

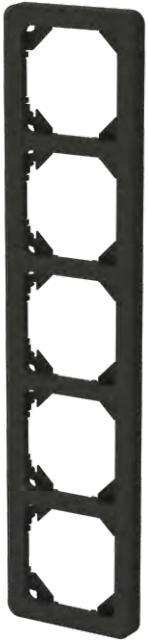
X Series 

X Series 

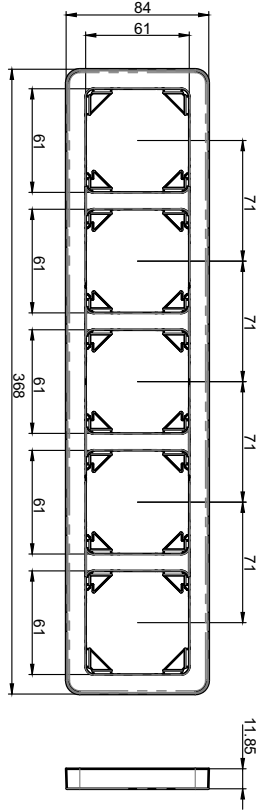


ETM234X





ETM295X



X Series 

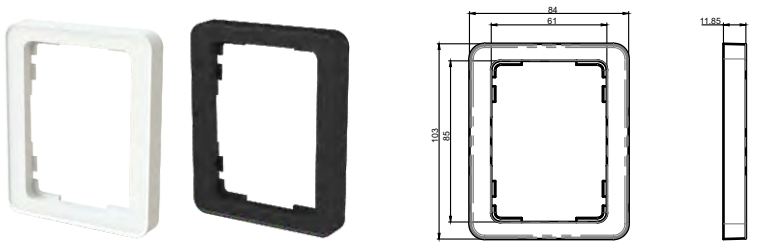
X Series 

© 2S frames, standing version

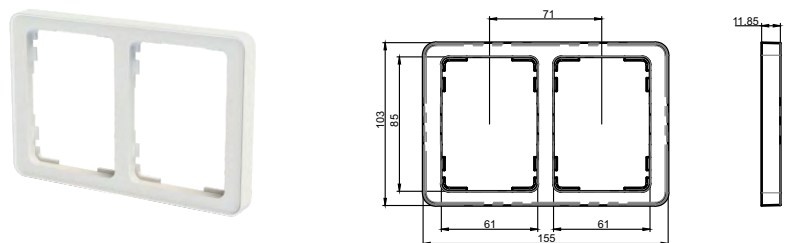
Fit in standard and low profile double Schuko socket unit
Hole dimension: 61x85mm

Type	Description/Remark
ETM304X	1 way Frame, 2S
ETM308X	2 way Frame, 2S+2S
ETM309X	3 way Frame, 2S+2S+2S
ETM310X	4 way Frame, 2S+2S+2S+2S

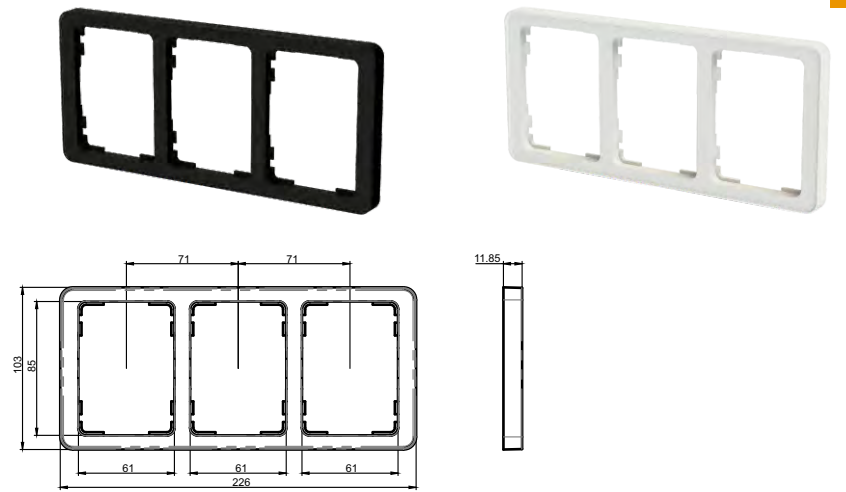
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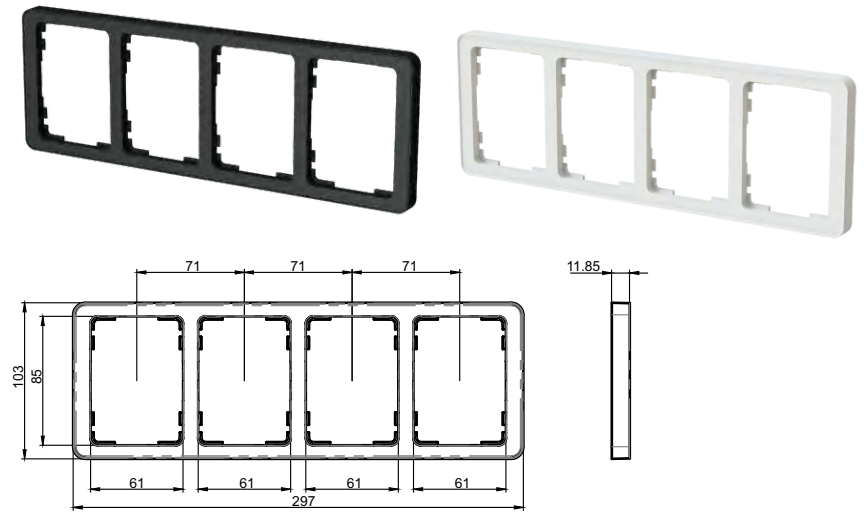
ETM304X



ETM308X



ETM309X



ETM310X

Roker with laser printed key marking

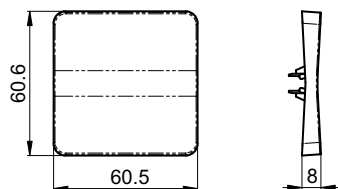
Type	Description/Remark
ETM493X	Key button
ETM493X-1	Double button



ETM493X

ETM493X-1

Drawing:



Blind plate

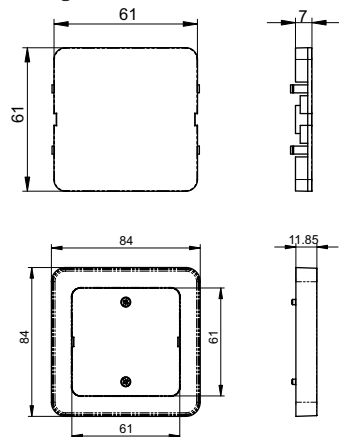
Type	Description/Remark
ETM264X	with steel bracket
ETM263X	without steel bracket



ETM263X

ETM264X

Drawing:

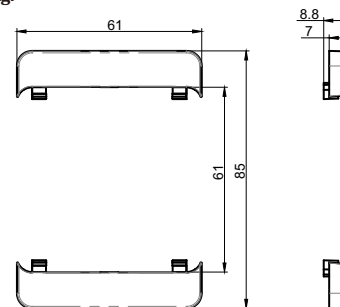


Middle piece

Cover the space for 2S frame with 61*61 standard equipment

Type	Description/Remark
ETM494X	Middle piece

Drawing:

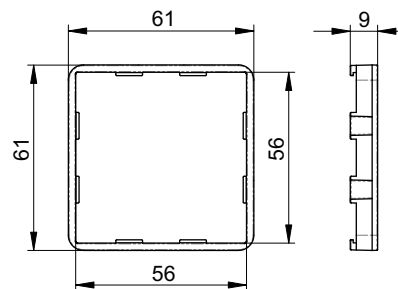


RS adapter ring

Used to be able to mount the devices with RS center plates from other manufactures to our X Series frames

Type	Description/Remark
ETM494X-1	RS adapter ring

Drawing:





P Series
Screw terminals



© **Flush-type wall rocker switch for fixed installation**

Technical Data: 16AX 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc.)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C /850°C (IEC60695-2-11)

The product complies with the standard(s): EN60669-1

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Wiring diagram is printed on the rear side.

The rocker and cover plate made by thermoplastic.

Standard 55x55 mm central plate.

Screw terminals.

Flush wiring.

Fit into wall boxes, screw distance c-c 60 mm, cover plate c-c 84 mm.



ETM201P, ETM201PP,
ETM352P, ETM214P



ETM202P, ETM202PP



ETM203P, ETM203PP



ETM204P, ETM204PP,
ETM351P



Black

Type designation:

Switches

Type	Description/Remark
ETM201P	1 pole/2-way, pattern No.1/6
ETM202P	2 pole, pattern No.2
ETM203P	1+2 pole, pattern No.1+2
ETM204P	1 pole and 2-way, pattern No.5
ETM351P	1+1pole and 2-way, pattern No.6+6
ETM352P	Reversing switch, pattern No.7

Switches, push button

Type	Description/Remark
ETM214P	1-pole, plus w/spring(doorbell), pattern No.1
ETM214PD	1-pole, plus w/spring(doorbell), pattern No.1
ETM201PP	1 pole/2-way, pattern No.1/6
ETM202PP	2 pole, push button, pattern No.2
ETM203PP	1+2 pole, push button, pattern No.1+2
ETM204PP	1 pole and 2-way, pattern No.5

P Series
Screw terminals



Shutter, push button

Type	Description/Remark
ETM355P	1 pole



ETM214PD

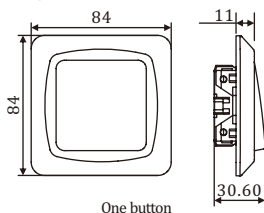
Hotel card

Type	Description/Remark
ETM356P	1 pole/2-way, pattern No.1/6
ETM357P	2 pole, pattern No.2

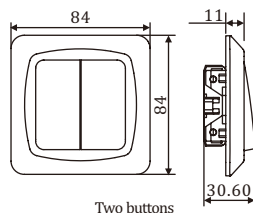


ETM355P

Drawing:



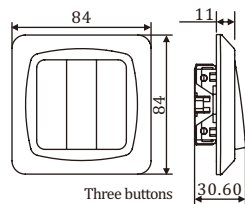
One button



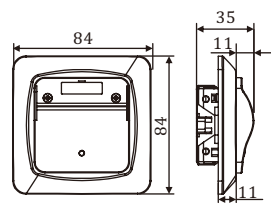
Two buttons



ETM356P



Three buttons



Hotel card switch



Black

P Series
Screw terminals



© **Flush-type wall socket outlet for fixed installation**



Technical Data: 16A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface, except ETM405P

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C /850°C (IEC60695-2-11)

The product complies with the standard(s):

IEC60884-1

The product is in conformity with the provisions of the following European directive(s):

RoHS, WEEE

Certificate(s): Semko

Technical info:

Socket outlet with thermoplastic cover. Screw (Pozidriv) terminals socket base, flush wiring. With shutter.

Special house (ETM240P/ETM431P/ETM429P) for single and double socket outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.

There are two screws in the cover plate.

1-way socket fit into single wall boxes, screw distance c-c 60 mm, with standard 55x55mm central plate. It can fit into our standard combination plate.

2-way socket fit into single wall boxes, screw distance c-c 60 mm.

3-way and 2 Schuko+2 Euro sockets fit into Etman double wall boxes, the boxes required with distance between fixing centre is 71 mm and distance of fixing centre is 60mm.

Type designation:

Type	Description/Remark
ETM207P	1-way Schuko socket , earthed
ETM246P	2-way Schuko socket , without earth
ETM022P	2-way Schuko socket , earthed
ETM022PT	2-way Schuko socket , earthed, with terminals for through wiring
ETM022PD	2-way Schuko socket , earthed, with divided outlet
ETM401P	3-way Schuko socket, earthed
ETM405P	3-way Euro socket, IP20



ETM207P



ETM246P



ETM022P, ETM022PT,
ETM022PD

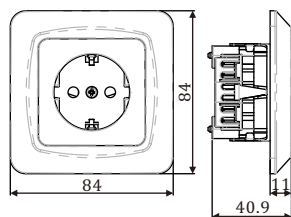


Black

Drawing:



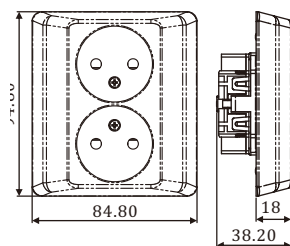
ETM405P



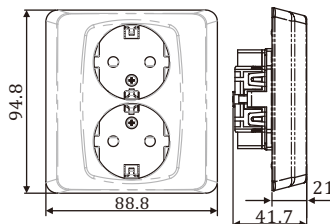
ETM207P



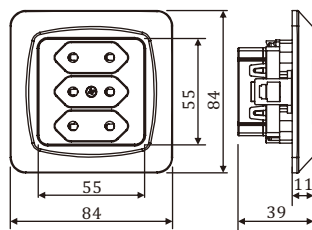
ETM401P



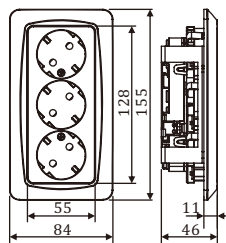
ETM246P



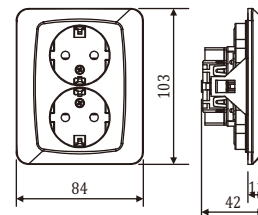
ETM022P, ETM022PT, ETM022PD



ETM405P



ETM401P



ETM022PL



© Flush-type wall socket outlet for fixed installation, low profile

Technical Data: 16A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

IEC60884-1

The product is in conformity with the provisions of the following European directive(s):

RoHS, WEEE

Certificate(s): Semko

Technical info:

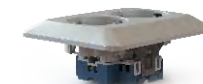
Socket outlet with thermoplastic cover. Screw (Pozidriv) terminals socket base, flush wiring. With shutter.

There are two screws in the cover plate.

Fit into one and half wall boxes, screw distance c-c 60 mm.



ETM022PL



ETM022PL



Black

Type designation:

Type	Description/Remark
ETM022PL	2-way Schuko socket, earthed

Drawing:

P Series
Screw terminals



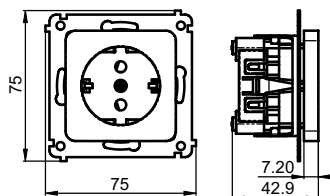
Socket outlet units

Single Schuko socket unit
Fit into "S" holes in multi way frames



Type	Description/Remark
ETM207PW	1-way socket, without frame, earthed

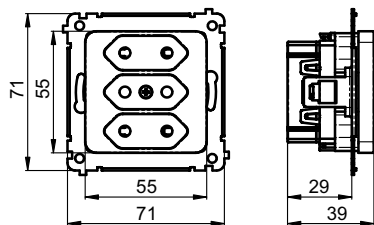
Drawing:



3-way Euro socket unit
Fit into "S" holes in multi way frames

Type	Description/Remark
ETM405PW	3-way Euro socket, without frame

Drawing:



P Series
Screw terminals



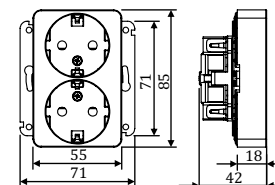
Socket outlet units

2 way Schuko socket unit, standrad
Fit into "M" and "2S" holes in combination plate, 55*85mm



Type	Description/Remark
ETM022PW	2 way Schuko socket, screw terminals

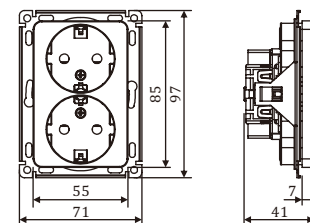
Drawing:



2 way Schuko socket unit, low model
Fit into "2S" holes in combination plate, 55*85mm

Type	Description/Remark
ETM022PQLW	2 way Schuko socket, Screwless terminals

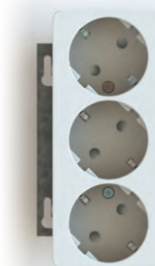
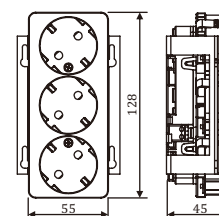
Drawing:



3 way Schuko socket unit
Fit into "3S;2S+2E" holes in combination plate, 55*128

Type	Description/Remark
ETM401PW	3 way Schuko socket, screw terminals

Drawing:



© Flush-type splash proof wall socket outlet for fixed installation



Technical Data: 16A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP44, on a smooth surface

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

IEC60884-1

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Socket outlet with thermoplastic cover. Screw (Pozidriv) terminals socket base, flush wiring. With shutter.

Special house (ETM240P/ETM431P) for single and double socket outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.

1-way Schuko socket with 55*55 centre plate, it can fit into our standard combination plate, pay attention: the IP-class will be IP20 accordingly.

There are two screws in the cover plate.

Fit into wall boxes, screw distance c-c 60 mm.



ETM209P44

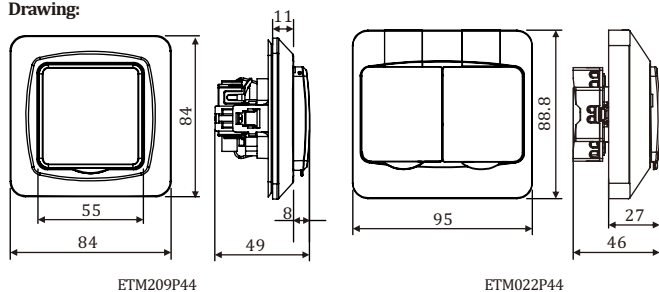


ETM022P44

Type designation:

Type	Description/Remark
ETM209P44	1-way Schuko socket, earthed, IP44
ETM022P44	2-way Schuko socket, earthed, IP44

Drawing:



P Series
Screwless terminals



☉ **Flush-type wall rocker switch for fixed installation**

Technical Data: 16AX 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc..)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): EN60 669-1

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Wiring diagram printed on the rear side.

The rocker and cover plate made by thermoplastic.

standard 55x55 mm central plate.

Screwless terminals.

Flush wiring.

Fit into wall boxes, screw distance c-c 60 mm, cover plate c-c 84 mm.

Type designation:

Switches

Type	Description/Remark
ETM201PQ	1 pole/2-way, pattern No.1/6
ETM202PQ	2 pole, pattern No.2
ETM203PQ	1+2 pole, pattern No.1+2
ETM204PQ	1 pole and 2-way, pattern No.5
ETM351PQ	1+1 pole and 2-way, pattern No.6+6
ETM352PQ	Reversing switch, pattern No.7
ETM353PQ	3 gang, pattern No.1+1+1

Switches, push button

Type	Description/Remark
ETM214PQ	1-pole, plus w/spring(doorbell), pattern No.1
ETM214PQD	1-pole, plus w/spring(doorbell), pattern No.1, with mark
ETM201PQP	1 pole/2-way, pattern No.1/6
ETM202PQP	2 pole, push button, pattern No.2
ETM203PQP	1+2 pole, push button, pattern No.1+2
ETM204PQP	1 pole and 2-way, pattern No.5



ETM201PQ ETM201PQP
ETM352PQ ETM214PQ



ETM202PQ ETM202PQP



ETM203PQ, ETM203PQP



ETM204PQ, ETM204PQP,
ETM351PQ



ETM201PQL, ETM202PQL,
ETM201PQLP, ETM202PQLP



P Series
Screwless terminals



switches, with indication lamp

Type	Description/Remark
	Indication lamp on when switch on, indication lamp off when switch off.
ETM201PQL	1 pole/2-way, pattern No.1/6
ETM202PQL	2 pole, pattern No.2
	Indication lamp off when switch on, indication lamp on when switch off.
ETM201PQLN	1 pole/2-way, pattern No.1/6
	Indication lamp always on.
ETM202PQLN	2 pole, pattern No.2



ETM214PQD



ETM353PQ



ETM355PQ



ETM356PQ

Switch, with indication lamp, push button

Type	Description/Remark
	Indication lamp on when switch on, indication lamp off when switch off.
ETM201PQLP	1 pole/2-way, pattern No.1/6
ETM202PQLP	2 pole, pattern No.2
	Indication lamp off when switch on, indication lamp on when switch off.
ETM201PQLNP	1 pole/2-way, pattern No.1/6
	Indication lamp always on
ETM202PQLNP	2 pole, pattern No.2

Shutter, push button

Type	Description/Remark
ETM355PQ	1 pole

Hotel card

Type	Description/Remark
ETM356PQ	1 pole/2-way, pattern No.1/6
ETM357PQ	2 pole, pattern No.2



Black



Black

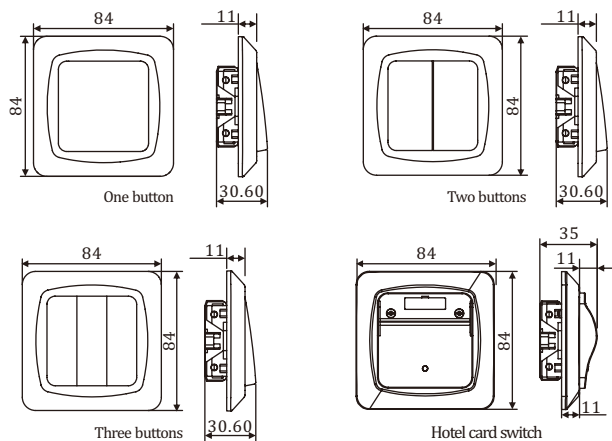


Black

P Series
Screwless terminals



Drawing:



P Series
Screwless terminals



© **Flush-type wall socket outlet for fixed installation**

Technical Data: 16A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

IEC60884-1

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Socket outlet with thermoplastic cover. Screwless terminals socket base, flush wiring. With shutter.

Special house (ETM240P) for single and double socket outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.

1-way socket fit into single wall boxes, screw distance c-c 60 mm, with standard 55x55 mm central plate. It can fit into our standard combination plate.



ETM207PQ



ETM209PQ

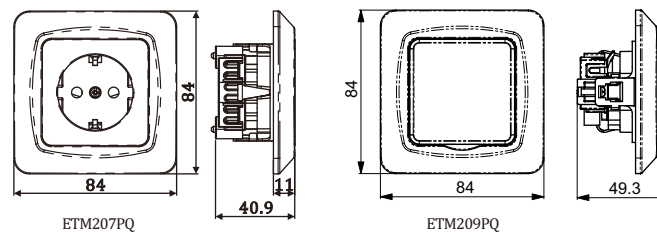


Black

Type designation:

Type	Description/Remark
ETM207PQ	1-way Schuko socket, earthed
ETM209PQ	1-way socket with hinged cover; flush mounted

Drawing:



© Flush-type wall socket outlet for fixed installation

Technical Data: 16A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):
IEC60884-1

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Socket outlet with thermoplastic cover. Screwless terminals socket base, flush wiring. With shutter.

Special house (ETM431P) for single and double socket outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.
2-way socket fit into single wall boxes, screw distance c-c 60 mm.



ETM246PQ



ETM022PQ, ETM022PQT,
ETM022PQD

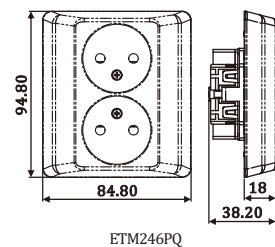


Black

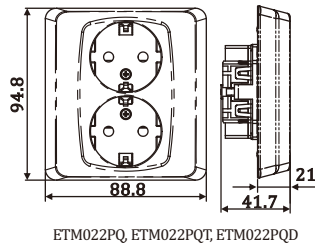
Type designation:

Type	Description/Remark
ETM246PQ	2-way Schuko socket, without earth
ETM022PQ	2-way Schuko socket, earthed
ETM022PQT	2-way Schuko socket, earthed, with terminals for through wiring
ETM022PQD	2-way Schuko socket, earthed, with divided outlet

Drawing:



ETM246PQ



ETM022PQ, ETM022PQT, ETM022PQD

© Flush-type wall socket outlet for fixed installation

Technical Data: 16A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP21 (Completed product on a smooth surface), IP20 (Insert only)

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

The product complies with the standard(s): EN 60884-1

Technical info:

Improved screwless terminals, fit both 1.5 and 2.5 mm², rigid solid and rigid stranded conductor. Flush wiring. Fit into normal wall boxes and Finnish boxes, screw distance c-c 60 mm. Socket outlet with thermoplastic cover. With shutter. Special house (ETM431P) for single and double socket outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.

Maximum torque: 1.2Nm

Possible with claws function: claws extension: 70 MIN, claws lowered: 58 MAX

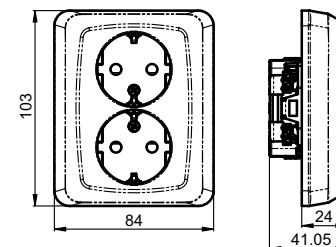
Cover with knockout holes, it can be applied to the sheathed cable.



Type designation:

Type	Description/Remark
ETM022PQV5	Flush mounted DSO, V5, earthed with QC terminals
ETM022PQTV5	Flush mounted DSO, V5, earthed with QC terminals for through wiring
ETM022PQDV5	Flush mounted DSO, V5, earthed with QC terminals, divided outlet

Drawing:



ETM022PQV5

© Flush-type wall socket outlet for fixed installation



ETM401PQ



ETM403PQ

Technical Data: 16A 250VAC
Frequency: 50Hz
Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
Main material: PC (Halogen free)
IP-Class: IP21, on a smooth surface
Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C/850°C (IEC60695-2-11)
The product complies with the standard(s):
 IEC60884-1

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Socket outlet with thermoplastic cover. Screwless terminals socket base, flush wiring. With shutter.

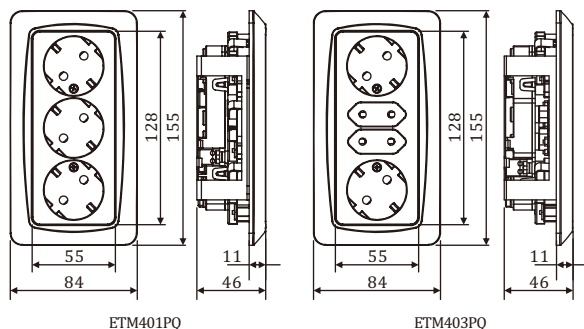
Special house (ETM429P) for single and double socket outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box.

3-way and 2 Schuko+2 Euro sockets fit into Etman double wall boxes, the boxes required with distance between fixing centre is 71 mm and distance of fixing centre is 60mm.

Type designation:

Type	Description/Remark
ETM401PQ	3-way Schuko socket, earthed
ETM403PQ	2 Schuko socket combine with 2 Euro socket

Drawing:



© Flush-type wall socket outlet for fixed installation, low model

Technical Data: 16A 250VAC
Frequency: 50Hz
Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
Main material: PC (Halogen free)
IP-Class: IP21, on a smooth surface
Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C/850°C (IEC60695-2-11)
The product complies with the standard(s):
 IEC60884-1

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Socket outlet with thermoplastic cover. Screwless (Pozidriv) terminals socket base, flush wiring. With shutter.

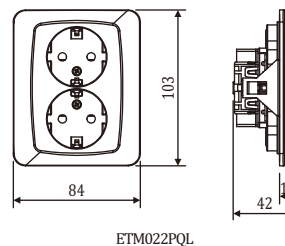
There are two screws in the cover plate.

Fit into one and half wall boxes, screw distance c-c 60 mm.

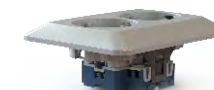
Type designation:

Type	Description/Remark
ETM022PQL	2-way Schuko socket, earthed
ETM022PQDL	2-way Schuko socket, earthed, with divided outlet

Drawing:



ETM022PQL



ETM022PQL



Black

P Series
Screwless terminals



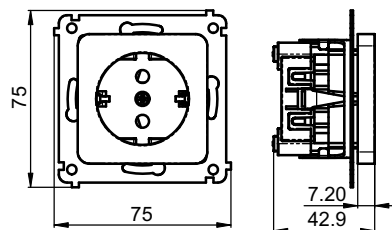
◎ **Socket outlet units**

Single Schuko socket unit
Fit into "S" holes in multi way frames



Type	Description/Remark
ETM207PQW	1-way socket, without frame, earthed

Drawing:



P Series
Screwless terminals



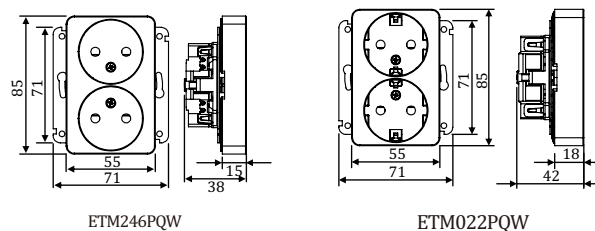
◎ **Socket outlet units**

2 way Schuko socket unit, standard
Fit into "M" and "2S" holes in combination plate, 55*85mm



Type	Description/Remark
ETM246PQW	2 way Schuko socket, without earth, screwless terminals
ETM022PQW	2 way Schuko socket, screwless terminals

Drawing:



ETM246PQW



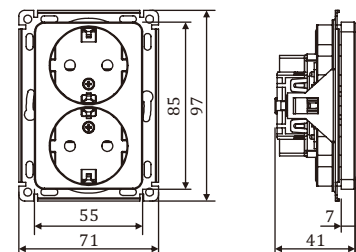
ETM022PQW

2 way Schuko socket unit, low model

Fit into "2S" holes in combination plate, 55*85mm

Type	Description/Remark
ETM022PQLW	2 way Schuko socket, Screwless terminals

Drawing:



P Series
Screwless terminals



☉ Socket outlet units

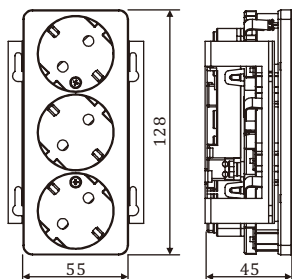
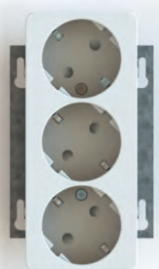
3 way Schuko socket unit

Fit into "3S;2S+2E" holes in combination plate, 55*128



Type	Description/Remark
ETM401PQW	3 way Schuko socket, Screwless terminals

Drawing:

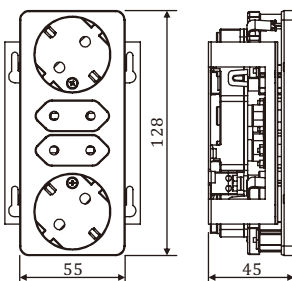


"2S+2E" socket unit

Fit into "3S;2S+2E" holes in combination plate, 55*128

Type	Description/Remark
ETM403PQW	2 way Schuko socket combines with 2 way Euro socket, Screwless terminals

Drawing:



P Series
Screwless terminals



☉ Flush-type splash proof wall socket outlet and switches for fixed installation

Technical Data: 16AX 250VAC (switches), 16A 250AC (sockets)

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP44, on a smooth surface

Max. Ambient temp.: 45 °C

Fire hazard test: 94V-0 (main parts)

The product complies with the standard(s):

Socket: IEC60884-1

Switch: EN60 669-1

Frame: EN60670-1

The product is in conformity with the provisions of the following European directive(s):

LVD (Switch and Frame)

RoHS

WEEE

Certificate(s): CE

Technical info:

Screwless terminals.

Flush wiring.

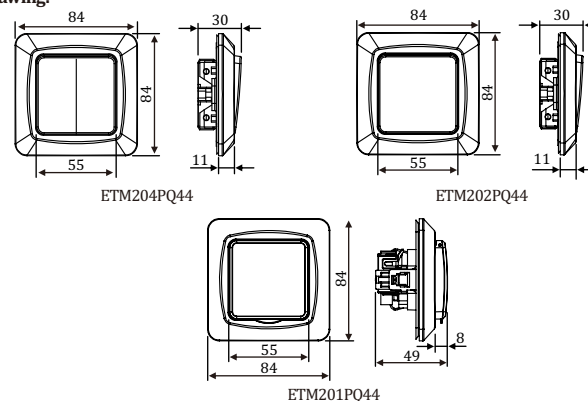
55*55 center plate, can fit into our IP44 combination plate.

Fit into standard wall boxes, screw distance c-c 60 mm.

Type designation:

Type	Description/Remark
ETM204PQ44	Switch no5, gasket included
ETM202PQ44	Switch no2, gasket included
ETM201PQ44	Switch no1/6, gasket included

Drawing:



ETM204PQ44



ETM202PQ44



ETM201PQ44



Black

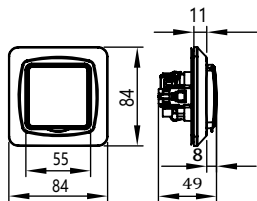
P Series
Screwless terminals



Type designation:

Type	Description/Remark
ETM207PQ44	1-way socket , earthed, gasket included

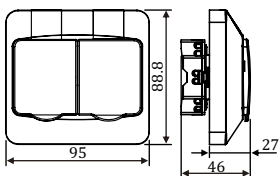
Drawing:



Type designation:

Type	Description/Remark
ETM022PQ44	2-way socket , earthed

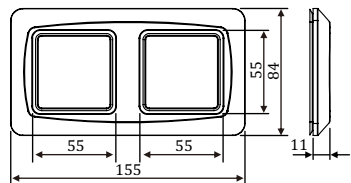
Drawing:



Type designation:

Type	Description/Remark
ETM205P44	2 way combination plate IP44

Drawing:



P Series



☉ **Coaxial outlets**

Technical Data: 75 ohm, 7 dB
Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
Main material: PC (Halogen free)
IP-Class: IP20
Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C/850°C (IEC60695-2-11)
The product is in conformity with the provisions of the Following European directive(s): RoHS, WEEE
Technical info:
 Flush mounted.
 Special house (ETM240P) for coaxial outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box .
 There has single screw (Pozidriv) in the cover plate.
 Fit into wall boxes, screw distance c-c 60 mm.
 With end terminator (75 ohm).
 Thermoplastic center plate 55*55 mm, which fits into Etman "P" series combination plate.

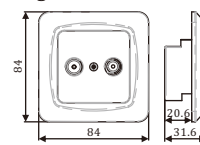
Electrical parameters:

	Parameter	Band Width	Specification
Insertion Loss	IN-TV	47-68 MHz	(11±2)dB
		125-860 MHz	(11±2)dB
	IN-RADIO	87.5-108 MHz	(11±2)dB
	IN-SAT	950-2300 MHz	(10±2)dB
	IN-OUT	47-1000 MHz	(2±1)dB
		1000-2300 Mhz	(3±1)dB

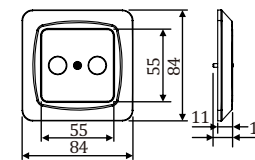
Type designation:

Type	Description/Remark
ETM213P	TV/Radio
ETM213PW	Without unit
ETM213PW-2	Center plate only

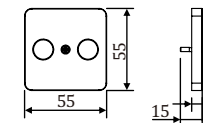
Drawing:



ETM213P



ETM213PW



ETM213PW-2



ETM213P



ETM213PW



ETM213PW-2

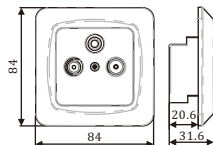
P Series



Type designation:

Type	Description/Remark
ETM215P	TV/Radio/Satellite

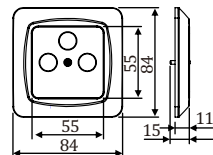
Drawing:



Type designation:

Type	Description/Remark
ETM215PW	Without unit

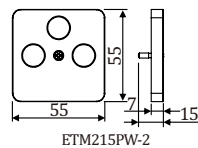
Drawing:



Type designation:

Type	Description/Remark
ETM215PW-2	Center plate only

Drawing:



ETM215PW-2



End Terminator

P Series

● RJ45, plastic

Technical Data: For Keystone modular

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

Technical info:

Flush mounted system with modular outlets

Special house (ETM240P) for modular outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box .

Non-screw cover plate

Fit into wall boxes, screw distance cc 60 mm

Thermoplastic center plate 55X55 mm, which fits into Etman "P" series combination plate
With dust cover except angled version

The refs with "R" means red plastic is for the "Big" keystone (15.6x19.8) and "B" means black plastic is for "Small" keystone (15.6x19.2). Not much differences, but enough to make also smaller Keystone versions like Gigamedia, Eurolan etc.

Red and Black versions/sizes we now have for 2xKeystone/RJ45 with dust cover, 1xKeystone/RJ45 with dust cover + 2xKeystone/RJ45 angled versions.

The holes on 2XRJ45 with dust cover, with more space from each other this to make fixing possible also for some AMP connectors that are wider.



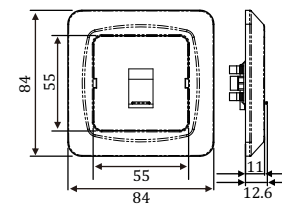
ETM211PWR

ETM211PWB

Type designation:

Type	Description/Remark
ETM211PWR	1xRJ45 dust-cover: Keystone size 14.6x19.8
ETM211PWB	1xRJ45 dust-cover: Keystone size 14.6x19.2

Drawing:



ETM211PWR, ETM211PWB

P Series



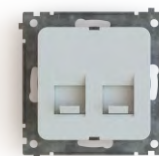
ETM210PWR
ETM210PWB



Black



ETM210PAWR
ETM210PAWB



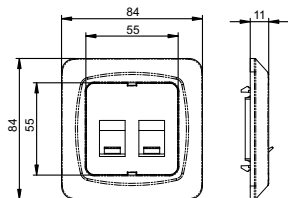
ETM210PAWR-2
ETM210PAWB-2

Drawing:

Type designation:

Type	Description/Remark
ETM210PWR	2xRJ45 dust-cover: Keystone size 14.6x19.8
ETM210PWB	2xRJ45 dust-cover: Keystone size 14.6x19.2

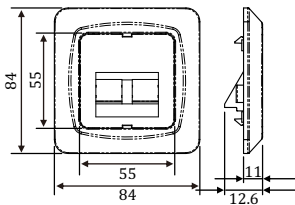
Drawing:



Type designation:

Type	Description/Remark
ETM210PAWR	2xRJ45 angled. Keystone size 14.6x19.8
ETM210PAWB	2xRJ45 angled. Keystone size 14.6x19.2

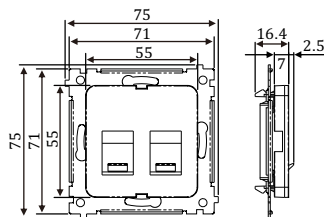
Drawing:



Type designation:

Type	Description/Remark
ETM210PWR-2	2xRJ45 dust-cover: Keystone size 14.6x19.8. NO frame
ETM210PWB-2	2xRJ45 dust-cover: Keystone size 14.6x19.2. NO frame

Drawing:



P Series

◎ Cat6 UTP Tool-Free Keystone Modular

Comply with TIA/EIA-568-B.2-1 requirements

Tool Free

Adapt for 22-26AWG cable

IDC Life: Termination>200 times

Jack Life: Insertion>750 times

UL and ETL approved

Contact material: Phosphor Bronze+Gold Plating 50µm

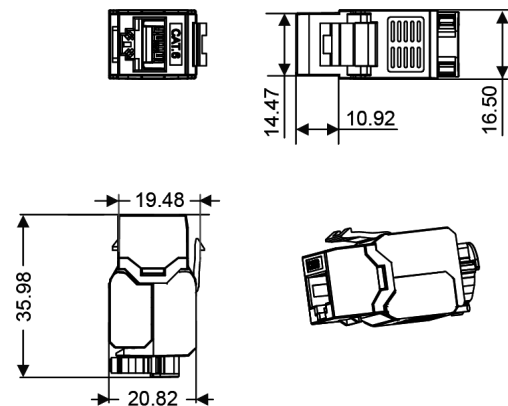
Transmission bandwidth 250MHz



Type designation:

Type	Description/Remark
CAT6JACKTJS180	Toolless Keystone CAT6 RJ45 connector: UTP / Unshielded

Drawing:



P Series 

○ Finnish telephone socket center plate

Name: Finnish telephone socket center plate

Technical Data: 3/5-pole

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Fire hazard test: 650°C/850°C (IEC60695-2-1)

The product is in conformity with the provisions of the following European directive(s):

RoHS, WEEE

Certificate(s): CE

Technical info:

The center plate is for the normal 3-pole Finnish telephone socket but it is possible to use also 5-pole telephone socket by opening 2 more preliminary holes.

The center plate is not included in delivery.

Center plate size 55x55 mm, which fits into Etman "P" series combination plate

Combination plate and insert are not included in delivery.

Flush mounted system.

Special house (ETM240P) for modular outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box .

There have single screw (Pozidriv) in the cover plate

Fit into wall boxes, screw distance cc 60 mm

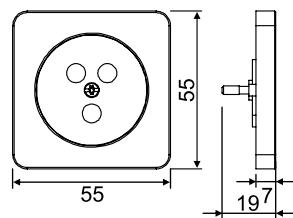


ETM210PW-F2

Type designation:

Type	Description/Remark
ETM210PW-F2	Center plate

Drawing:



ETM210PW-F2

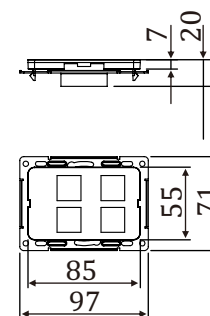
P Series 

○ RJ45, plastic

Type designation:

Type	Description/Remark
ETM440PW-2	4xLexCom/Actassi cover, 2S

Drawing:



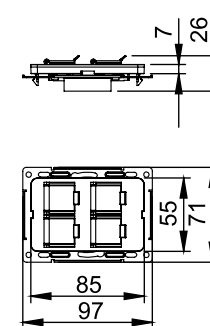
ETM440PW-2

○ Telephone & Network socket panel without modular jacks, for LexCom modular

Type designation:

Type	Description/Remark
ETM441PWR-2	4xRJ45 with dust-cover. Keystone size 15.6x19.8, red, 2S
ETM441PWB-2	4xRJ45 with dust-cover. Keystone size 15.6x19.2, black, 2S.

Drawing:



ETM441PWR-2
ETM441PWB-2

P Series 

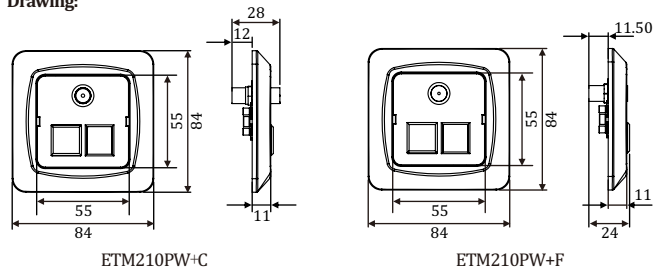
◎ RJ45, plastic

Technical Data: Cat 5e or Cat 6
Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
Main material: PC (Halogen free)
IP-Class: IP20
Max. Ambient temp.: 80 °C
Fire hazard test: 650 °C / 850 °C (IEC60695-2-1)
The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE
Certificate(s): CE
Technical info:
 Flush mounted system
 With 2 holes for Keystone jack and one for antenna connector (Coax/F type or F Type/F type) mounted, including 1 blind plug in Keystone hole
 Screwless cover plate, snap into combination plate
 Thermoplastic center plate 55X55 mm, which fits into Etman "P" series combination plate
 Without shutter
 Modular is not included
 Special house (ETM240P) for modular outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box .
 Fit into wall boxes, screw distance cc 60 mm

Type designation:

Type	Description/Remark
ETM210PW+C	2xRJ45+ Coax/F Type
ETM210PW+F	2xRJ45+ F Type/F Type

Drawing:



ETM210PW+C

ETM210PW+F



ETM210PW+C



ETM210PW+F

P Series 

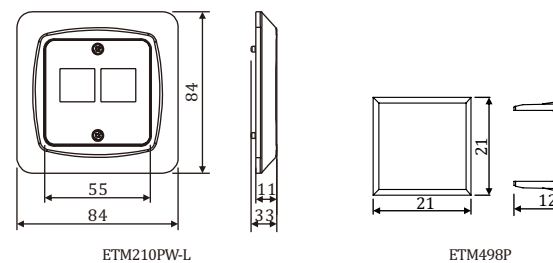
◎ Telephone & Network socket panel without modular jacks, for LexCom modular

Technical Data: Cat 5e or Cat 6
Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
Main material: PC (Halogen free)
IP-Class: IP20
Working temperature: -25 °C to +60 °C
Installation temperature: -5 °C to +25 °C
Fire hazard test: 650 °C / 850 °C (IEC60695-2-11)
The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE
Technical info:
 This product is used to be able to mount the LexCom modular to our combination plate.
 Flush mounted system without modular outlets.
 Special house (U240) for modular outlets - can be used when flush mounting cable installation enters as surface mounting, covering the flush box .
 There are two screws (Pozidriv) in the cover plate.
 Fit into wall boxes, screw distance c-c 60 mm.
 Thermoplastic center plate is 55X55 mm, which fits into Etman "P" series combination plate.

Type Designation:

Type	Description/Remark
ETM210PW-L	2 x LexCom
ETM498P	Blind cover

Drawing:



ETM210PW-L

ETM498P



ETM210PW-L



ETM498P



Black

© **Swedish telephone socket**

Technical Data: 4-pole

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25 °C to +60 °C

Installation temperature: -5 °C to +25 °C

Fire hazard test: 650°C(IEC60695-2-11)

The product complies with the standard(s):

Swedish Standard SS 455 15 50

The product is in conformity with the provisions of the following European directive(s):

RoHS, WEEE

Technical info:

Usually used as a NTP (Network Termination Point) for PSTN(Public Switched Telephone Network).

Flush mounted system.

There is single screw (Pozidriv) in the cover plate.

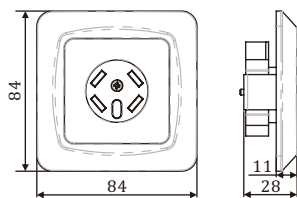
Fit into wall boxes, screw distance c-c 60 mm.

Thermoplastic center plate is 55*55 mm, which fits into Etman "P" series combination plate.

Type designation:

Type	Description/Remark
ETM210P-S	Swedish telephone socket

Drawing:



ETM210P-S

Connection methods

1 Installation with sockets connected in cascade

The user installation, which connects TEs(Terminal Equipment's) to the PSTN, may consist of several sockets of the Swedish type wired according to figure 1. Contacts 1 and 2 are used for connection to the PSTN and contacts 3 and 4 are used for connection of a line to the next socket. Each socket also incorporates a switch (contacts 5 and 6) to bypass the socket when not used.

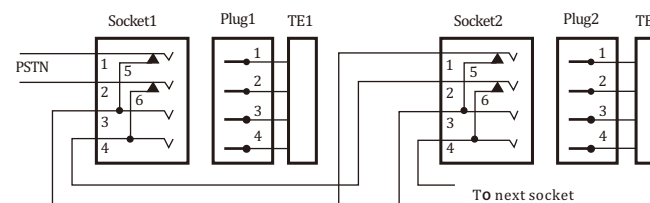


Figure1:Wiring of socket (SS 455 15 50)

The contacts are arranged in such a way that TEs designed for 4-wire connection will be connected in cascade, in accordance with the two-port principles, look at figure 2.

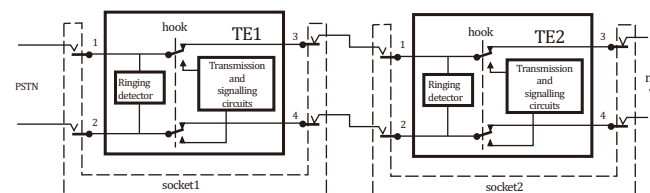


Figure2:4-wire Tes connected in cascade

Characteristics of the cascade installation with TEs designed for 4-wire connection:

If all TEs in the user installation are in quiescent state, they are all connected simultaneously in parallel to the line.

More than one TE cannot be in loop state simultaneously.

A TE cannot be placed in loop state if it is connected to a socket behind another TE in loop state.

A TE in loop state will be disconnected if another TE, connected to a socket prior to the TE first mentioned, placed in loop state.

Also TEs designed for 2-wire connection, may be connected to this type of installation.

2 Installation with sockets connected in parallel

The user installation may as an alternative to clause 4.1.1 consist of several sockets connected in parallel. Only contacts 1 and 2 of each socket, see figure 1, are used in this case.

TEs designed for 2-wire connection, may be connected to this type of installation.

TEs designed for 4-wire connection, may be connected to this type of installation, although the characteristics will differ from that of the cascade installation described in clause 1.



● Flush-type dimmer for fixed installation

Color: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working Temperature: 0°C to +40°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): EN 60669-2-1, EN 60669-1

The product is in conformity with the provisions of the following European directive(s):

LVD, EMC, RoHS, WEEE, REACH

Certificate(s): CE, Semko, EMC

Technical Info: 230VAC

Frequency: 50Hz

Load type:

- 230V incandescent lamps (ohmic load, R): 25-315W
 - 230V halogen lamps (ohmic load, R): 25-315W
 - 12V low-voltage halogen lamps with dimmable wound (conventional) transformer (inductive load, L): Not suitable
 - 12V low-voltage halogen lamps with electronic transformer (capacitive load, C): 25-315VA (max. 3 transformers, 105W)
 - Dimmable LED lamp (trailing edge, RC mode): 10-100VA
- Dimmable LED lamp (leading edge, RL mode): Not suitable

Product information:

Press the knob to switch dimmer on/off, adjust the brightness of light by rotating the knob, turn the knob clockwise to brighter bulb. Dimmer is able to adjust the brightness of bulb from minimum to maximum by rotary potentiometer; push-button switch on/off which can control load power.

Neutral conductor: Not required

Set the minimum brightness using the set-screw (MIN) possible just by taking away the knob. Fit into standard wall boxes (c-60mm). By surface fixing, please use surface house (Typed ETM240P).

By surface fixing in combination with a switch or others, please use double surface house (Typed ETM429P).

Thermoplastic center plate 55X55 mm, which fits into Etman "P" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

No visible screws.

Only suitable for use in indoor areas.

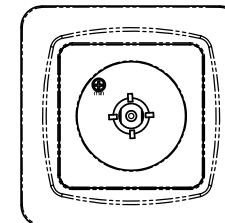
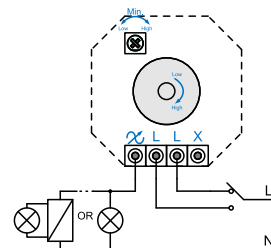
Built-in protection circuit.

Possibility to mount claws ETM32XPC.



Type designation:

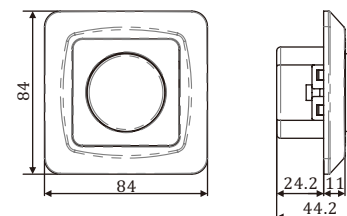
Type	Description/Remark
ETM321PV2	315W, Trailing edge dimmer



Note:

- If light is flicker, or with a long time to start it, or not all lights start at the same time, please adjust the "MIN" adjustment clockwise to higher level.
- Lamp with same type can be connected in parallel, but connecting different types of lamps in parallel is not recommended in general.
- Make sure that the load type and dimming mode match the ETM321P dimmer before turning it on.
- Some flicker may occur when dimming LED. Try to minimize it by turning the MIN.

Drawing:



SAFETY INSTRUCTIONS:

Read these instructions carefully before commencing installation and retain for future reference. The dimmer should be installed by a licensed electrician and in accordance with local regulations. Make sure that the power is off before installation or maintenance.

P Series

Screw terminals



© Flush-type, Universal dimmer for fixed installation

Color: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working Temperature: 0°C to +40°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): EN 60669-2-1, EN 60669-1

The product is in conformity with the provisions of the following European directive(s):

LVD, EMC, RoHS, WEEE

Certificate(s): CE, Semko, EMC

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Technical Info: 230VAC

Frequency: 50Hz

Load type:

- 230V incandescent lamps (ohmic load, R): 4-400W
- 230V halogen lamps (ohmic load, R): 4-400W
- 12V low-voltage halogen lamps with dimmable wound (Conventional) transformer (Inductive load, L): 4-400VA (max. 2 x transformers 150W; max. 3 x transformers 105W; max 5 x transformers 70W)
- 12V low-voltage halogen lamps with electronic transformer (Capacitive load, C): 4-400VA (max. 2 x transformers 150W; max. 3 x transformers, 105W; max 5 x transformers, 70W)
- Dimmable LED lamp (trailing edge, RC mode): 4-200VA
- Dimmable LED lamp (leading edge, RL mode): 4-40VA
- Dimmable LED filament: 4-200VA

Product information:

Press the knob to switch dimmer on/off, adjust the brightness of light by rotating the knob, turn the knob clockwise to brighter bulb. Dimmer is able to adjust the brightness of bulb from minimum to maximum by rotary potentiometer; push-button switch on/off which can control load power.

Neutral conductor: Required

Set the minimum brightness using the set-screw (MIN) possible just by taking away the knob.

Set the maximum brightness using the set-screw (MAX) possible just by taking away the knob.

Set the leading or trailing edge by selection switch possible just by taking away the knob.

Fit into standard wall boxes (c-c60mm). By surface fixing, please use surface house (Typed ETM240P).

By surface fixing, in combination with a switch or others, please use double surface house (Typed ETM429P).

Thermoplastic center plate is 55X55 mm, which fits into Etman "P" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

No visible screws.

Only suitable for using in indoor areas.

Built-in protection: OCP, auto reset, OTP, auto reset, is short circuit protection, auto reset.

Standby: <0.1W

Possibility to mount claws ETM32XPC.



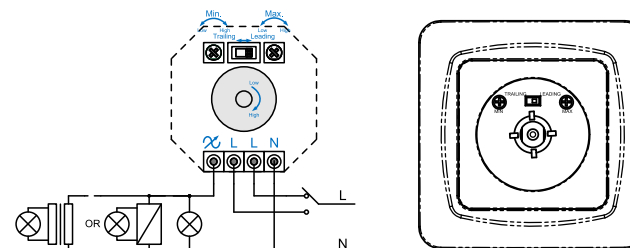
P Series

Screw terminals



Type designation:

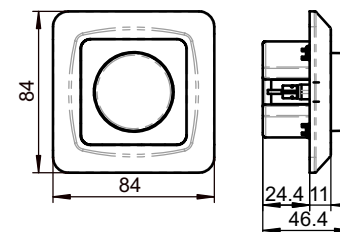
Type	Description/Remark
ETM329P	400W, Leading/Trailing edge dimmer



Note:

- If light is flicker, or with a long time to start it, or not all lights start at the same time, please adjust the "MIN" adjustment clockwise to higher level.
- Lamp with same type can be connected in parallel, but connecting different types of lamps in parallel is not recommended in general. Mixed connection lamps suitable for leading edge and trailing edge (e.g. Inductive load and capacitive load in parallel connection) is not allowed.
- Turn off the ETM329P dimmer before changing leading edge mode and trailing edge mode.
- Make sure that the load type and dimming mode match the ETM329P dimmer before turning it on.
- Some flicker may occur when dimming LED. Try to minimize it by turning the MIN and MAX to get proper working range for better performance.

Drawing:



SAFETY INSTRUCTIONS:

Read these instructions carefully before commencing installation and retain for future reference. The dimmer should be installed by a licensed electrician and in accordance with local regulations. Make sure that the power is off before installation or maintenance



☉ Flush-type, 2-pole Universal dimmer for fixed installation

Color: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc..)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Working Temperature: 0~+40°C

Fire hazard test:

650°C / 850°C (IEC60695-2-11)

The product complies with the standard(s):

EN 60669-2-1

The product is in conformity with the provisions of the following European directive(s):

LVD

EMC

RoHS

WEEE

REACH

Certificate(s): CE, Semko, EMC

Quality management system according to:

ISO 9001

Environmental management system:

ISO 14001

Occupational Health and Safety Management System:

ISO 45001

Technical Info: 230VAC

Frequency: 50Hz

Load type:

● 230V incandescent lamps (ohmic load, R):4-400W

● 230V halogen lamps (ohmic load, R):4-400W

● 12V low-voltage halogen lamps with dimmable wound

(Conventional) transformer (Inductive load, L): 4-400VA

(max. 2 x transformers 150W; max. 3 x transformers 105W; max 5 x transformers 70W)

● 12V low-voltage halogen lamps with electronic transformer

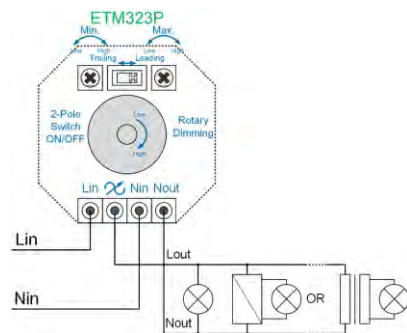
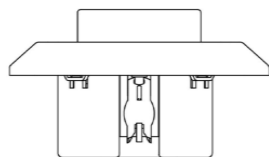
(Capacitive load, C): 4-400VA

(max. 2 x transformers 150W; max. 3 x transformers, 105W; max 5 x transformers, 70W)

● Dimmable LED lamp (trailing edge, RC mode): 4-200VA

● Dimmable LED lamp (leading edge, RL mode): 4-40VA

● Dimmable LED filament: 4-200VA



Product information:

Rotate the knob to switch dimmer on/off, adjust the brightness of light by rotating the knob, turn the knob clockwise to brighter bulb. Dimmer is able to adjust the brightness of bulb from minimum to maximum by rotary potentiometer, push-button switch on/off which can control load power.

Neutral conductor: Required

Set the minimum brightness using the set-screw (MIN) possible just by taking away the knob.

Set the maximum brightness using the set-screw (MAX) possible just by taking away the knob.

Set the leading or trailing edge by selection switch possible just by taking away the knob.

Fit into standard wall boxes (c-c 60mm). By surface fixing, please use surface house (Typed ETM240P).

By surface fixing, in combination with a switch or others, please use double surface house (Typed ETM429P).

Thermoplastic center plate 55X55 mm, which fits into Etman "P" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

No visible screws.

Only suitable for use in indoor areas.

Built-in protection: OCP, auto reset, OTP, auto reset, Short circuit protection, auto reset.

Standby: <0.1W

Possibility to mount claws ETM32XPC.

Note:

● If light is flicker; or with a long time to start it, or not all lights start at the same time, please adjust the "MIN" adjustment clockwise to higher level.

● Lamp with same type can be connected in parallel, but connecting different types of lamps in parallel is not recommended in general. Mixed connection lamps suitable for leading edge and trailing edge (e.g. Inductive load and capacitive load in parallel connection) is not allowed.

● Turn off the ETM323P dimmer before changing leading edge mode and trailing edge mode.

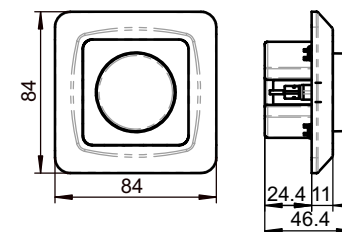
● Make sure that the load type and dimming mode match the ETM323P dimmer before turning it on.

● Some flicker may occur when dimming LED. Try to minimize it by turning the MIN and MAX to get proper working range for better performance.

Type designation:

Type	Description/Remark
ETM323P	400VA, 2-pole. Leading/Trailing edge dimmer

Drawing:



SAFETY INSTRUCTIONS:

Read these instructions carefully before commencing installation and retain for future reference. The dimmer should be installed by a licensed electrician and in accordance with local regulations. Make sure that the power is off before installation or maintenance.



☉ Box push dimmer

Color: Blue

Main material: PC (Halogen free)

IP-Class: IP20

Working Temperature: 0~+40 °C

Fire hazard test:

650 °C/850 °C (IEC60695-2-11)

The product complies with the standard(s):

EN 60669-2-1

EN 60669-1

The product is in conformity with the provisions of the following European directive(s):

LVD (Low Voltage Directive)

EMC (Directive of Electromagnetic Compatibility)

RoHS Directive

WEEE Directive

REACH Directive

Certificate(s): CE, Semko, EMC

Quality management system according to:

ISO 9001

Environmental management system:

ISO 14001

Occupational Health and Safety Management System:

ISO 45001

Technical Info: 230VAC

Frequency: 50Hz

Load type:

- 230V incandescent lamps (ohmic load, R): 4-200W
- 230V halogen lamps (ohmic load, R): 4-200W
- 12V low-voltage halogen lamps with dimmable conventional transformer (Inductive load, L): 4-200VA (max. 3 x transformers 50W)
- 12V low-voltage halogen lamps with electronic transformer (capacitive load, C): 4-200VA (max. 3 x transformers 50W)
- Dimmable LED lamp (trailing edge, RC mode): 4-100VA
- Dimmable LED lamp (leading edge, RL mode): 4-40VA
- Dimmable LED filament 4-100VA

Product information:

The dimmer is for indoor use only.

Box push dimmer can be installed in normal wall boxes, regulated by one or more push buttons.

Short press on button is ON/OFF, and long press on button is rising/lowering the brightness.

Every second time rising and every second time lowering.

The lamp stops at highest/lowest brightness.

Neutral conductor: Required

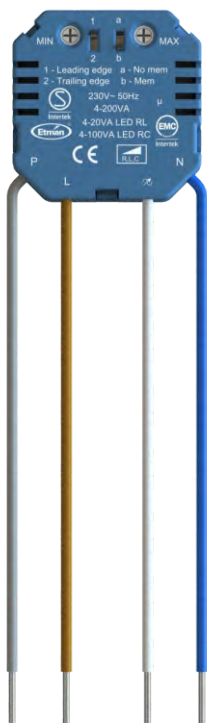
Set the minimum brightness using the set-screw (MIN).

Set the maximum brightness using the set-screw (MAX).

Set the leading or trailing edge by selection switch.

Built-in protection: OCP, auto reset, OTP, auto reset, Short circuit protection, auto reset.

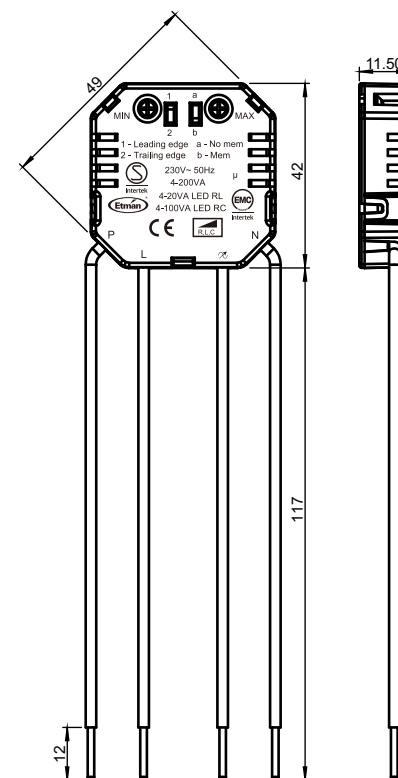
Standby: <0.1W



Type designation:

Type	Description/Remark
ETM324P	200VA, Leading/Trailing edge dimmer

Drawing:



P Series

Functional description:

Push switch

- Connect the push button switch to terminal P of box push dimmer and L.
- Parallel of multi push button switches is allowed for multi-switch control.
- Power on or power off by a short press <0.4s.
- Dimming by a long press >0.5s after power on.
- Long press dimming the lamp to brighter until maximum brightness then stops.
- Next long press dimming the lamp to darker until minimum brightness then stops.

MIN/MAX

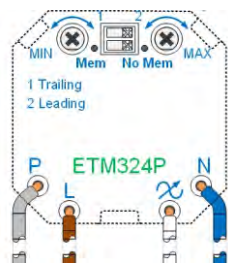
Tuning MIN changes the lowest brightness. Tuning MAX changes the highest brightness.

Mode Switches

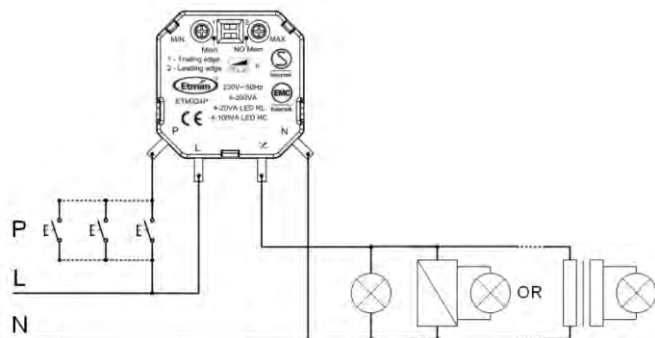
Dimmer works in trailing edge mode if the switch is set to the left marked '1' (RC mode).
Dimmer works in leading edge mode if the switch is set to the right marked '2' (RL mode).

Memory mode is enabled if the switch is set to the left marked 'Mem'. In this mode, the lamp turns on at the same brightness it had when last turned off.

Memory function disabled if the switch is set to the right marked 'No Mem'. In this mode, the lamp always turns on at a brightness of around 70%.



Installation diagram:



P Series

Note:

If light is flickering, or take long time to start, or doesn't start at the same time, please adjust the "MIN" adjustment clockwise to higher level.

- Lamp with same type can be connected in parallel, but connecting different types of lamps in parallel is not recommended in general. Mixed connection lamps suitable for leading edge and trailing edge (e.g. inductive load and capacitive load in parallel connection) is not allowed.
- Turn OFF the ETM324P dimmer by a short press on the push switch before changing dimmer mode (leading edge / trailing edge).
- Turn OFF the ETM324P dimmer by a short press on the push switch before changing memory mode (memory / no-memory).
- Check that load type and dimming mode match driver/lamp before ETM324P dimmer is turned on.
- Little flicker might exist with LEDs at minimum/maximum brightness. Tuning the MIN and MAX to get a proper working range for better performance.

SAFETY INSTRUCTIONS:

Read these instructions carefully before commencing installation and retain for future reference. The dimmer should be installed by a licensed electrician and in accordance with local regulations. Make sure that the power is off before installation or maintenance.



☉ Flush-type, DALI dimmer for fixed installation

Color: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP21, on a smooth surface

Ambient temperature: 0...+50 °C

Fire hazard test: 650 °C /850 °C (IEC60695-2-11)

The product complies with the standard(s): EN 60669-2-1

The product is in conformity with the provisions of the following European directive(s):

LVD, EMC, RoHS, WEEE, REACH

Certificate(s): CE

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Frequency: 50Hz

Product Data:

Designation: DALI MCU

Power connection: L, N AC mains

Operating voltage: 100-240V AC

Power consumption: 2.3W max.

DALI connection: DA+/DA-, max. 300m cable length, DALI power supply output current max 100mA.

Perm. Cable cross-section: 0.5...1.5 mm²

Ambient temperature: 0...+50 °C

Protection class: II

Each control circuit can supply DALI power for as many as 50 DALI devices

The lighting system responds immediately and harmoniously when the brightness level is changed at either of the control devices.

All that while allowing for the required comfortable, easy and complete control over the lighting levels at any time.

Innovative Function to Power DALI Bus While Connected to AC Mains

Powered by DALI Bus while not Connected to AC Mains

Operation:

This device is a DALI MCU with built-in DALI bus power supply which can power DALI bus while connected with

100-240VAC mains. It also can be powered by DALI bus while not connected with AC mains.

There can be up to only 2 MCUs connect to AC 220V mains, the other MCUs powered by DALI bus.

Each control circuit simultaneously affords the integration of as many as 100 DALI ECG and of up to 4 DALI

MCU control devices (control points).

Switch ON/OFF

Click the rotary knob to switch ON/OFF light.

Increase/Decrease Light Intensity

Rotate the knob clockwise to increase light intensity from 1% to 100%, rotate the knob counterclockwise to

decrease light intensity from 100% to 1%.



Set the minimum brightness value

Press and hold down the knob over 5 seconds until the light flashes, to set the current brightness value as the minimum brightness value for dimming, it is dimmable from this minimum brightness value to 100%.

Delete the minimum brightness value setting

Click the knob to switch off the light first, then press and hold down the knob over 5 seconds until the light flashes, the minimum brightness value will be deleted. It is dimmable from 1% to 100% then.

Product info:

Fit into standard wall boxes (c-c 60mm). By surface fixing, please use surface house (Typed ETM240P).

By surface fixing, in combination with a switch or others, please use double surface house (Typed ETM429P).

Thermoplastic center plate 55X55 mm, which fits into Etman "P" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

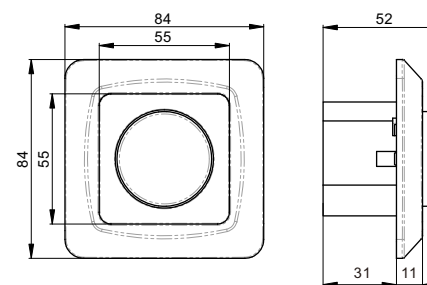
No visible screws.

Only suitable for use in indoor areas.

Type designation:

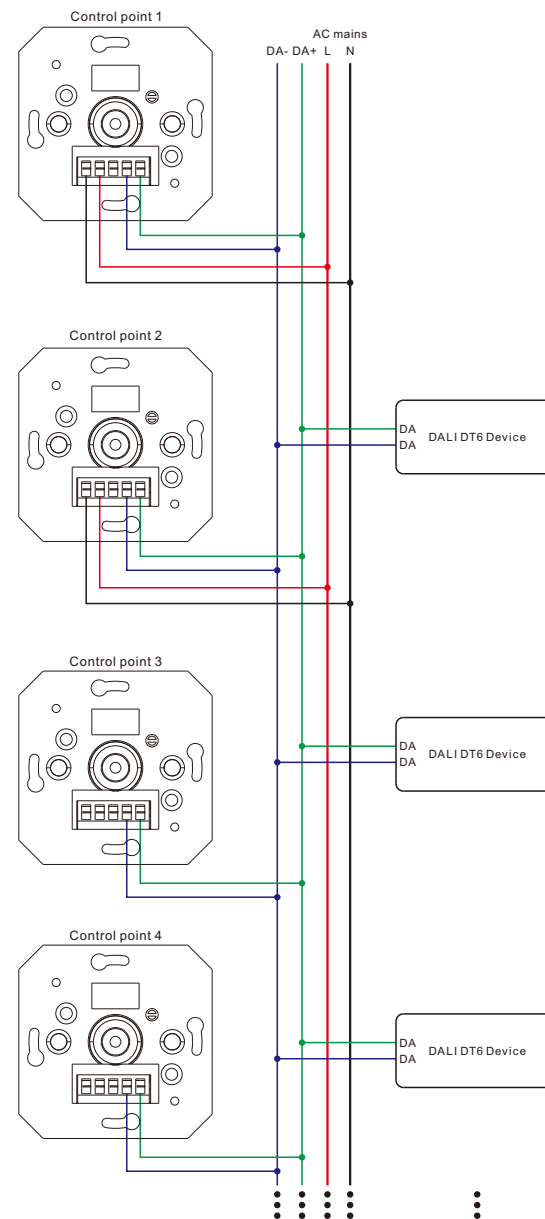
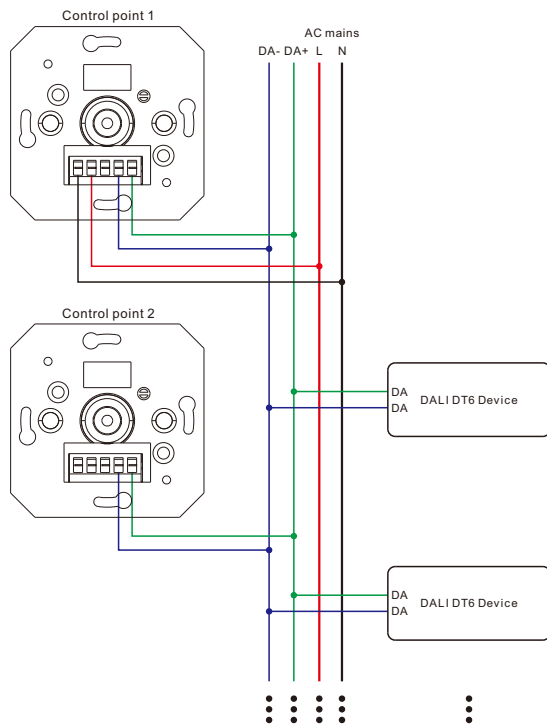
Type	Description/Remark
ETM325P	DALI dimmer

Drawing:





Installation diagram



P Series
Screw terminals

ZigBee Box Dimmer

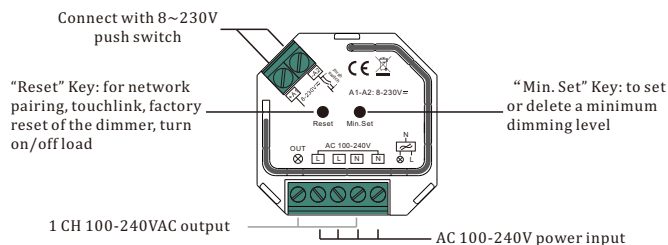
Color: White

IP-Class: IP20

Working temperature: 0~+40°C

Technical info: 100 -230VAC, Radio Frequency 2,4Ghz, ZigBee 3.0

Frequency: 50Hz



Compatible Load Types			
Load Symbol	Load Type	Maximum Load	Remarks
	Dimmable LED lamps	200W @ 220V 100W @ 110V	Due to variety of LED lamp designs, maximum number of LED lamps is further dependent on power factor result when connected to dimmer.
	Dimmable LED drivers	200W @ 220V 100W @ 110V	Maximum permitted number of drivers is 200W divided by driver nameplate power rating.
	Incandescent lighting, HV Halogen lamps	400W @ 220V 200W @ 110V	
	Low voltage halogen lighting with electronic transformers	200W @ 220V 100W @ 110V	

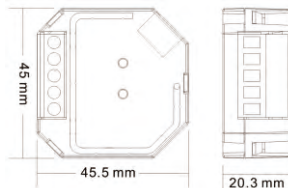
Product information:

The dimmer is for indoor use only.

The dimmer can be installed in normal wall boxes, controlled by one or more push buttons, or wireless ZigBee system.

Short press on push- button is ON/OFF, long press on button is rising/lowering the brightness, every second key push rising and every second time key push lowering. The lamp stops at highest/lowest brightness.

Neutral conductor: Required

P Series
Screw terminals**Type designation:**

Type	Description/Remark
SR-ZG9101SAC-HP	ZigBee Box Dimmer

Functional description**Commission:**

Method 1: Short press "Reset" 4 times to start Touchlink commissioning immediately, 180S timeout, repeat the operation for each new device.

Method 2: Re-power on the device, Touchlink commissioning will start after 15S if it's not added to a ZigBee network, 165S timeout. Or start immediately if it's already added to a network, 180S timeout. Once timeout, repeat the operation.

Factory Reset Manually:

Step 1: Short press "Reset" 5 times or re-power on the device 5 times continuously.

Step 2: Connected light will blink 3 times to indicate successful reset.

Note: 1) If the device is already in factory default setting, there is no indication when resetting.
2) All configuration parameters will be reset after the device is reset or removed from the network.

Zigbee Network Pairing through Coordinator or Hub (Added to a Zigbee Network):

Step 1: Remove the device from previous ZigBee network if it has previously been added, otherwise pairing will fail. Please refer to the part "Factory Reset Manually".

Step 2: From your ZigBee Controller or hub interface, choose to add lighting device and enter Pairing mode as instructed by the controller.

Setting minimum brightness:

Adjust brightness to a desired level from ZigBee hub or controller interface or a remote, then press "Min. Set" key till connected load blink, then the connected load can only be dimmable between this minimum brightness and 100% brightness.

The dimming range of this dimmer is 1%-100%, but some load types may flicker when dimmed to 1%, thus a minimum brightness shall be set higher than 1% to avoid flickering during dimming process.

Delete the minimum brightness:

Adjust the brightness to 100% from ZigBee hub or controller interface or a remote, then press and hold down the "Min. Set" key on the dimmer for over 3s to delete the minimum brightness.

Note:

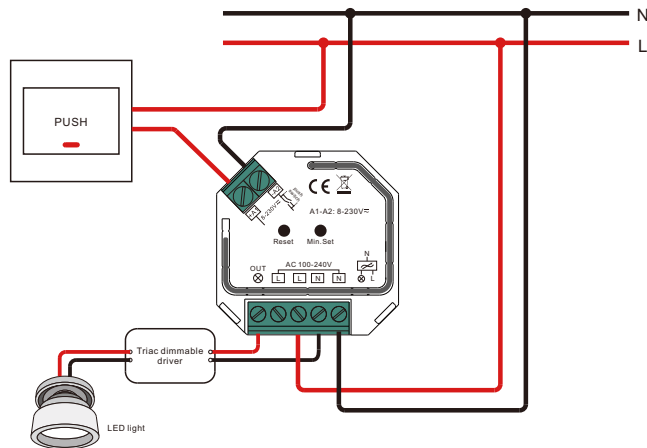
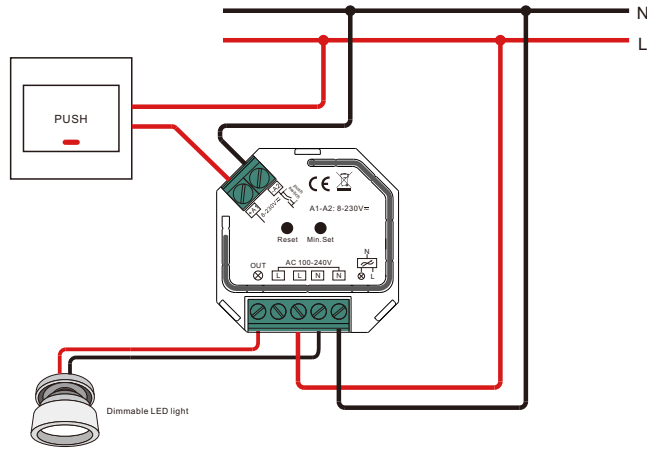
- If light is flickering, or take long time to start, or doesn't start at the same time, please adjust the "MIN" level to higher level.
- Lamp with same type can be connected in parallel but connecting different types of lamps in parallel is not recommended in general. Mixed connection of lamps suitable for leading edge and trailing edge (e.g. inductive load and capacitive load in parallel connection is not allowed).
- Check that load type and dimming mode match driver/lamp before dimmer is turned on.

SAFETY INSTRUCTIONS:

Read these instructions carefully before commencing installation and keep it for future reference. The dimmer should be installed by an authorized electrician and in accordance with local regulations.

Make sure that the power is off before installation or maintenance.

P Series
Screw terminals

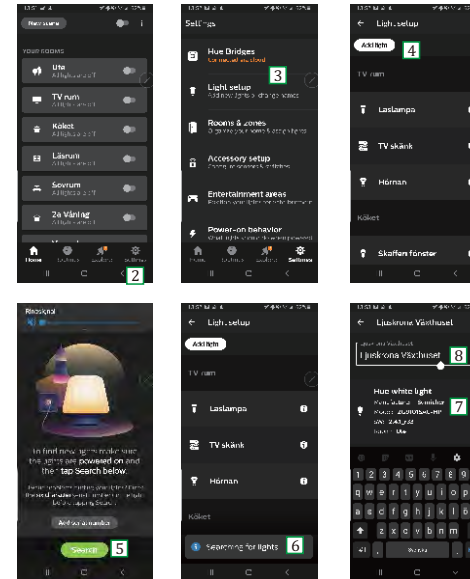


P Series
Screw terminals



**We recommend using Philips hue app and Philips hue Router.
Guide how to integrate ZigBee dimmer with Philips hue:**

Start the Philips hue app.
Go to "Settings" and select "Light setup".
Click on "Add light" at the top left of the app.
Click on "Search"
hue starts searching for light
Power ON the actuator and wait for hue to find a new light source.
hue will find the SR-ZG9101SAC-HP
Re name and start using the dimmer inside hue.
If the hue NOT find the unit, reset the actuator by pressing the reset button "key" 5 times again.
Start a new search "Add light" for next device to pair...





Flush-type timer for fixed installation



ETM620P



Black

Technical Data: 250VAC
Maximum current: 10A
Maximum load: 2500W
Power consumption: <0.5W
Time duration in hours: 5MIN; 10MIN; 15MIN; 30MIN; 1H; 2H; 4H; 8H
Ambient temperature: -10°C to 50°C
Relative humidity: <95%
Frequency: 50/60Hz
Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
Main material: PC (Halogen free)
IP-Class: IP20
Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): EN 60669-2-1, EN 60669-1
The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE, EMC

Certificate(s): CE, Semko

Technical info:

Electronic timer switch for 2-poles switching of electrical appliances.

For safety, the electric time switch switches off the electrical appliances connected to it after a selected timer interval. The practical application area is the connection of heat-producing appliances, for example coffee machines, heating blanket, etc...

The switch-off timer is set to suit the usage time of the specific connected appliance ("time" rotary switch on the unit).

The timers fit into standard wall boxes from ETMAN (c-c 60mm) . By surface fixing, please use surface house (Typed ETM240P). By surface fixing, in combination with a switch or other regulators/dimmers, please use double surface house (Typed ETM429P). It is easy to rebuild into the coloured creative line solutions, egardless of flush or surface mounted by removing plastic parts.

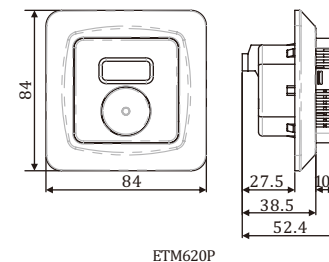
Thermoplastic center plate is 55X55 mm, which fits into Etman "P" series combination plate.

Screw terminal.

Type designation:

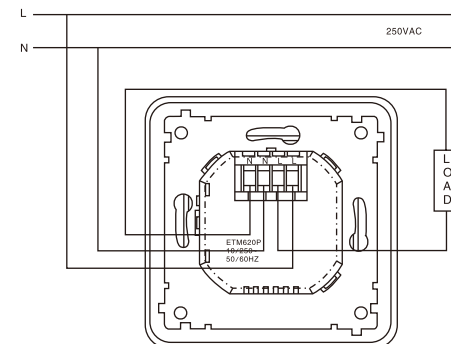
Type	Description/Remark
ETM620P	Electronic time switch

Drawing:



ETM620P

Connection diagram:



Noted: Neutral conductor must always be connected.

☉ **Thermostat without display**



Color: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: Polycarbonate

IP-Class: IP21, on a smooth surface

Working Temperature: 0°C-35°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

EN 60730-1

EN 60730-2-9

The product is in conformity with the provisions of the following European directive(s):

LVD (Low Voltage Directive)

EMC (Directive of Electromagnetic Compatibility)

RoHS Directive

WEEE Directive

REACH Directive

Certificate(s): CE, Semko, EMC

Quality management system according to:

ISO 9001

Environmental management system:

ISO 14001

Occupational Health and Safety Management System:

ISO 45001

Technical Info: 230VAC 16A

Frequency: 50Hz

Load type:

Resistive load: 16A 250VAC (AC1)

Product information:

Fit into standard wall boxes (c-c 60mm). By surface fixing, please use surface house (Typed ETM240P).

By surface fixing, in combination with a switch or others, please use double surface house (Typed ETM429P).

Thermoplastic center plate 55X55 mm, which fits into Etman "P" series combination plate.

Type designation:

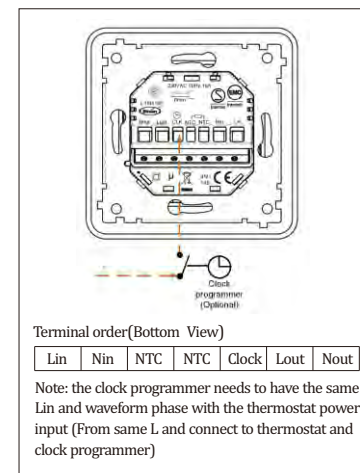
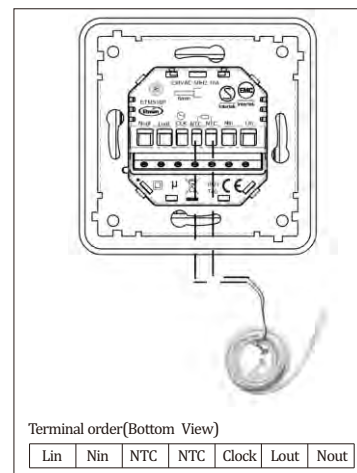
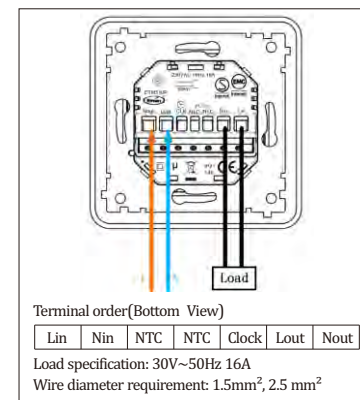
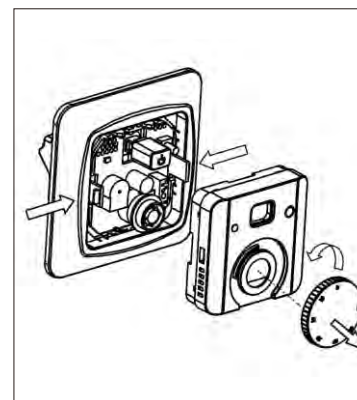
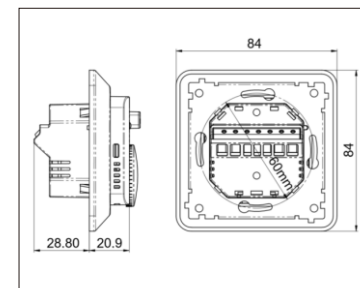
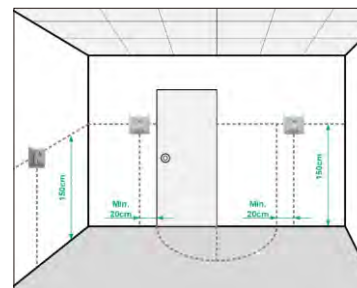
Type	Description/Remark
ETM510P	Thermostat without display, P-Design

SAFETY INSTRUCTIONS:

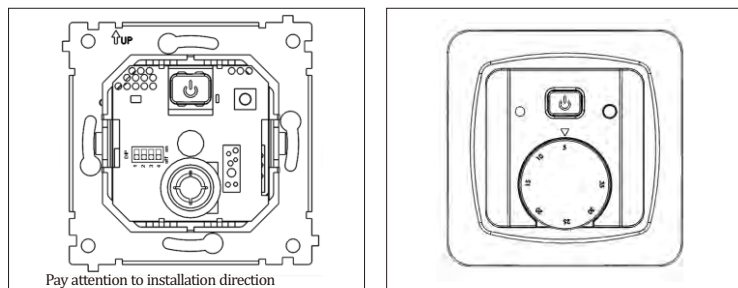
Read these instructions carefully before commencing installation and retain for future reference.

The dimmer should be installed by a licensed electrician and in accordance with local regulations.

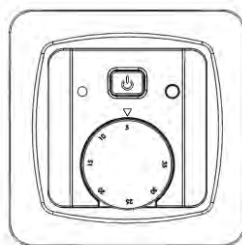
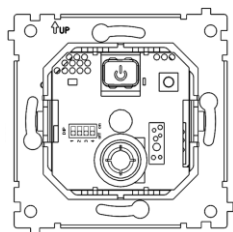
Make sure that the power is off before installation or maintenance.



P Series
Screw terminals



User interface



ON/OFF power switch



Main potentiometer

Thermostat mode:

The potentiometer is ambient temperature setting for end user to set proper room temperature, The temperature setting range is +5°C ~ +35°C

Measuring accuracy	± 0,1°C
Operating temperature	0°C - 40°C
Setting temperature range	+5°C to 35°C
Floor limiting temperature	28°C
Regulation characteristics	PID algorithm
Electrical protection	IP21 Class II
Main switch	16A Two poles 16A
Output	16A 250VAC (AC1) Relay 16A 250 VAC resistive load (AC1)
Power supply	230VAC ± 10%
External sensor	NTC 10k Ω 25°C
Load	cos φ = 1
Max. length sensor cable	50 m, 2x1.5 mm2

P Series
Screw terminals



Power regulator (electronic timer mode) mode:

Power regulator mode/ electronic timer mode is to set the power on time within total 15minutes, similar to PWM (Pulse Width Modulation). The electronic on time setting range is 1.5 min~15 min ; (Duty cycle range: 10%~100% @15min)



Corresponding Table:

In power regulator / electronic timer mode, only the internal temperature sensor is enabled. And when the temperature sensed exceeds the temperature upper limit, the relay will be closed. The relay will be turned on again in the next control cycle.

Knob	Time
1	1.5min
2	3min
3	4.5min
4	6min
5	7.5min
6	9min
7	10.5min
8	12min
9	13.5min
10	15min

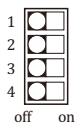
LED indicator implemented by dual color LED (Green, Red, mixed for Orange).

LED indicator	Instructions
OFF	The load is powered off and the heating is stopped
Red	The load is powered on and the heating begins
Green	Enter the night control mode by the external clock or the internal settings, reduce the setting temperature
Green LED at start-up	Green LED at start-up, lit for approx. 7 seconds
Orange	Heat on the night control mode
Green blinking	Enter/Exit the night control mode
Red blinking	0.5S Internal and external sensor failure
	1S Internal sensor failure
	2S External sensor failure
Orange blinking	0.5S Internal and external sensor failure
	1S Internal sensor failure
	2S External sensor failure



DIP switches for mode selection during installation(Digit side means off)

Switch configuration	Description	Remark
Switch 1	1 <input type="checkbox"/> on DIP1 On: Power load <1500W	Power load
	1 <input type="checkbox"/> on DIP1 Off: Max. power load up to 3600W	
Switch 2	2 <input type="checkbox"/> on DIP2 On: Power regulator mode	Regulation mode
	2 <input type="checkbox"/> on DIP2 Off: Thermostat mode	
Switch 3&4	3 <input type="checkbox"/> on 4 <input type="checkbox"/> on DIP3 Off & DIP4 Off: Internal sensor only	Thermostat mode
	3 <input type="checkbox"/> on 4 <input type="checkbox"/> on DIP3 Off & DIP4 On: External sensor only	
	3 <input type="checkbox"/> on 4 <input type="checkbox"/> on DIP3 On & DIP4 Off: Internal and external sensors used with lower floor temperature limit (5°C)	
	3 <input type="checkbox"/> on 4 <input type="checkbox"/> on DIP3 On & DIP4 On: Internal and external sensors used with upper floor temperature limit (25°C)	



Night control mode setting

The operating temperature is 5°C lower than the set temperature External night control mode setting, enter or exit night mode by detecting external mains signal.

Set the internal night control mode, press the button to enter the internal night control mode; press and hold on 3S to enter the internal night control mode.

After 7 hours, the temperature will be recovered, and the night mode will be re-entered in 24 hours cycle. The cycle will be continued in night mode; Press and hold 3S again to exit the internal night control mode.



night mode

External night control mode has higher priority than internal night control mode; In the external night control mode, the internal night control operation is invalid; In the internal night control mode, when the external signal enters, exit the internal night control mode and clear all the internal night control mode setting data After power off, clear all the internal night control mode setting data



© Flush-type USB Charger for fixed installation

Color: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc..)

Main material: PC (Halogen free)

IP-Class: IP20

Fire hazard test: 650°C/850°C (IEC60695-2-1)

The product complies with the standard(s): EN62368-1

The product is in conformity with the provisions of the following European directive(s): LVD, EMC, RoHS, WEEE, Ecodesign

Certificate(s): CE, Semko

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Technical info:

Input:

230VAC 50Hz

200mA Max

Output:

DC 5V 3.4A

Standby Power consumption: <0.1W

Power AVG EFF: >82.15%

Relative humidity: <95%

Working Temperature: -25°C to 45°C

IP-Class: Ip20

OCP: 3.8A OTP: <110°C

OVP: <6.3V; SCP: Input Power<2W

Product information:

USB Charger makes it possible to charge rechargeable batteries of electronic devices such as mobile phones, iPad, iPod, iPhone or similar products, with the charging process taking place exclusively via USB connection.

Two vertical parallel arranged USB jack 2.0 Type A.

An auto-detect feature monitors USB data line voltage, and automatically provides the correct electrical output (max2,4A) on the USB ports to charge compliant devices.

2 x 1A, 2.1A+1A, 2.4A+1A; 5V.

USB Charger fit into standard wall boxes from Etman (c-c 60mm). By surface fixing, please use surface house (Typed ETM240P).

By surface fixing, in combination with a switch or others, please use double surface house (Typed ETM429P).

Thermoplastic center plate is 55X55 mm, which fits into Etman "P" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

No visible screws.

Only suitable for use in indoor areas.

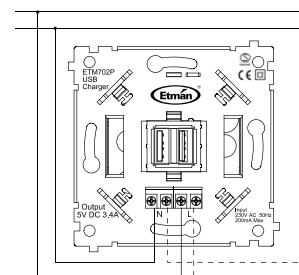
Built-in protection circuit.

Type Designation:

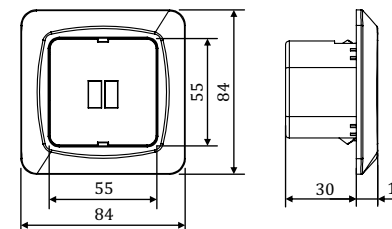
Type	Description/Remark
ETM702P	3.4A USB Charger

Connection diagram:

Noted: Neutral conductor must always be connected.



Drawing:



P Series

Screwless terminals



◎ SO with 2 USB ports

Color: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working Temperature: 0°C–35°C

The product complies with the standard(s):

EN 62368-1

IEC 60884-1

The product is in conformity with the provisions of the following European directive(s):

LVD (Low Voltage Directive)

EMC (Directive of Electromagnetic Compatibility)

RoHS Directive

WEEE Directive

REACH Directive

Certificate(s): CE, TUV

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Overvoltage category: III;

High voltage insulation test: 3kVac;

Socket Data: 16A/250 ~, 50Hz MAX 3600W

USB Data:

Rated input: 230V~, 50Hz, 0.4A

Rated output:

Output Single A-port or Output Single C-port:

5.0V3.0A, 15.0W;

9.0V2.0A, 18.0W;

12.0V1.5A, 18.0W;

Output A-port + Output C-port:

5.0V3.0A, 15.0W (3.0A in total);

Standby operation: 0.10 W;

Energy efficiency: Average active efficiency: 81.4%;
Efficiency at low load (10%): 72.1%;

Characteristics

Equipped with Smart IC (intelligent device detection for optimal charging current), output overcurrent limiting, output overvoltage protection. The USB sockets are only for power supply. Data transfer does not take place.

Type designation:

Type	Description/Remark
ETM703PQ	Wall-Adapter; USB Power Output Ports

P Series

Screwless terminals



Warnings

Installation and assembly of electrical devices may only be carried out by a qualified electrician. To avoid electric shock, de-energize cables while working on the USB power supply (switch off circuit breaker).

The 250VAC connection is done by the quick terminals L and N, and earth.

Installation must be done by people having knowledge and experience in electrical connections

Improper installation can cause danger for

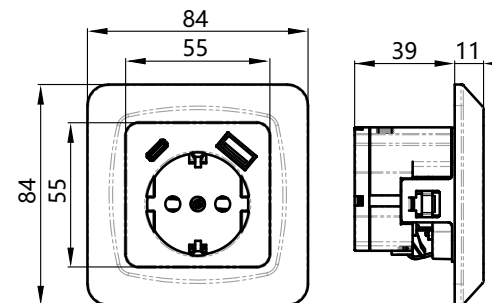
- your own life

- the life of everyone using the electrical appliance

Improper installation can cause damage of property e.g. fire

Use the USB power supply only in protected places and not outdoors.

Drawing:



P Series
Screw terminals

☉ USB-A&C charger

Color: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc..)

Main material: PC (Halogen free)

IP-Class: IPX0

Working Temperature: 0°C–35°C

The product complies with the standard(s):

EN 62368-1

The product is in conformity with the provisions of the following European directive(s):

LVD (Low Voltage Directive)

EMC (Directive of Electromagnetic Compatibility)

RoHS Directive

WEEE Directive

REACH Directive

Certificate(s): CE

Quality management system according to: ISO 9001

Environmental management system: ISO 14001

Occupational Health and Safety Management System: ISO 45001

Overvoltage category: II;

High voltage insulation test: 3kVac;

USB Data:

Rated input: 100-240V~, 50/60Hz, 0.4A

Rated output:

Output Single A-port or Output Single C-port:

5.0V3.0A, 15.0W;

9.0V2.0A, 18.0W;

12.0V1.5A, 18.0W;

Output A-port + Output C-port:

5.0V3.0A, 15.0W (3.0A in total);

Standby operation: 0.10 W;

Energy efficiency: Average active efficiency: 81.4%;
Efficiency at low load (10%): 72.1%;

Characteristics

Equipped with Smart IC (intelligent device detection for optimal charging current), output overcurrent limiting, output overvoltage protection. The USB sockets are only for power supply. Data transfer does not take place.

Only fits into cc60 boxes, and 1 & 2 way surface frame + corner boxes, NOT 3-4 way surface frames.

Type designation:

Type	Description/Remark
ETM704P	Wall-Adapter, USB Power Output Ports

P Series
Screw terminals

Warnings

Installation and assembly of electrical devices may only be carried out by a qualified electrician.

To avoid electric shock, de-energize cables while working on the USB power supply (switch off circuit breaker).

The 100-240V AC connection is done by the screw terminals L and N.

Installation must be done by people having knowledge and experience in electrical connections

Improper installation can cause danger for

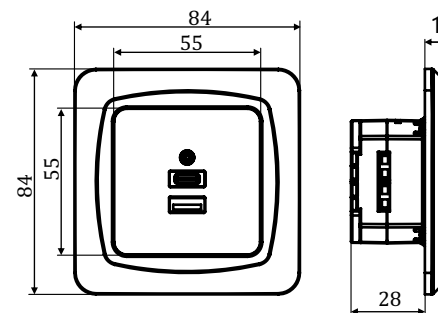
- your own life

- the life of everyone using the electrical appliance

Improper installation can cause damage of property e.g. fire

Use the USB power supply only in protected places and not outdoors.

Drawing:





☉ Low voltage pushbutton

Technical data:

Voltage range
Direct current: 12-30VDC
Alternate current: 12-24VAC
Current
Continuous: 400mA max
Peak: 1.5A max
Fixed serial resistor for LED:10KΩ
Self resetting overload protection
Installation: CEE60
Needed depth: 25mm
Max. load capacity of LED's:
ETM731P: 9 mA AC / 15mA DC
ETM732P, ETM734P: 12 mA AC / 20mA DC

Ambient temperature: -5°C to +40°C

Relative humidity: <95%

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): EN 60669-2-1, EN 60669-1

The product is in conformity with the provisions of the following European directive(s):

LVD, EMC, RoHS, WEEE, REACH, Ecodesign

Product info:

Low voltage pushbuttons are suitable for control of pulse relays, programmable logic units. Low voltage pushbuttons can directly drive the most of relays found in markets, without using external amplification. The buttons are available in one, two and four channel versions. Each of switches has independently controlled LED for state indication. Low voltage push buttons fit into standard wall boxes from Etman (c-c 60mm). By surface fixing, please use surface house (Typed ETM240P). By surface fixing, in combination with a switch or other regulators/dimmers, please use double surface house (Typed ETM429P).

Thermoplastic center plate is 55x55 mm, which fits into Etman "P" series combination plate.

Screw terminal, capacity: 1.5-2.5mm².

No visible screws.

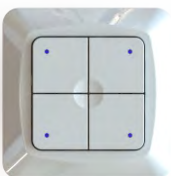
Only suitable for use in indoor areas.



ETM731P



ETM732P

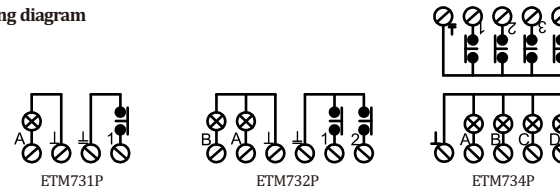


ETM734P

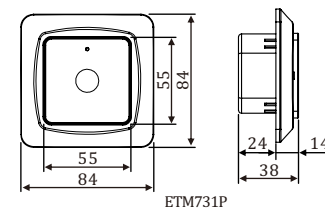
Type Designation:

Type	Description/Remark
ETM731P	1 button
ETM732P	2 buttons
ETM734P	4 buttons

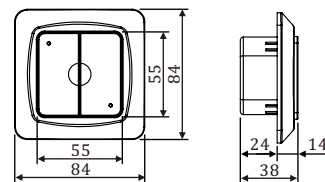
Wiring diagram



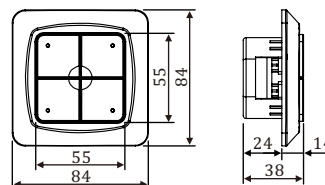
Drawing:



ETM731P



ETM732P



ETM734P

P Series

○ Frames

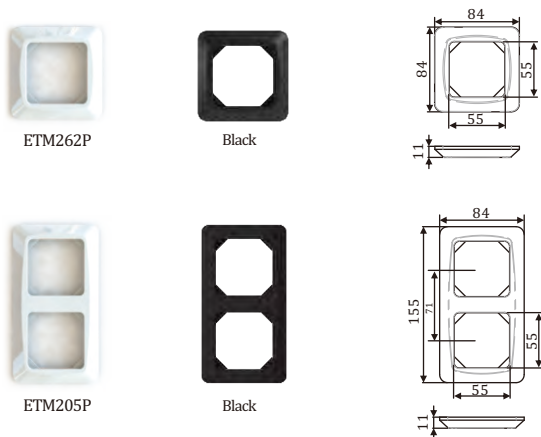
RAL9016, RAL9003 (UV stable)

Code name	Description/Remark	Hole dimension
S	Standard, all standard 55x55 mm central plate equipment will fit into the combination plate, such like switches, single Schuko sockets, network sockets, switches need in addition a locking frame to fasten the combination plate to the swith-base	55*55
2S	Fit in standard and low profile double Schuko socket unit	55*85
3S; 2S+2E	Fit into 3 way Schuko socket unit Fit into 2 way Schuko socket and 2 way Euro socket unit	55*128
M	Only fit in standard double Schuko socket unit	55*85
RS	Fit into ELKO's RS16 central plate equipment	56*56

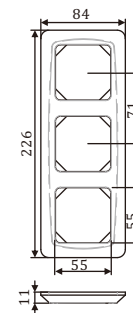
○ Standard Frames

Type	Description/Remark
ETM262P	"S" frames
ETM205P	"S+S" frames
ETM206P	"S+S+S" frames
ETM234P	"S+S+S+S" frames
ETM295P	"S+S+S+S+S" frames

Drawing:



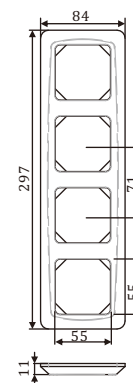
P Series



Black



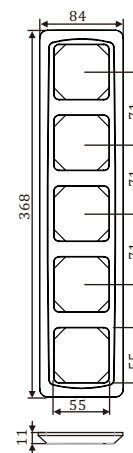
ETM206P



Black



ETM234P

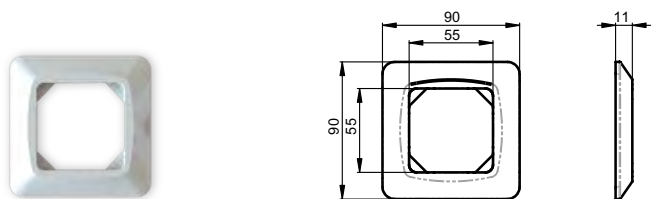


ETM295P

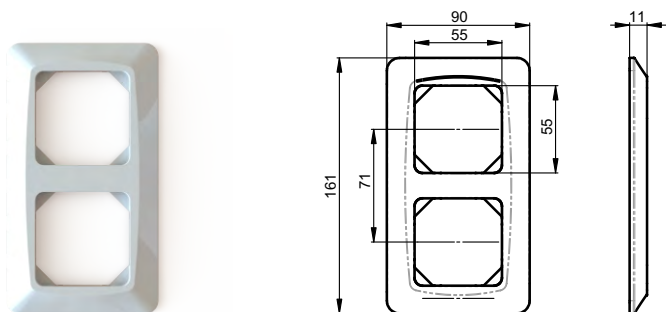
◎ Standard Frames, 90mm

Type	Description/Remark
ETM262P90	Single way frame, 90mm
ETM205P90	Double way frame, 90mm
ETM206P90	Three way frame, 90mm
ETM234P90	Four way frame, 90mm

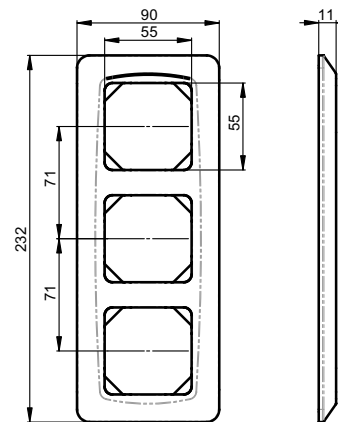
Drawing:



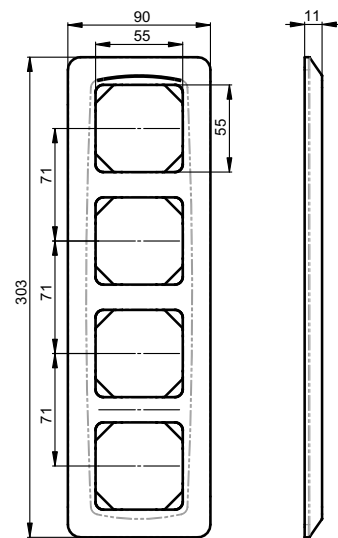
ETM262P90



ETM205P90



ETM206P90



ETM234P90



P Series 

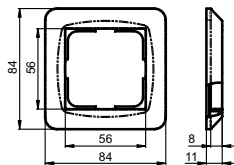
© Standard Frames with one way for ELKO's Rs16 central plate equipment

Type	Description/Remark
ETM249P	"RS" frame
ETM250P	"S+RS" frames
ETM251P	"S+S+RS" frames
ETM253P	"S+S+S+RS" frames
ETM311P	"S+S+S+S+RS" frames

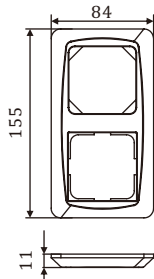
Drawing:



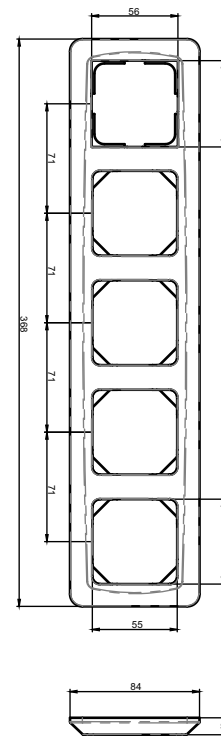
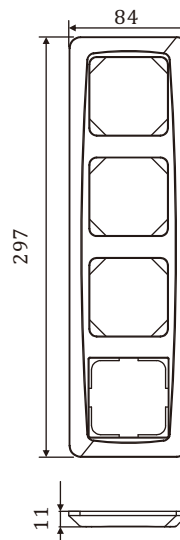
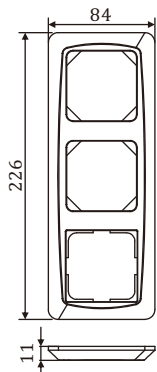
ETM249P



ETM250P



ETM251P



ETM253P



ETM311P

P Series 

P Series 

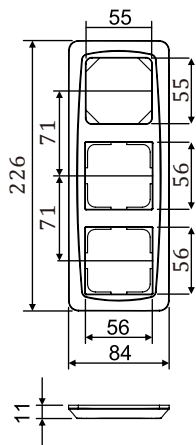
○ Standard Frames with one way for ELKO's Rs16 central plate equipment

Type	Description/Remark
ETM313P	"S+RS+RS" frames
ETM314P	"S+S+RS+RS" frames
ETM315P	"S+S+S+RS+RS" frames

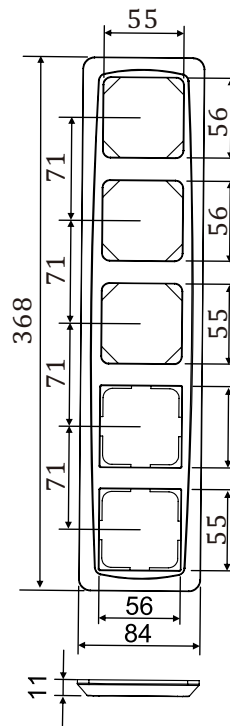
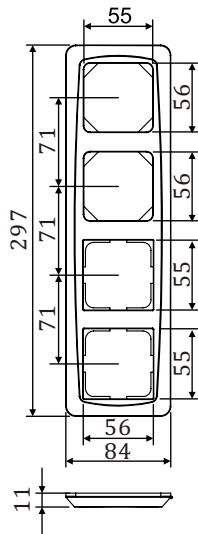
Drawing:



ETM313P



ETM314P



ETM315P

P Series 

P Series



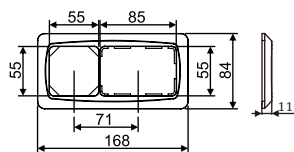
◎ Standard Frames with M holes

Type	Description/Remark
ETM305P	"M+S" frames
ETM306P	"M+S+S" frames
ETM296P	"M+S+S+S" frames

Drawing:



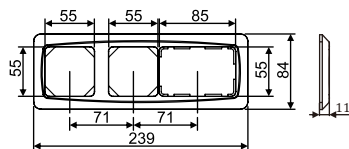
ETM305P



ETM305P



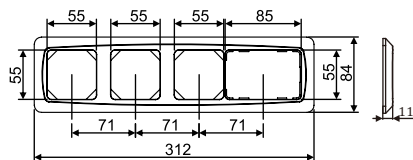
ETM306P



ETM306P



ETM296P



ETM296P

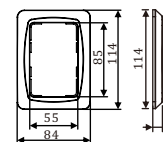
P Series



◎ 2S frames, standing version

Type	Description/Remark
ETM304P	"2S" frames
ETM308P	"2S+2S" frames, standing version
ETM309P	"2S+2S+2S" frames, standing version
ETM310P	"2S+2S+2S+2S" frames, standing version

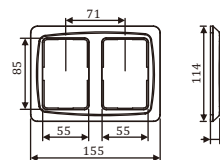
Drawing:



ETM304P



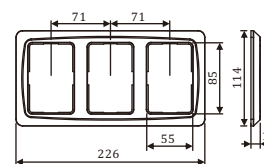
ETM304P



ETM308P



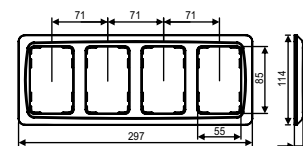
ETM308P



ETM309



ETM309P



ETM310P



ETM310P

P Series 

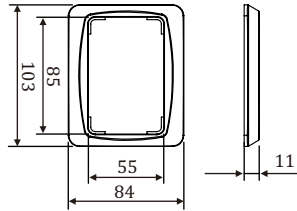
© 2U frame

Type	Description/Remark
ETM442P	Frame 2U for ETM438P. Inside 85mmx55mm = 2S, outside 103mm x 84mm.



ETM442P

Drawing:



P Series 

P Series

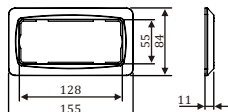
◎ Standard frames with one 3S hole

Type	Description/Remark
ETM297P	"3S" frames
ETM300P	"3S+S" frames
ETM301P	"3S+S+S" frames

Drawing:



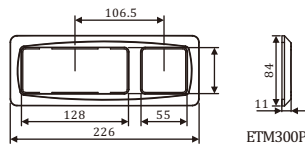
ETM297P



ETM297P



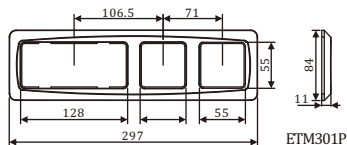
ETM300P



ETM300P



ETM301P



ETM301P

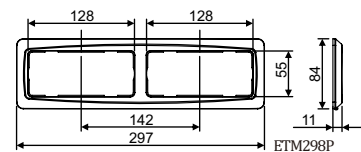


P Series

◎ Standard frames with two 3S hole

Type	Description/Remark
ETM298P	"3S+3S" frames
ETM299P	"3S+3S+S" frames
ETM303P	"3S+3S+S+S" frames

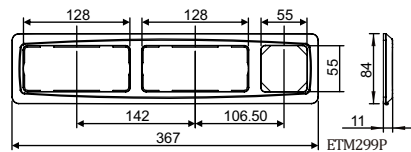
Drawing:



ETM298P



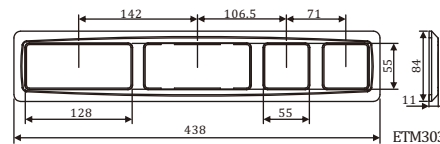
ETM298P



ETM299P



ETM299P










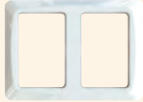




























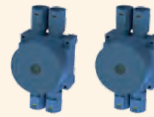




ETM303P



ETM303P

◎ Example

Frames	Devices	Wall boxes
 S+S	 1-way  2-way	 Universal
 3S+S	 3-way  Data	 Double  Universal
 2S+2S	 2-way, low profile(2S) 	 1.5
 2S+2S	 2-way, normal(M) 	 Universal
 2S+2S+2S  Middle piece	 2-way low profile(2S)   TV	 1.5  Universal

Frames	Devices	Wall boxes
 3S+3S	 3-way	 Double
 3S+3S+S+S	 3-way  TV  Data	 Double  Universal
 M+S	 2-way, normal(M)  2-way	 Universal
 M+S+S	 2-way, normal(M)  2-way	 Universal

P Series

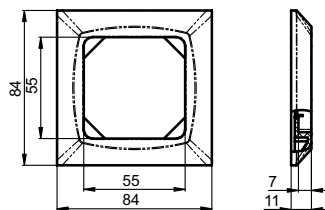
© Frames for trunkings

Type	Description/Remark
ETM262PT	1S, without label Field
ETM262PTL	1S, with label Field
ETM205PT	S+S, without label Field
ETM205PTL	S+S, with label Field
ETM297PT	3S, without label Field
ETM297PTL	3S, with label Field

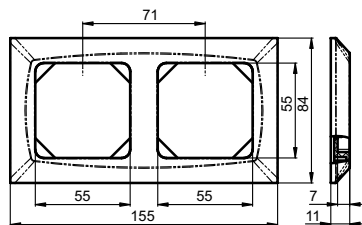
Drawing:



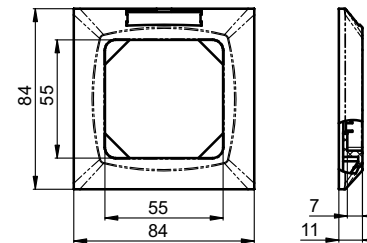
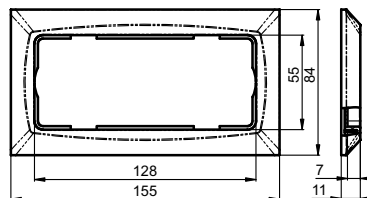
ETM262PT



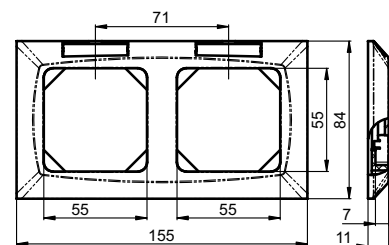
ETM205PT



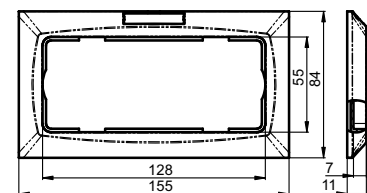
ETM297PT



ETM262PTL



ETM205PTL



ETM297PTL



P Series

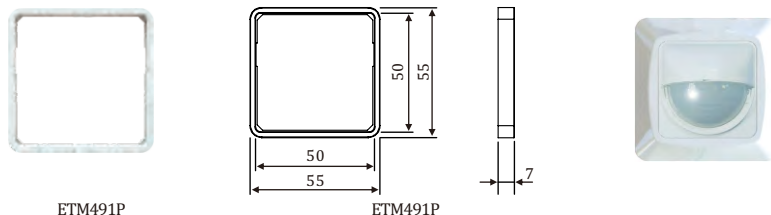
P Series

◎ Intermediate ring, 50x50mm

Adapter ring to be used together with combination plate.
The inner dimension is designed according to DIN 49075 with dimension of 50x50mm.
This product is used to be able to mount the devices with standard 50x50 mm centre plates from other manufactures to our combination plate.

Type	Description/Remark
ETM491P	Intermediate ring, 50x50mm

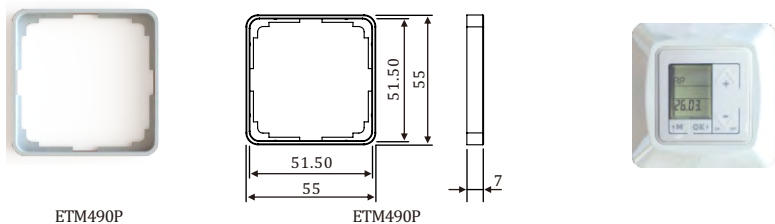
Drawing:



◎ Intermediate ring for digital astro time switch

Type	Description/Remark
ETM490P	Intermediate ring for digital astro time switch (From hugo-mueller)

Drawing:

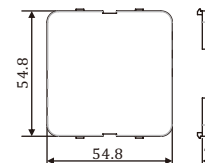


◎ Blind Cover

Blind plate is used to cover the hole in a combination plate.
In some cases the installer puts in for example two wall boxes in the wall but only use one.
In this case we need a blind plate to cover another one.

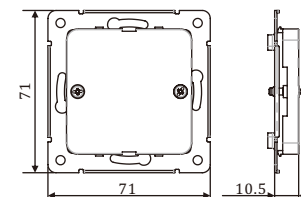
Type	Description/Remark
ETM263P	Blind plate, S

Drawing:



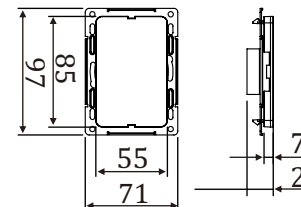
Type	Description/Remark
ETM264P	Blind plate, S, w/steel bracket

Drawing:



Type	Description/Remark
ETM439PW	Blind plate, 2S, w/steel bracket

Drawing:



P Series

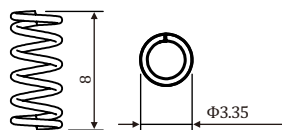
P Series

◎ Spring

The spring is used to mount in insert of our normal switches work as push button.

Type	Description/Remark
ETM492P	Spring, $\Phi 3.35 \times 8\text{mm}$

Drawing:



◎ How to mount spring inside our switches



Flat screwdriver,
width 3.5-4.0mm



Put flat screwdriver
between 1st and 2nd lap
*Noted: Spring clamped
the flat screwdriver, not losing*



One side direct to dome



Press spring down



Put spring under
the internal button



Put spring inside
the dome of internal button



Remove the screwdriver,
one spring ready



Mount another spring

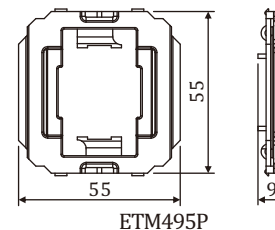
P Series

◎ Locking frame

Switches need locking frame to fasten the combination plate with the switch-base.

Type	Description/Remark
ETM495P	For screw terminal switches

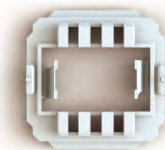
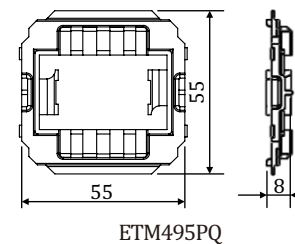
Drawing:



ETM495P

Type	Description/Remark
ETM495PQ	For screwless terminal switches

Drawing:



ETM495PQ

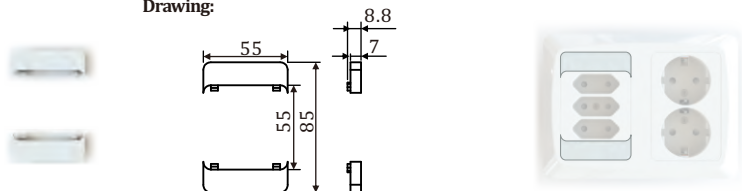
P Series

◎ Middle piece

Used to cover the space which is caused by the 55*55 standard equipments fits into the 2s frame except switches.

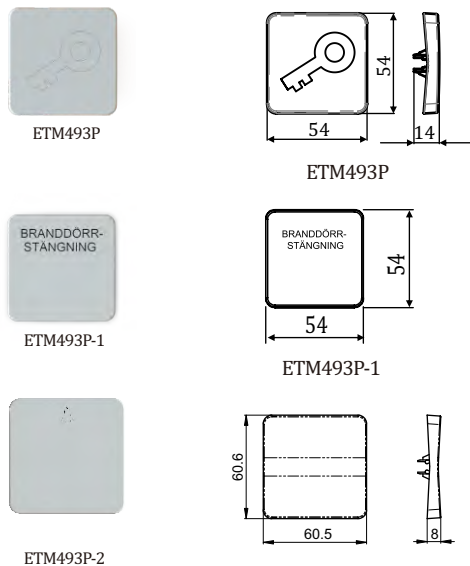
Type	Description/Remark
ETM494P	Middle piece

Drawing:



Type	Description/Remark
ETM493P	Key button
ETM493P-1	BRANDDÖRR - STÄNGNING button
ETM493P-2	Doorbell

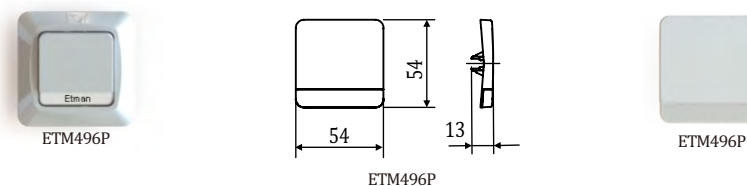
Drawing:



P Series

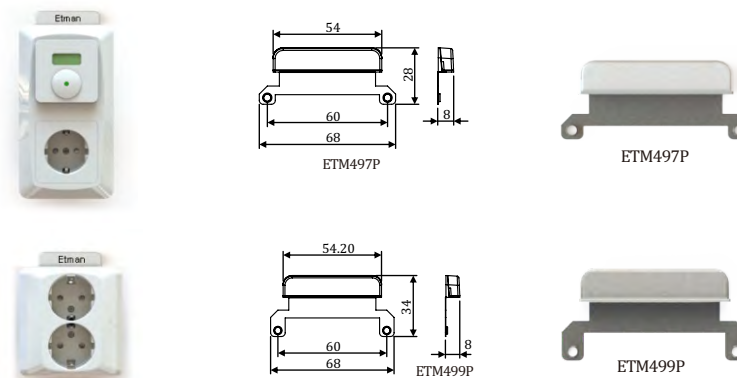
Type	Description/Remark
ETM496P	Button with write field

Drawing:



Type	Description/Remark
ETM497P	Marking for 1 way
ETM499P	Marking for 2 way

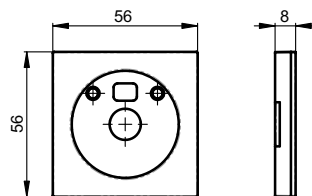
Drawing:



◎ Center plate

Type	Description/Remark
ETM329RSCP	Center plate ELKO RS for ETM321PV2, ETM329P

Drawing:



ETM20XPC

◎ claw kits

Type	Description/Remark
ETM20XPC	claws for switches and sockets
ETM32XPC	claws for dimmers



ETM32XPC

P Series
Screw terminals



◎ Surface-type wall rocker switch for fixed installation



Technical Data: 16AX 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): EN60 669-1

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Wiring diagram printed on the rear side.

The rocker and cover plate made by thermoplastic.

Screw terminals.

Flush wiring.

Screw distance c-c 38 mm -cover plate 75*84 mm.

Space enough for cables up to 2.5 mm² under the cover plate.

Base bottom plate acts at the same time as a positioning guide by the door frame under installation.

Type designation:

Type	Description/Remark
ETM221P	1-pole / 2-way, pattern No. 1/6
ETM222P	2-pole, pattern No. 2
ETM223P	1+2-pole, pattern No. 1+2
ETM224P	1-pole and 2-way, pattern No. 5
ETM341P	1+1pole and 2-way, pattern No.6+6
ETM342P	Reversing switch, pattern No. 7
ETM344P	1-pole, plus w/spring (doorbell), pattern No. 1
ETM345P	Shutter push button switch
ETM221PP	1-pole / 2-way, push button, pattern No. 1/6
ETM222PP	2-pole, push button, pattern No. 2
ETM223PP	1+2-pole, push button, pattern No. 1+2
ETM224PP	1-pole and 2-way, push button, pattern No.5



ETM221P, ETM342P,
ETM221PP



ETM222P, ETM222PP



ETM223P, ETM223PP

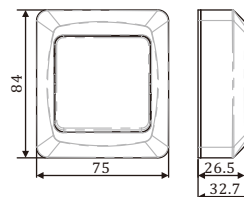


ETM224P, ETM341P,
ETM224PP

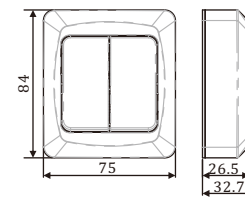
P Series
Screw terminals



Drawing:



One button



Two buttons



ETM344PP



ETM345P

☉ Surface-type wall socket outlet for fixed installation

Technical Data: 16A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25 °C to +60 °C

Installation temperature: -5 °C to +25 °C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

IEC60884-1

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Surface mounted socket outlets with or without earth (schuko), with shutter, screw terminal.

Covering cap is made of thermoplastic, which is less rigid but more durable than thermo-setting plastic.

Inclusive a back plate, on to which the socket insert is fixed.

Roomy space for cables under the broader covering cap. Fixing screw-holes in the back plate for the surface mounting. Screw distance c-c 38 mm.



ACJN1010P



ACJN1011P

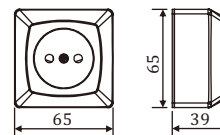


ACJN2010P

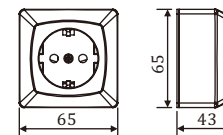
Type designation:

Type	Description/Remark
ACJN1010P	1-way Schuko socket, without earth
ACJN1011P	1-way Schuko socket, earthed
ACJN2010P	2-way Schuko socket, without earth
ACJN2011P	2-way Schuko socket, earthed
ETM241P	4-way Schuko socket, earthed

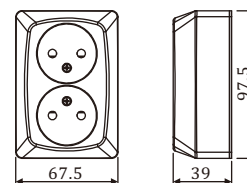
Drawing:



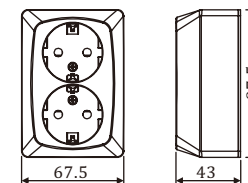
ACJN1010P



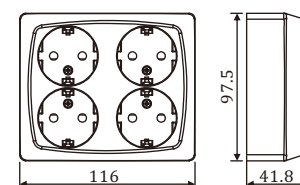
ACJN1011P



ACJN2010P



ACJN2011P



ETM241P



ACJN2011P



ETM241P



Black

☉ Surface splash proof wall rocker switch for fixed installation

Technical Data: 16AX 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP44 (The lowest IP degree must be considered when combinations of plug and socket outlets are in use)

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 94V-0(main parts)

The product complies with the standard(s): EN60 669-1

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Surface mounted - protected against corrosion.

There is a knock-out draining hole in the bottom to let out condensation water.

Wiring diagram printed on the rear side.

The rocker and cover plate made by thermoplastic.

Screw terminals.

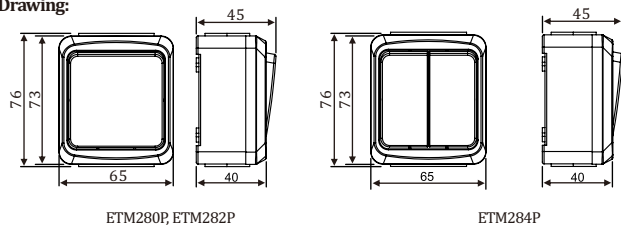
Flush wiring.

Connecting piece and strain relief are available for order.

Type designation:

Type	Description/Remark
ETM280P	2-pole, pattern No. 2
ETM282P	1-pole / 2-way, pattern No. 1/6
ETM284P	1-pole and 2-way, pattern No. 5
ETM281P	2 x 2-pole, 16A, pattern No. 2

Drawing:



ETM280P, ETM282P

ETM284P



ETM280P, ETM280PQ



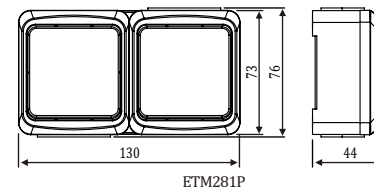
ETM282P, ETM282PQ



ETM284P, ETM284PQ



Drawing:



ETM281P

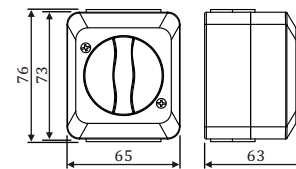


ETM281P

Type designation:

Type	Description/Remark
ETM410S	Turn switch, 2-pole, 16A, pattern No. 2, IP54
ETM410SL	Turn switch, lockable, 2-pole, 16A, pattern No.2, IP54

Drawing:



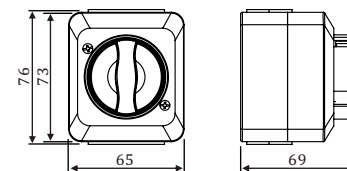
ETM410S



ETM410S



Black



ETM410SL



ETM410SL



☉ Surface splash proof wall socket outlet for fixed installation



ETM273P



ETM274P



ETM271P



ETM278P

Technical Data: 16A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP44 (The lowest IP degree must be considered when combinations of plug and socket outlets are in use)

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 94V-0(main parts)

The product complies with the standard(s):

IEC60884-1

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Surface mounted socket outlets are with earth (schuko), with shutter; screw terminal.

Covering cap is made of thermoplastic, which is less rigid but more durable than thermo-setting plastic.

Inclusive a back plate, on to which the socket insert is fixed.

Roomy space for cables under the broader covering cap. Fixing screw-holes in the back plate for the surface mounting.

Connecting piece and strain relief are available for order.

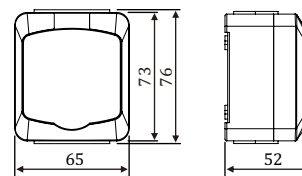


Type designation:

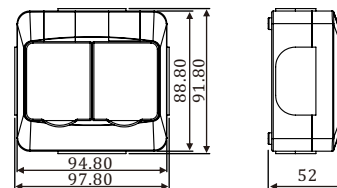
Type	Description/Remark
ETM273P	1-way Schuko socket, earthed, mini version, IP44
ETM274P	2-way Schuko socket, earthed, mini version, IP44
ETM271P	2-way Schuko socket, earthed, IP44
ETM278P	1-way Schuko socket, earthed + 2-pole switch, pattern No. 2, IP44



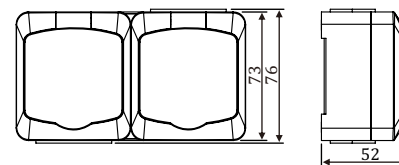
Drawing:



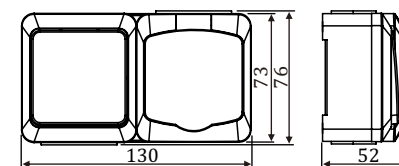
ETM273P



ETM274P



ETM271P



ETM278P

P Series



P Series
Screw terminals



○ Accessories for surface splash proof wall switches and sockets



ETM275S

Connecting piece is supposed to be connected to the two products.

Type	Description/Remark
ETM275S	Connecting piece

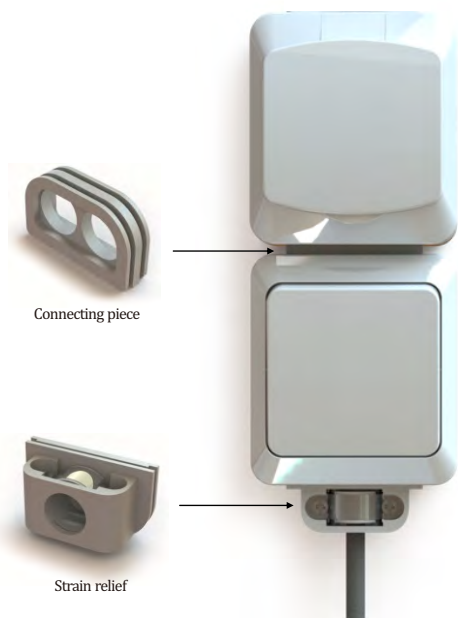


ETM276S

Strain relief is used to replace the original membrane cable entries so that which can be accessed to heavy cable such as rubber cable Ø8-13mm.

Type	Description/Remark
ETM276S	Strain relief

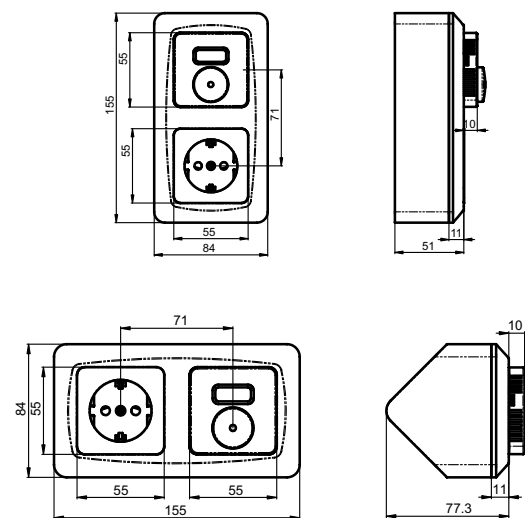
Connecting Piece & Strain Relief



Bundled products:

Type	Description/Remark
ETM690PDSO	Floorbox and pre-mounted DSO, with wires, length 180mm
ETM429PTS	2 way surface mounting box with pre-wired timer and Schuko socket
ETM402PTS	2 way corner box with pre-wired timer and Schuko socket

Drawing:



ETM690PDSO



ETM429PTS



ETM402PTS

P Series
Screw terminals



© Socket outlet and plug for oven, Norwegian model

Product Information

Name: Socket outlet and plug

Technical Data: 25A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc..)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

IEC60884-1, CEE7X (socket) and CEE7XI (plug)

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

3 flat-pin system

Socket outlet: surface type, 2P+E, with thermoplastic cover. Screw (Pozidriv) terminals socket base, flush wiring. Screw distance 66.70x37.0 mm -cover plate 90x91 mm. also can fit into wall boxes, screw distance c-c 60 mm

Plug: 2P+E, with screw type terminals, straight cable entry.



ETM229P

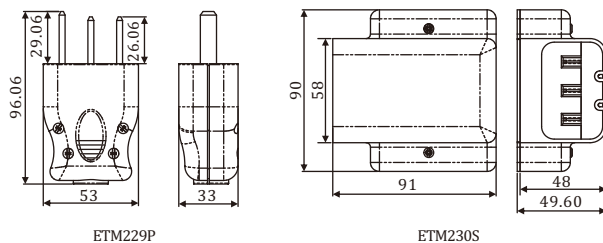


ETM230S

Type designation:

Type	Description/Remark
ETM229P	Rewirable Plug, white
ETM230S	Wall Socket for fixed installation, surface type

Drawing:



P Series
Screw terminals



© Socket outlet and plug for oven, Swedish model

Product Information

Name: Socket outlet and plug

Technical Data: 16A 230/400VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc..)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

IEC60884-1, DIN 49445 forms A2 (socket) and DIN 49446 (plug)

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Normal peoples call them "Perilex" plug and socket. The plus and socket are equipped with protective earth (PE), a neutral conductor (N) and three phase conductors (L1, L2, L3; formerly: R, S, T).

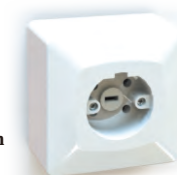
Usage of the "Perilex" plug and socket is usually confined to small businesses (e.g. bakeries, restaurants), medical facilities (hospitals, laboratories) and homes (for electric stoves), where it has the advantage of a smaller form factor and better clean ability.

ETM422P: Surface type wall socket, with thermoplastic cover. Screw (Pozidriv) terminals socket base, for flush wiring 1.5-2.5mm² only. Screw distance 49 mm -cover plate 92x92 mm.

ETM420P: Flush type wall socket, with thermoplastic cover. Screw (Pozidriv) terminals socket base, for flush wiring 1.5-2.5mm² only. Fit into flush junction boxes, screw distance c-c 67 mm

ETM421S, ETM423: Plug, rewirable, with pillar type terminals, for all kinds of wire, connectable wire area 1.5-2.5mm², side cable entry.

ETM248S: Plug, molded, 3P+E, with cable: H05VV-F 4G1.5mm²



ETM422P

Type designation:

Type	Description/Remark
ETM422P	Socket, Surface type
ETM420P	Socket, Flush type
ETM421S	Plug, rewirable, side entry
ETM423S	Plug, rewirable, straight entry

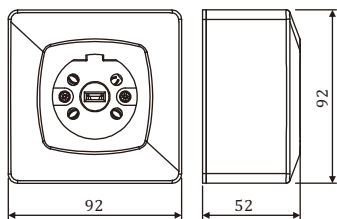
P Series
Screw terminals



Drawing:



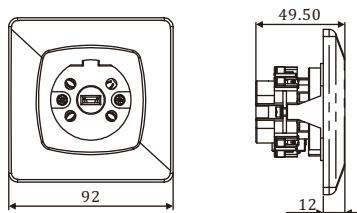
ETM422P



ETM422P

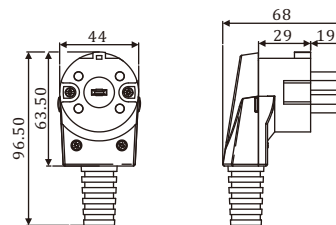


ETM420P



ETM420P

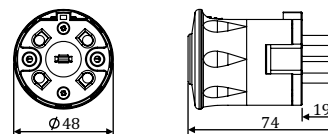
Drawing:



ETM421S



ETM421S



ETM423S



ETM423S

P Series
Screw terminals





☉ **Combination of Owen and Stove outlets**

Colour:

White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc..)

Main material:

PC (Halogen free)

IP-Class: IP20

Working temperature:

-25°C to +60°C

Installation temperature:

-5°C to +25°C

Fire hazard test:

650°C/850°C (IEC60695-2-11)

The product is in conformity with the provisions of the following European directive(s):

RoHS

WEEE

Certificate(s):

Semko

Quality management system according to:

ISO 9001

Environmental management system:

ISO 14001

Occupational Health and Safety Management System:

ISO 45001

The product complies with the standard(s):

EN 60884-1

Technical info:

Included three products:

1.16A 250V~ Schuko sockets

2.Junction boxes

3.16A 400/230V~ "Perilex" sockets

Prewired, H07V-R 2.5mm²

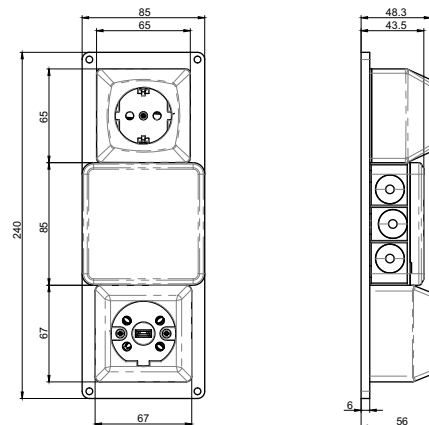
Color of wire:

L1 - brown, L2 - black, L3 - grey, N - blue, E - Yellow and green



ETM424P

Drawing:



Type designation:

Type	Description/Remark
ETM424P	Combination of Owen and Stove outlets

◎ **Surface-type wall rocker switch for fixed installation, screwless terminals**



Technical Data: 16AX 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s): EN60669-1

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Wiring diagram printed on the rear side.

The rocker and cover plate made by thermoplastic.

Screwless terminals.

Flush wiring.

Screw distance c-c 38 mm -cover plate c-c 73 mm.

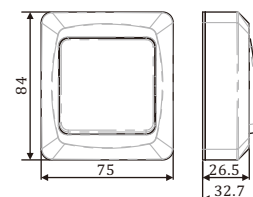
Space enough for cables up to 2.5 mm² under the cover plate.

Base bottom plate acts at the same time as a positioning guide by the door frame under installation.

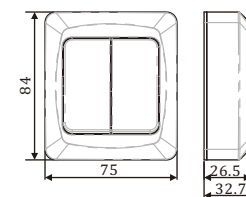
Type designation:

Type	Description/Remark
ETM221PQ	1-pole / 2-way, pattern No. 1/6
ETM222PQ	2-pole, pattern No. 2
ETM223PQ	1+2-pole, pattern No. 1+2
ETM224PQ	1-pole and 2-way, pattern No. 5
ETM341PQ	1+1pole and 2-way, pattern No.6+6
ETM342PQ	Reversing switch, pattern No. 7
ETM344PQ	1-pole, plus w/spring (doorbell), pattern No. 1
ETM345PQ	Shutter push button switch
ETM343PQ	3-gang, pattern No. 1+1+1
ETM221PQL	1-pole / 2-way, with indication lamp, pattern No. 1/6
ETM222PQL	2-pole, with indication lamp, pattern No. 2
ETM221PQLP	1-pole / 2-way, push button, with indication lamp, pattern No.1/6
ETM222PQLP	2-pole, push button, with indication lamp, pattern No. 2
ETM221PQP	1-pole / 2-way, push button, pattern No. 1/6
ETM222PQP	2-pole, push button, pattern No. 2
ETM223PQP	1+2-pole, push button, pattern No. 1+2
ETM224PQP	1-pole and 2-way, push button, pattern No.5

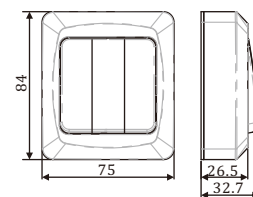
Drawing:



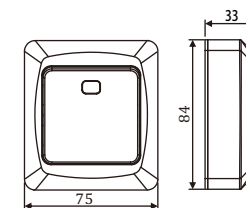
One button



Two buttons



Three buttons



With indication lamp



ETM221PQ, ETM342PQ,
ETM221PQP



ETM222PQ, ETM222PQP



ETM223PQ, ETM223PQP



ETM224PQ, ETM341PQ,
ETM224PQP



ETM343PQ



ETM344PQP



ETM345PQ



ETM221PQL, ETM222PQL,
ETM221PQLP, ETM222PQLP

☉ Surface-type wall socket outlet for fixed installation

Technical Data: 16A 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-1)

The product complies with the standard(s):
IEC60884-1

The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Surface mounted socket outlets are with or without earth (schuko), with shutter, screwless terminal.

Covering cap is made of thermoplastic, which is less rigid but more durable than thermo-setting plastic.

Inclusive a back plate, on to which the socket insert is fixed.

Roomy space for cables under the broader covering cap. Fixing screw-holes in the back plate for the surface mounting, Screw distance c-c 38 mm.



ACJN1010PQ



ACJN1011PQ



ACJN2010PQ

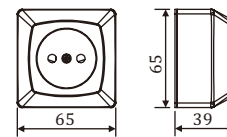


ACJN2011PQ
ACJN2011PQT

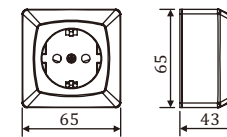
Type designation:

Type	Description/Remark
ACJN1010PQ	1-way Schuko socket, without earth
ACJN1011PQ	1-way Schuko socket, earthed
ACJN2010PQ	2-way Schuko socket, without earth
ACJN2011PQ	2-way Schuko socket, earthed
ACJN2011PQT	2-way Schuko socket, earthed, with terminals for through wiring
ETM241PQ	4-way Schuko socket, earthed
ETM404PQ	"4S+2E" socket: 4-way Schuko socket combine with 2 Euro socket

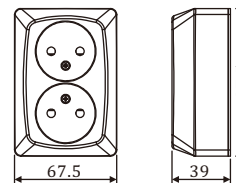
Drawing:



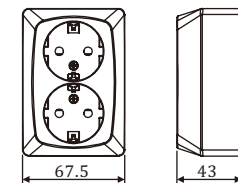
ACJN1010PQ



ACJN1011PQ



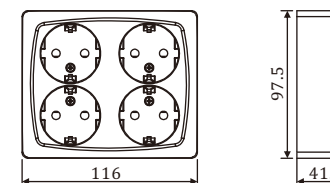
ACJN2010PQ



ACJN2011PQ
ACJN2011PQT



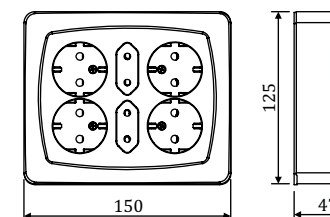
Black



ETM241PQ



ETM241PQ



ETM404PQ



ETM404PQ

○ Surface splash proof wall rocker switch for fixed installation

Technical Data: 16AX 250VAC

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP44 (The lowest IP degree must be considered when combinations of plug and socket outlets are in use)

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 94V-0(main parts)

The product complies with the standard(s): EN60669-1

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Surface mounted - protected against corrosion.

There is a knock-out draining hole in the bottom to let out condensation water.

Wiring diagram printed on the rear side.

The rocker and cover plate made by thermoplastic.

Screwless terminals.

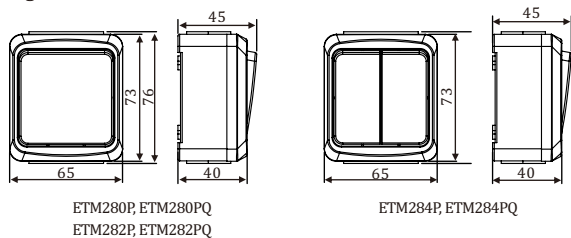
Flush wiring.

Connecting piece and strain relief are available for order.

Type designation:

Type	Description/Remark
ETM280PQ	2-pole, pattern No. 2
ETM282PQ	1-pole / 2-way, pattern No. 1/6
ETM284PQ	1-pole and 2-way, pattern No. 5, IP20
ETM280PQL	2-pole, with indication lamp, pattern No. 2
ETM282PQL	1-pole / 2-way, with indication lamp, pattern No. 1/6
ETM282PQLP	1-pole / 2-way, push button, with indication lamp, pattern No. 1/6
ETM410PQ	Turn switch, 2-pole, 16A, pattern No. 2, IP54
ETM410PQL	Turn switch, lockable, 2-pole, 16A, pattern No.2, IP54
ETM281PQ	2 x 2-pole, 16A, pattern No. 2

Drawing:



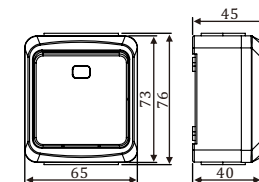
ETM280PQ



ETM282PQ



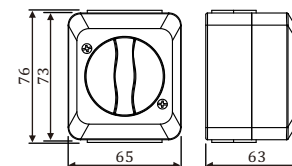
ETM284PQ



ETM280PQL, ETM282PQL, ETM282PQLP



ETM280PQL, ETM282PQL
ETM282PQLP



ETM410S, ETM410SQ



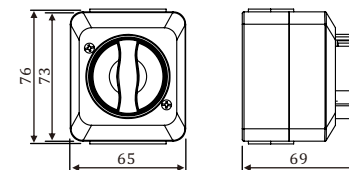
ETM410SQ



Black



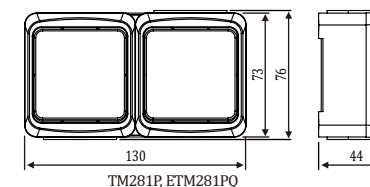
ETM410SL, ETM410SQL with locker



ETM410SQL



ETM410SQL



ETM281P, ETM281PQ



ETM281PQ

P Series
Screwless terminals



☉ **Surface splash proof wall socket outlet for fixed installation, screwless terminals**



Technical Data: 16A 250VAC
Frequency: 50Hz
Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
Main material: PC (Halogen free)
IP-Class: IP44 (The lowest IP degree must be considered when combinations of plug and socket outlets are in use)
Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C
Fire hazard test: 94V-0(main parts)
The product complies with the standard(s):
 IEC60884-1



The product is in conformity with the provisions of the following European directive(s): RoHS, WEEE

Certificate(s): Semko

Technical info:

Surface mounted socket outlets are with earth (schuko), with shutter; screwless terminal. Covering cap made is of thermoplastic, which is less rigid but more durable than thermo-setting plastic.
 Inclusive a back plate, on to which the socket insert is fixed.
 Roomy space for cables under the broader covering cap. Fixing screw-holes in the back plate for the surface mounting.
 Connecting piece and strain relief are available for order.

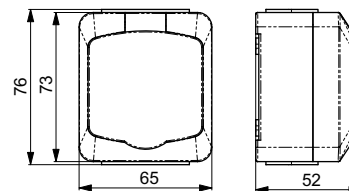
Type designation:

Type	Description/Remark
ETM273PQ	1-way Schuko socket, earthed, mini version, IP44
ETM274PQ	2-way Schuko socket, earthed, mini version, IP44
ETM271PQ	2-way Schuko socket, earthed
ETM278PQ	1-way Schuko socket, earthed + 2-pole switch, pattern No. 2, IP44
ETM273PQL	1-way Schuko socket, earthed, mini version, lockable, IP44
ETM274PQL	2-way Schuko socket, earthed, mini version, lockable, IP44

P Series
Screwless terminals



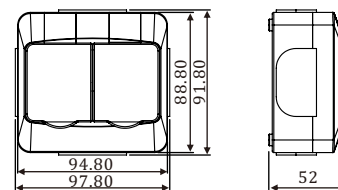
Drawing:



ETM273PQ



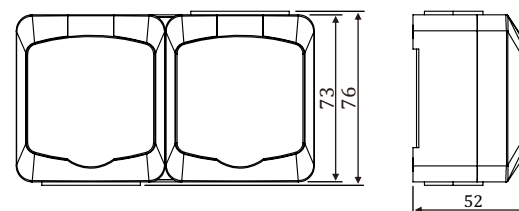
ETM273PQ



ETM274PQ



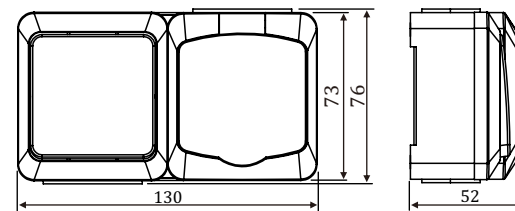
ETM274PQ



ETM271PQ



ETM271PQ



ETM278PQ

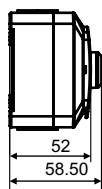
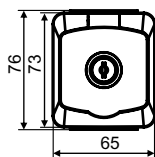


ETM278PQ

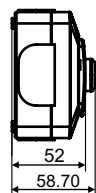
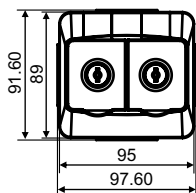
P Series
Screwless terminals



ETM273PQL



ETM274PQL



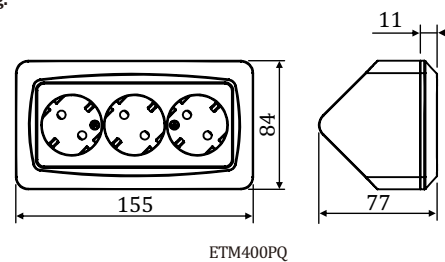
Bundled products:

Type	Description/Remark
ETM400PQ	2 way corner box with 3-way Schuko socket , earthed
ETM406PQ	2 way corner box with 2-way Schuko, earthed + 2 Euro socket

P Series
Screwless terminals



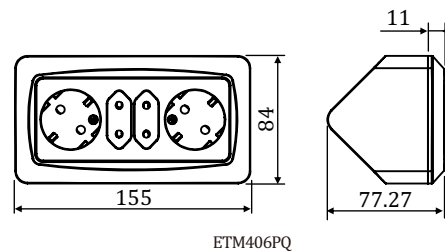
Drawing:



ETM400PQ



Black



ETM406PQ



P Series

Screwless terminals



⊙ RCCB Socket

Technical data:

Rated voltage: 230VAC 50Hz

Rated current: 16A

$I_{\Delta n} \leq 30\text{mA}$

$I_{\Delta n} = I_{nc} = 1500\text{A}$, type A

Trip time $\leq 30\text{ms}$

Poles No.: 1P+N

Ambient temperature: -25°C to +40 °C

Relative humidity: <95%

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP44 (with mounting on level surface)

Fire hazard test:

650 °C / 850 °C (IEC60695-2-11)

The product complies with the standard(s):

EN 61008-1

EN 61008-2-1

EN 60884-1

CEE7/III

The product is in conformity with the provisions of the following European directive(s): LVD, EMC, RoHS, WEEE

Certificate(s): Semko

Product info:

The working principle of the safety socket outlets is the same as that of a residual current device.

The fault current protection related all devices and cables which are connected to the safety socket outlet.

Flush type.

Suitable for using in indoor and outdoor areas.

Rewirable, Screwless terminal, capacity: 1.5-2.5mm², the length of insulation to be removed is 12mm.

With shutter.

With plastic frame and cover; with a self-closing water proof lid.

Class I

"T" is marked on the test button and "R" is marked on the reset button.

Type designation:

Type	Description/Remark
ETM209Q44R	RCCB Socket, Schuko type, 30mA, IP44

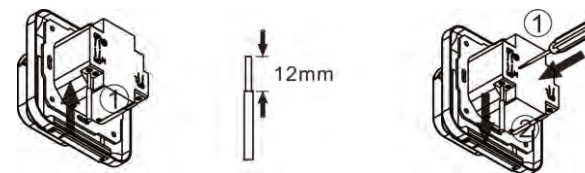
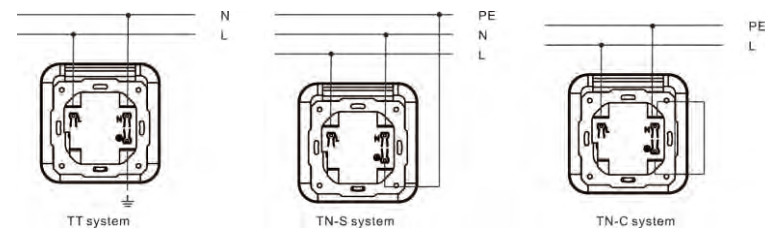
Note: Please find more information on the next page.

P Series

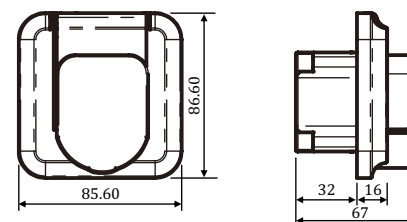
Screwless terminals



Wiring diagram

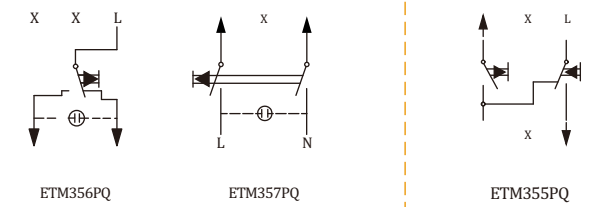
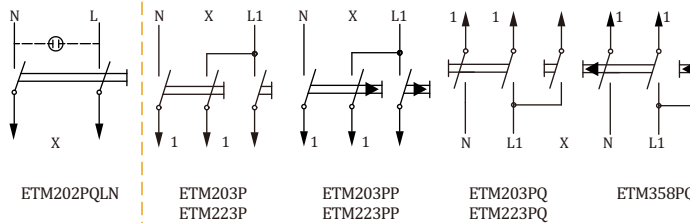
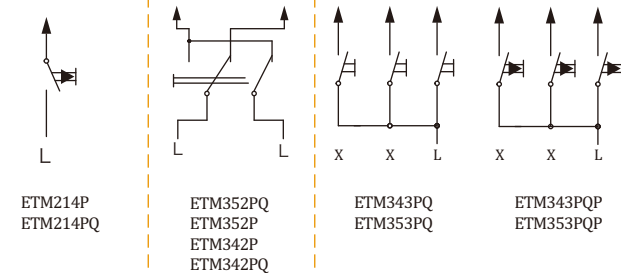
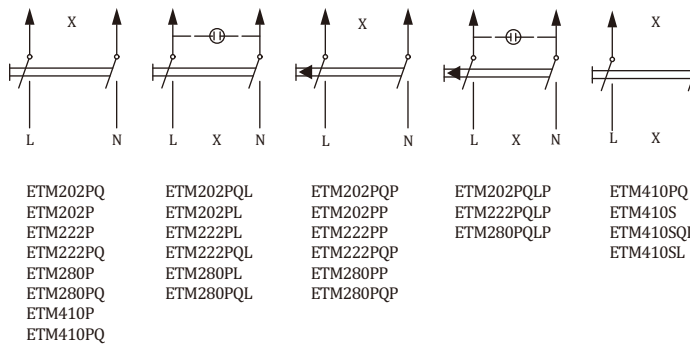
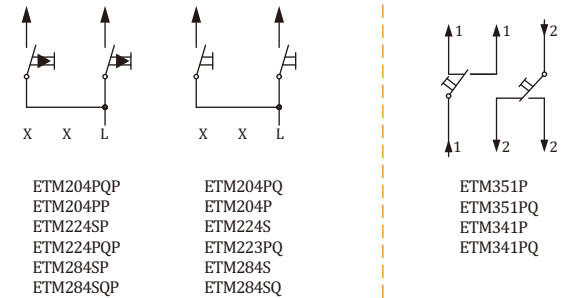
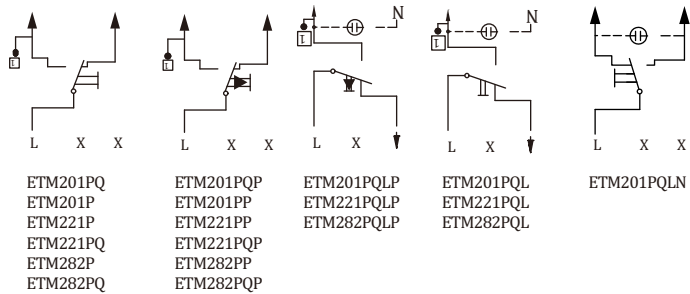


Drawing



ETM209Q44R

○ Wiring diagram of switches





P Series
Screwless terminals 

☉ **Flush type roof DCL sockets**

Technical Data: 6A 250V~

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc..)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

EN61995-1: Standard

EN61995-2: Standard sheets

The product is in conformity with the provisions of the following European directive(s):

LVD

RoHS

WEEE

REACH

Certificate(s): CE, Semko

Product info:

DCL is a new plug and socket system for the connection of fixed lighting equipment, related standard EN 61995 valid from 2009-08-24.

Technical info:

Flush, round DCL sockets for roof box, includes suspension hook (Max load 15 kg). Collection thermoplastic has adopted newly developed operation. Attach screws applied in the correct mounting position c-c 67-78 mm. Fast connections for rigid conductors is up to 2.5 mm², external dimensions: Ø110 mm.



ETM710P

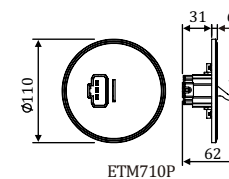


Black

Type designation:

Type	Description/Remark
ETM710P	Flush type roof DCL sockets

Drawing:



ETM710P

P Series

Screwless terminals



☉ Surface type roof DCL sockets

Technical Data: 6A 250V~

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

EN61995-1: Standard

EN61995-2: Standard sheets

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Product info:

DCL is a new plug and socket system for the connection of fixed lighting equipment, related standard EN 61995 valid from 2009-08-24.

Technical info:

Surface, round DCL sockets has integrated bottom plate, mounting directly in the ceiling, with demountable suspension hook (Max load 15 kg). Collection thermoplastic has adopted newly developed operation. Integrated base plate with 2 each 16mm and 20mm knockouts. The cover has 10pcs multiple size combined knock-outs on the sides of the cover. Can also be mounted on an existing takdosa. Attach screws applied in the correct mounting position c-c 67-78 mm, Fast connections for rigid conductors is up to 2.5 mm², external dimensions: Ø110 mm.

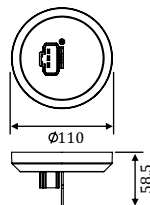


ETM712P

Type designation:

Type	Description/Remark
ETM712P	Surface type roof DCL sockets

Drawing:



P Series

Screwless terminals



☉ Flush type wall DCL sockets

Technical Data: 6A 250V~

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

EN61995-1: Standard

EN61995-2: Standard sheets

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Product info:

DCL is a new plug and socket system for the connection of fixed lighting equipment, related standard EN 61995 valid from 2009-08-24.

Technical info:

Flush, square DCL sockets for wall installation boxes and junction boxes. Collection thermoplastic has adopted newly developed operation. Fast connections for rigid conductors is up to 2.5 mm². Support of non - leading composite material. Fits into all types of cans.

ETM713P: Fixing c-c 60 mm for mounting, External dimensions: 84 x 84mm, Thermoplastic center plate is 55x55 mm, which fits into Etman "P" series combination plate. No visible screws. By surface fixing, please use surface house (Typed ETM240P). By surface fixing, in combination with a switch or other regulators/dimmers, please use double surface house (Typed ETM429P).

ETM714P: Fixing c-c 60, 67, 70 mm for mounting, External dimensions: 95 x 95mm



ETM713P



ETM714P

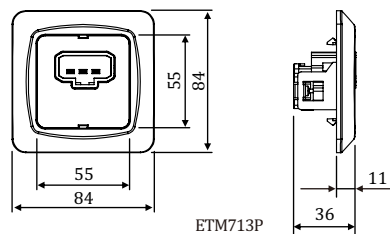
Type designation:

Type	Description/Remark
ETM713P	Flush type DCL sockets, 84x84
ETM714P	Flush type DCL sockets, 95x95

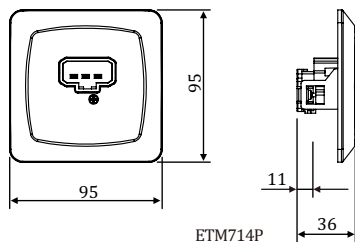
P Series
Screwless terminals



Drawing:



ETM713P



ETM714P

P Series
Screwless terminals



© **Surface type wall DCL sockets**

Technical Data: 6A 250V~
Frequency: 50Hz
Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
Main material: PC (Halogen free)
IP-Class: IP20
Working temperature: -25°C to +60°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C/850°C (IEC60695-2-11)
The product complies with the standard(s):
 EN61995-1: Standard
 EN61995-2: Standard sheets
The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE
Certificate(s): CE, Semko
Product info:
 DCL is a new plug and socket system for the connection of fixed lighting equipment, related standard EN 61995 valid from 2009-08-24.



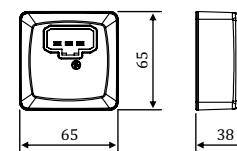
ETM715P

Technical info:
 Surface wall mounting has integrated bottom plate. Collection thermoplastic with newly developed operation. Integrated base plate with both 16mm and 20mm knockouts. The cover has 12pcs multiple size combined knock-outs on the sides of the cover. Can be mounted on the leading surface. Fixing c-c 38 mm for mounting Fast connections conductors up to 2.5 mm². External dimensions: 65 x 65mm

Type designation:

Type	Description/Remark
ETM715P	Surface type wall DCL sockets

Drawing:



P Series
Screwless terminals



☉ Spacer

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

EN61995-1: Standard

EN61995-2: Standard sheets

The product is in conformity with the provisions of the following European directive(s):

LVD, RoHS, WEEE

Certificate(s): CE, Semko

Technical info:

Ø110 mm, H=10mm

For ETM710P Flush type roof DCL sockets possible mounting in 32mm deep roof box

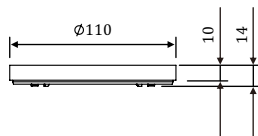


ETM711P

Type designation:

Type	Description/Remark
ETM711P	Spacer for flush type wall DCL sockets

Drawing:



ETM711P+ETM710P

P Series
Screw terminals



☉ DCL plug

Technical Data: 6A 250V~

Frequency: 50Hz

Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)

Main material: PC (Halogen free)

IP-Class: IP20

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

EN61995-1: Standard

EN61995-2: Standard sheets

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE, Semko

Product info:

DCL is a new plug and socket system for the connection of fixed lighting equipment, related standard EN 61995 valid from 2009-08-24.

Technical info:

Rewirable.

With straight cable connection.

Screw terminals, for flexible conductor up to 1.5mm².

With cable fixation screw, for external dimensions of flexible cables up to Ø8.0mm.



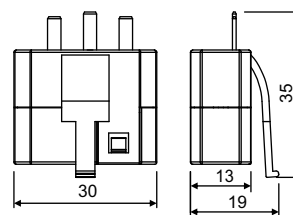
ETM721P

Type designation:

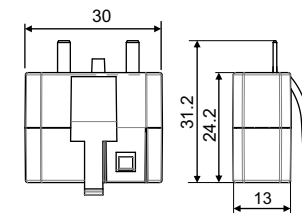
Type	Description/Remark
ETM721P	DCL plug, rewirable, earthed
ETM722P	DCL plug, rewirable, without earth



Drawing:



ETM721P



ETM722P



ETM722P

P Series

© Portable DCL plug with cable

Technical Data: 6A 250V~
 Frequency: 50Hz
 Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
 Main material: PC (Halogen free)
 IP-Class: IP20
 Working temperature: -25°Cto +60°C
 Installation temperature: -5°Cto +25°C
 Fire hazard test: 650°C/850°C(IEC60695-2-11)
 The product complies with the standard(s): EN61995-1: Standard
 EN61995-2: Standard sheets
 The product is in conformity with the provisions of the following European directive(s):
 LVD (Low Voltage Directive) RoHS Directive WEEE Directive REACH Directive
 Certificate(s): CE, Semko
 Quality management system according to: ISO 9001
 Environmental management system: ISO 14001
 Occupational Health and Safety Management System: ISO 45001
 Product info:
 DCL is a new plug and socket system for the connection of fixed lighting equipment,
 related standard EN 61995 valid from 2009-08-24.
 Non-rewirable.
 Straight cable entry.
 With cable



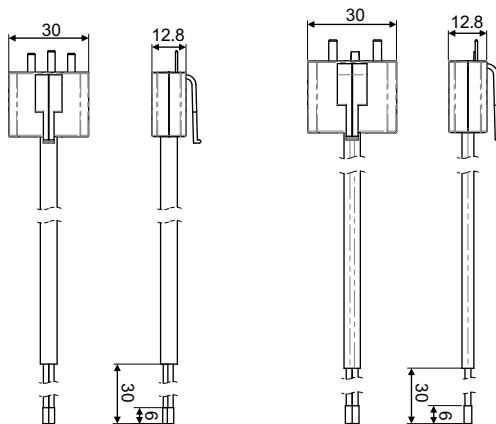
ETM723P

Type	Description/Remark
ETM723P	Plug with cable H03VV-F 3G0.75mm2 /0.155M, with earth
ETM724P	Plug with cable H03VVH2-F 2X0.75mm2 /0.155M, without earth

Drawing:



ETM724P



ETM723P

ETM724P

P Series

© DCL plug with E27 lamp holder

Technical Data: 6A 250V~
 Frequency: 50Hz
 Colour: White (RAL9016, RAL9003 - UV stable) or customized (such as black, grey, etc...)
 Main material: PC (Halogen free)
 IP-Class: IP20
 Working temperature: -25°C to +60°C
 Installation temperature: -5°C to +25°C
 Fire hazard test: 650°C /85°C (IEC60695-2-11)
 The product complies with the standard(s):
 EN61995-1: Standard EN61995-2: Standard sheets
 The product is in conformity with the provisions of the following European
 directive(s):
 LVD (Low Voltage Directive) RoHS Directive WEEE Directive REACH Directive
 Certificate(s): CE, Semko
 Quality management system according to: ISO 9001
 Environmental management system: ISO 14001
 Occupational Health and Safety Management System: ISO 45001
 Product info:
 DCL is a new plug and socket system for the connection of fixed lighting equipment,
 related standard EN 61995 valid from 2009-08-24.
 Portable.
 0.1M H03VVH2-F 2x0.75mm2 VDE cable.



Type	Description/Remark
ETM724P+E27	DCL plug with E27 lamp holder, cable 0.1M



☉ Downlight box

For Sweden

Size: 303*232*60mm

Halogen-free

850°C glow wire

UL 94V-0

2 screw markings inside for each side

Four 16mm inlets for flex-tube

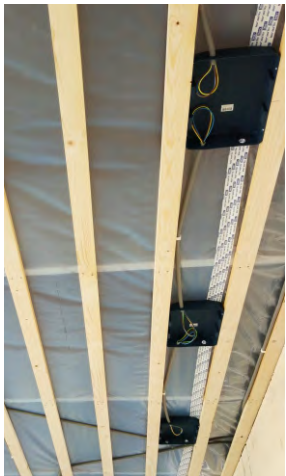
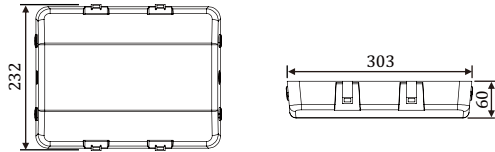
Two 20mm knock-outs

Operating temperature range: -25°C to +90°C



Type	Description/Remark
ETM679S	Sweden version

Drawing:



☉ Downlight box

For Halogen Lamp

Size: 492/600*272/290*135mm

Halogen-free

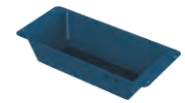
850°C glow wire

Four fixed 16mm entries, locking spring, sealing plug are included

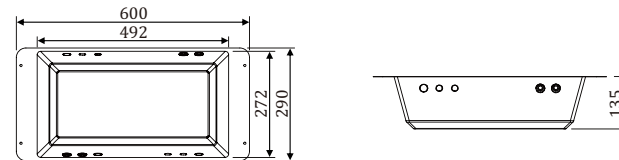
Four 16mm and two 20mm knock-outs

Operating temperature range: -25°C to +90°C

Type	Description/Remark
ETM608S	Without tape
ETM609S	With tape



Drawing:



© Downlight box

For LED Downlight

Size: 350-575*230/250*48mm

Halogen-free

850°C glow wire

2 screw markings on two short sides

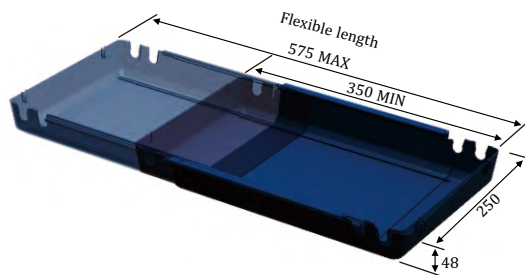
Four 16mm and 20mm open inlets for flex-tube directly

Operating temperature range: -25°C to +90°C



Type	Description/Remark
ETM671S	For LED downlight

Drawing:





Plug and Socket



Rewirable socket, IP44

Resist on low temperature condition: -30 degree
Spring lid.

Art.No.	Type	Description/Remark
83112121	ACJ101044	Socket earthed, red, IP44



ACJ101044

Rewirable socket, IP44

Resist on low temperature condition: -30 degree
Spring lid.

Art.No.	Type	Description/Remark
83112122	ETM212S-1	2-way socket earthed, Yellow, without child protection, IP44
83112123	ETM212S-1	2-way socket earthed, red, without child protection, IP44
83112122	ETM212S	2-way socket earthed, with child protection, Yellow, IP44
83112123	ETM212S	2-way socket earthed, with child protection, red, IP44



ETM212S-1

Plug and Socket



ETM227S

Rewirable plug, Rubber

Resist on low temperature condition: -35 degree

Art.No.	Type	Description/Remark
83014420	ETM227S	Earthed, straight, black, IP44
83014421	ETM227S	Earthed, straight, yellow, IP44
83014422	ETM227S	Earthed, straight, orange, IP44

Rewirable socket, Rubber

German IP44

Resist on low temperature condition: -35 degree



ETM228S

Art.No.	Type	Description/Remark
83114420	ETM228S	Earthed, straight, black, IP44
83114421	ETM228S	Earthed, straight, yellow, IP44
83114422	ETM228S	Earthed, straight, orange, IP44

Extension cord

German IP44

Resist on low temperature condition: -35 degree



Art.No.	Type	Description/Remark
83311800	ACPW38	Ext. H05RN-F 3G1.5mm ² / 5M, black
83311801	ACPW38	Ext. H05RN-F 3G1.5mm ² / 10M, black
83311802	ACPW38	Ext. H05RN-F 3G1.5mm ² / 15M, black
83311803	ACPW38	Ext. H05RR-F 3G1.5mm ² / 20M, black
83311804	ACPW38	Ext. H05RR-F 3G1.5mm ² / 25M, black
83311805	ACPW38	Ext. H05RR-F 3G1.5mm ² / 50M, black
83311809	ACPW38	Ext. H07RN-F 3G1.5mm ² / 5M, black
83311810	ACPW38	Ext. H07RN-F 3G1.5mm ² / 10M, black
83311811	ACPW38	Ext. H07RN-F 3G1.5mm ² / 15M, black
83311812	ACPW38	Ext. H07RN-F 3G1.5mm ² / 20M, black
83311813	ACPW38	Ext. H07RN-F 3G1.5mm ² / 25M, black
83311814	ACPW38	Ext. H07RN-F 3G1.5mm ² / 50M, black

Extension Cord



Rubber extension cord, IP44

Resist on low temperature condition: -35 degree
Spring lid.

Art.No.	Type	Description/Remark
83311001	ACPW37+ACJ101044	H05RR-F 3G1.5mm ² / 15M (plug and cable: black, socket: red)
83311002	ACPW37+ACJ101044	H05RR-F 3G1.5mm ² / 20M (plug and cable: black, socket: red)
83311003	ACPW37+ACJ101044	H05RR-F 3G1.5mm ² / 25M (plug and cable: black, socket: red)
83311004	ACPW37+ACJ101044	H05RR-F 3G1.5mm ² / 50M (plug and cable: black, socket: red)
83311005	ACPW37+ACJ101044	H07RN-F 3G1.5mm ² / 10M (plug and cable: black, socket: red)
83311006	ACPW37+ACJ101044	H07RN-F 3G1.5mm ² / 15M (plug and cable: black, socket: red)
83311007	ACPW37+ACJ101044	H07RN-F 3G1.5mm ² / 20M (plug and cable: black, socket: red)



Art.No.	Type	Description/Remark
83312102	ACPW37+ETM212S-1	2 -way Ext. H05RR-F 3G1.5mm ² / 15M (plug and cable: black, socket: red)
83312103	ACPW37+ETM212S-1	2 -way Ext. H05RR-F 3G1.5mm ² / 20M (plug and cable: black, socket: red)
83312104	ACPW37+ETM212S-1	2 -way Ext. H05RR-F 3G1.5mm ² / 25M (plug and cable: black, socket: red)
83312105	ACPW37+ETM212S-1	2 -way Ext. H05RR-F 3G1.5mm ² / 50M (plug and cable: black, socket: red)
83312110	ACPW37+ETM212S-1	2 -way Ext. H07RN-F 3G1.5mm ² / 10M (plug and cable: black, socket: red)
83312111	ACPW37+ETM212S-1	2 -way Ext. H07RN-F 3G1.5mm ² / 15M (plug and cable: black, socket: red)
83312112	ACPW37+ETM212S-1	2 -way Ext. H07RN-F 3G1.5mm ² / 20M (plug and cable: black, socket: red)



Industrial Plug and Socket



Industrial power accessories



Art.No.	Description/Remark
83610300	400V 416-6 plug to IP44 2-way 250V Schuko socket, H07RN-F 3G2.5mm ² / 1.0M
83610308	400V 416-6 plug to IP44 2-way 250V Schuko socket, H07RN-F 3G1.5mm ² / 0.8M



Art.No.	Description/Remark
83610400	230V 316-9 plug to IP44 2-way 250V Schuko socket, H07RN-F 3G2.5mm ² / 1.0M
83610000	230V 216-6 plug to IP44 2-way 250V Schuko socket, H07RN-F 3G2.5mm ² / 1.5M

Industrial Plug and Socket



Industrial power accessories

Art.No.	Description/Remark
83610500	230V 216-6 plug to IP44 1-way 230V Schuko socket, H07RN-F 3G1.5mm ² / 1.5M
83610503	230V 216-6 plug to IP44 1-way 230V Schuko socket, H07RN-F 3G1.5mm ² / 0.5M
83610501	230V 216-6 plug to IP44 1-way 230V Schuko socket, H07RN-F 3G2.5mm ² / 0.5M
83610502	230V 216-6 plug to IP44 1-way 230V Schuko socket, H07RN-F 3G2.5mm ² / 1.5M



Art.No.	Description/Remark
83610600	IP44 230V Schuko plug to 230V 216-6 socket, H07RN-F 3G2.5mm ² / 0.5M
83610601	IP44 230V Schuko plug to 230V 216-6 socket, H07RN-F 3G2.5mm ² / 1.5M
83610602	IP44 230V Schuko plug to 230V 216-6 socket, H07RN-F 3G1.5mm ² / 1.5M



Industrial extension cord

Art.No.	Description/Remark
83600000	H07RN-F 3G2.5mm ² , 230V, 216-6, 2P+E, 6h, 25M
83600105	H07RN-F 4G1.5mm ² , 230V, 316-9, 3P+E, 9h, 5M
83600100	H07RN-F 4G2.5mm ² , 230V, 316-9, 3P+E, 9h, 10M
83600120	H07RN-F 4G2.5mm ² , 230V, 316-9, 3P+E, 9h, 20M
83600101	H07RN-F 4G2.5mm ² , 230V, 316-9, 3P+E, 9h, 25M
83600202	H07RN-F 4G6.0mm ² , 230V, 332-9, 3P+E, 9h, 25M
83600303	H07RN-F 4G16.0mm ² , 230V, 363-9, 3P+E, 9h, 25M



Art.No.	Description/Remark
83604001	H07RN-F 5G1.5mm ² , 400V, 416-6, 3P+N+E, 6h, 5M
83604002	H07RN-F 5G2.5mm ² , 400V, 416-6, 3P+N+E, 6h, 10M
83604003	H07RN-F 5G2.5mm ² , 400V, 416-6, 3P+N+E, 6h, 20M
83604000	H07RN-F 5G2.5mm ² , 400V, 416-6, 3P+N+E, 6h, 25M
83604101	H07RN-F 5G6.0mm ² , 400V, 432-6, 3P+N+E, 6h, 25M





© Power distribution box

Technical Data: 16/32A 250/400VAC

Frequency: 50Hz

Colour: Grey or yellow

Main material: ABS (Halogen free)

IP-Class: IP44

Working temperature: -25°C to +60°C

Installation temperature: -5°C to +25°C

Fire hazard test: 650°C/850°C (IEC60695-2-11)

The product complies with the standard(s):

EN61439-4

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

Technical info:

PDBs are normally installed on the load side of under centers.

PDBs are designed and certified according to EN60439-4 used in conjunction with EN 60439-1.

PDBs are available in bag models.

Mini and midi bag 16 to 32 A and as cabinet models 32 to 63 A.

Made of durable thermoplastic nature.

Manufactured according to standard EN60439-4 used in conjunction with EN 60439-1. CE marked.

- Small and handy construction central.

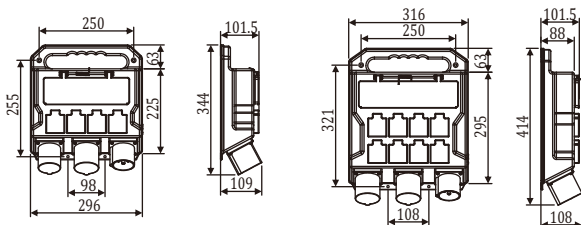
- Enclosure is made of durable thermoplastic nature.

- Self-closing transparent lid over miniature circuit breakers.

- Grip-friendly handle with hole to fix a hook.

- Contains earth as the default outgoing groups fused with miniature circuit breakers of the C-characteristic.

Drawing:



Art.No.	Type	Description/Remark
83611701	83611701	16A 400V, 4 Schuko sockets, 1-pole fuse Input: 416-6 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 4x16A Schuko socket, secured by 2xMCB(16A, 1P) 2x416-6 industry socket
83611702	83611702	32A 400V, 4 Schuko sockets, 1-pole fuse Input: 432-6 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 4x16A Schuko socket, secured by 2xMCB(16A, 1P) 1x416-6 industry socket, secured by MCB(16A, 4P) 1x432-6 industry socket
83611703	83611703	16A 400V, 8 Schuko sockets, 1-pole fuse Input: 416-6 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 8x16A Schuko socket, secured by 4xMCB(16A, 1P) 2x416-6 industry socket
83611704	83611704	32A 400V, 8 Schuko sockets, 1-pole fuse Input: 432-6 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 8x16A Schuko socket, secured by 4xMCB(16A, 1P) 1x416-6 industry socket, secured by MCB(16A, 4P) 1x432-6 industry socket
83610700	1523187	16A 230V, 4 Schuko sockets, 2-pole fuse Input: 316-9 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 4x16A Schuko socket, secured by 2xMCB(16A, 2P) 2x316-9 industry socket
83611000	1523188	16A 400V, 4 Schuko sockets, 2-pole fuse Input: 416-6 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 4x16A Schuko socket, secured by 2xMCB(16A, 2P) 2x416-6 industry socket



© With breakers from Chint



Art.No.	Type	Description/Remark
83610801	1501478	32A 230V, 4 Schuko sockets, 2-pole fuse Input: 332-9 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 4×16A Schuko socket, secured by 2×MCB(16A, 2P) 1×316-9 industry socket, secured by MCB(16A, 3P) 1×332-9 industry socket



83611101	1501479	32A 400V, 4 Schuko sockets, 2-pole fuse Input: 432-6 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 4×16A Schuko socket, secured by 2×MCB(16A, 2P) 1×416-6 industry socket, secured by MCB(16A, 4P) 1×432-6 industry socket
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83610901	1501480	32A 230V, 8 Schuko sockets, 2-pole fuse Input: 332-9 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 8×16A Schuko socket, secured by 4×MCB(16A, 2P) 2×332-9 industry socket
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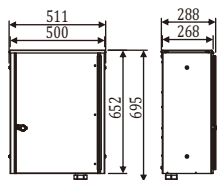
83611201	1501481	32A 400V, 8 Schuko sockets, 2-pole fuse Input: 432-6 industry plug Output: Secured by RCCB (40A, 4P, 0.03A) 8×16A Schuko socket, secured by 3×MCB(16A, 2P), 1×416-6 industry socket, secured by MCB(16A, 4P) 1×432-6 industry socket
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Art.No.	Type	Description/Remark
82501000	1524402	Floor Stand For Plastic PDB



© Main Centre (HS)



Technical Data: 63A 230/400VAC
Frequency: 50Hz
Colour: Orange
Main material: Aluminum
IP-Class: IP44
Working temperature: -25°C to +90°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C/850°C (IEC60695-2-11)
The product complies with the standard(s):
 EN61439-4

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

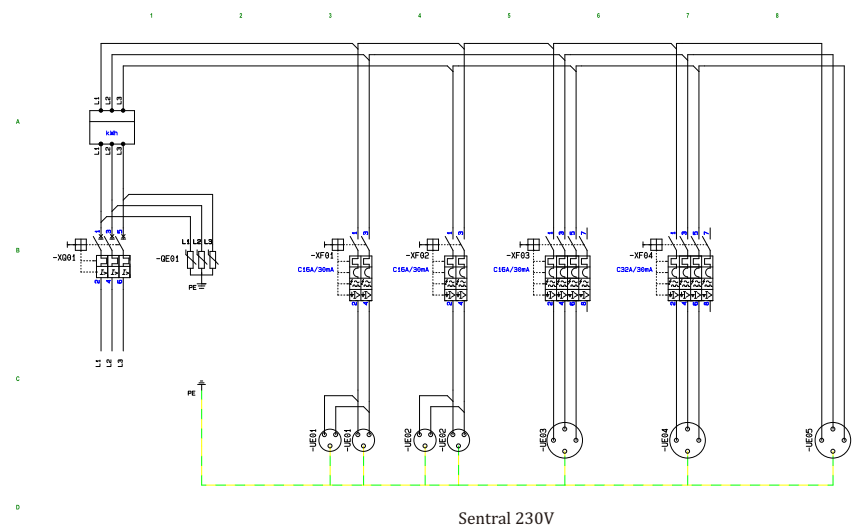
Technical info:

Main centres are normally installed as the first power distribution centre at the construction site and contains connections for the energy provider's cable. Connection of the incoming cable is made permanent on the fuse-switch. Box body is made by powder coated corrosion-resistant sheet aluminum. Stand is available and is made by hot-dip galvanized steel. Hinge is made by corrosion-resistant aluminum. Outer screws is made by hot-dip galvanized steel. Spacious connection area. Service friendly plug-in system. Aluminum frame for meter included. Fortified and lockable door.

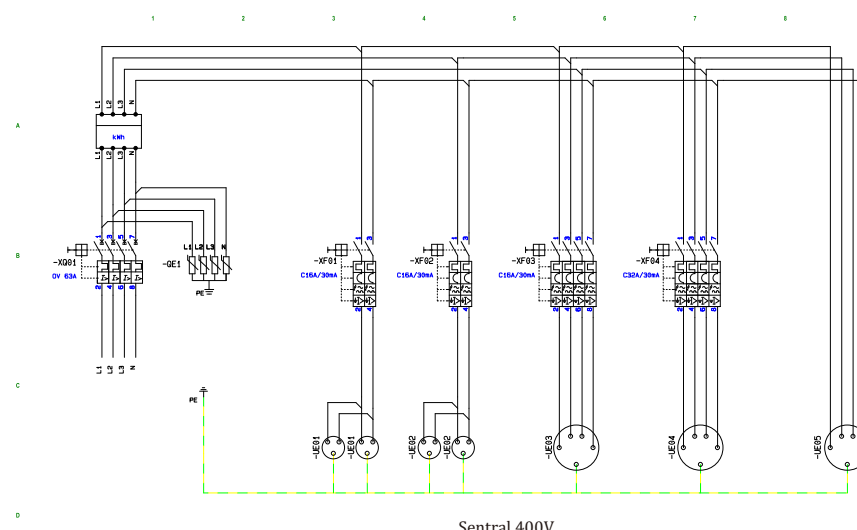
Type designation:

Art.No.	Type	Description/Remark
83611400	1524406	230V/63A Input MCB (63A, 3P), maximum terminal connectable area: 25mm ² Output: 1×63A, 3P+E, 9h industry socket 2×32A, 3P+E, 9h industry socket, secured by 2×RCBo (32A, 3P+N) 4×16A Schuko socket, secured by 2×RCBo (16A, 2P) SPD (3P, 385V)
83611600	1524407	400V/63A Input MCB (63A, 4P), maximum terminal connectable area: 25mm ² Output: 1×63A, 3P+N+E, 6h industry socket 2×32A, 3P+N+E, 6h industry socket, secured by 2×RCBo (32A, 3P+N) 4×16A Schuko socket, secured by 2×RCBo (16A, 2P) SPD (4P, 275V)

Electrical Drawing



Sentral 230V



Sentral 400V



Under Centre (US)

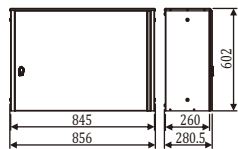
Technical Data: 63A 230/400VAC
Frequency: 50Hz
Colour: Orange
Main material: Aluminum
IP-Class: IP44
Working temperature: -25°C to +90°C
Installation temperature: -5°C to +25°C
Fire hazard test: 650°C/850°C (IEC60695-2-11)
The product complies with the standard(s):
 EN61439-4

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

Technical info:

Under centres are normally installed on the load side of the main centres.
 Box body is made by powder coated corrosion-resistant sheet aluminum.
 Stand is available and made by hot-dip galvanized steel.
 Hinge made by corrosion-resistant aluminum.
 Outer screws are made by hot-dip galvanized steel.
 Spacious connection area.
 Service friendly plug-in system.
 Fortified and lockable door.



Type designation:

Art.No.	Type	Description/Remark
83612000	1524404	230V/63A Input: 63A, 3P+E, 9h industry plug Output: Secured by RCCB (63A, 4P, 0.1A) 2 × 32A, 3P+E, 9h industry socket, secured by 2 × MCB (32A, 3P) 1 × 16A, 3P+E, 9h industry socket, secured by 1 × MCB (16A, 3P) 6 × 16A Schuko socket, secured by 3 × RCBo (16A, 2P) 1 × 63A, 3P+E, 9h industry socket
83612100	1524405	400V/63A Input: Secured by RCCB (63A, 4P, 0.1A) Output: Secured by RCCB (63A, 4P, 0.03A) 2 × 32A, 3P+N+E, 6h industry socket, secured by 2 × MCB (32A, 4P) 1 × 16A, 3P+N+E, 6h industry socket, secured by 1 × MCB (16A, 4P) 6 × 16A Schuko socket, secured by 3 × RCBo (16A, 2P) 1 × 63A, 3P+N+E, 6h industry socket
82501200	1524415	Stand



Power Pedestal

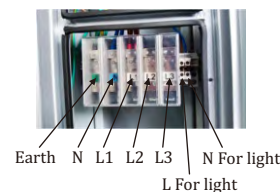
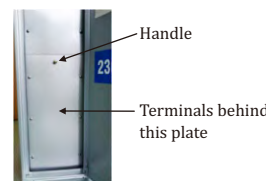
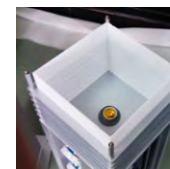
Technical Data: 16A 230VAC
Frequency: 50Hz
Colour: Grey
Main material: Aluminum - 5083
IP-Class: IP44 (door must closed)
Max. Ambient temp.: -20°C - 45°C
Fire hazard test: 650°C/850°C (IEC60695-2-1)
The product complies with the standard(s):
 EN61439-4
 NEK 400-7-709 (Marinas)

The product is in conformity with the provisions of the following European directive(s): LVD, RoHS, WEEE

Certificate(s): CE

Technical info:

The concept behind the Etman power pedestal is one of great flexibility and it can be used in all types of environments from marinas to camping.
 Box body and base plate are made by powder coated corrosion-resistant sheet aluminum (5083).
 The mounting plate for mounting on quays or to a base is included in delivery.
 Power pedestal is supplied with a top light. The lamp holder in the top light is in E27, which can fit in E27 energy saving lamp, length cannot longer than 110mm. Energy saving lamp is not included in the packing. Top light is secured by MCB (16A, 1-pole, Semko approved).
 Power pedestal is supplied with 4 sockets of industry type 216-6 (16A 230VAC, 2P+E, IP67, Semko approved).
 Power meters (KWh) (220VAC±20%, 50Hz, 1P, 5(30)A, Ist: 20mA) are supplied for all sockets.
 Each socket secured by RCBo (16A 250VAC, 2P, 0.03A).
 Connection of the incoming cable is made permanent on the terminal (230/400V, CE approved). 5-Poles for power in (2*16mm² each pole), 2-poles for the top light (0.5-2.5mm²), screw terminals.

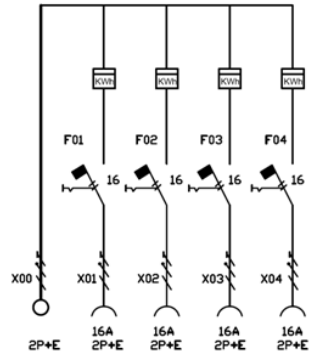


Outer screws and nuts are made by stainless steel.
 Power pedestal is equipped with lockable door.
 Cable entry on the center of base plate fit in 2 x 5G16.0mm² cables.

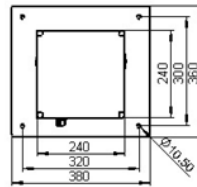
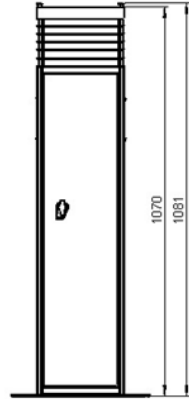


© Power Pedestal

Branching program (with power meter)



Dimensions



Type Designation

Art.No.	Type	Description/Remark
1524431	PPL1.4x216.230.A.A.0	230V, 4X216-6



