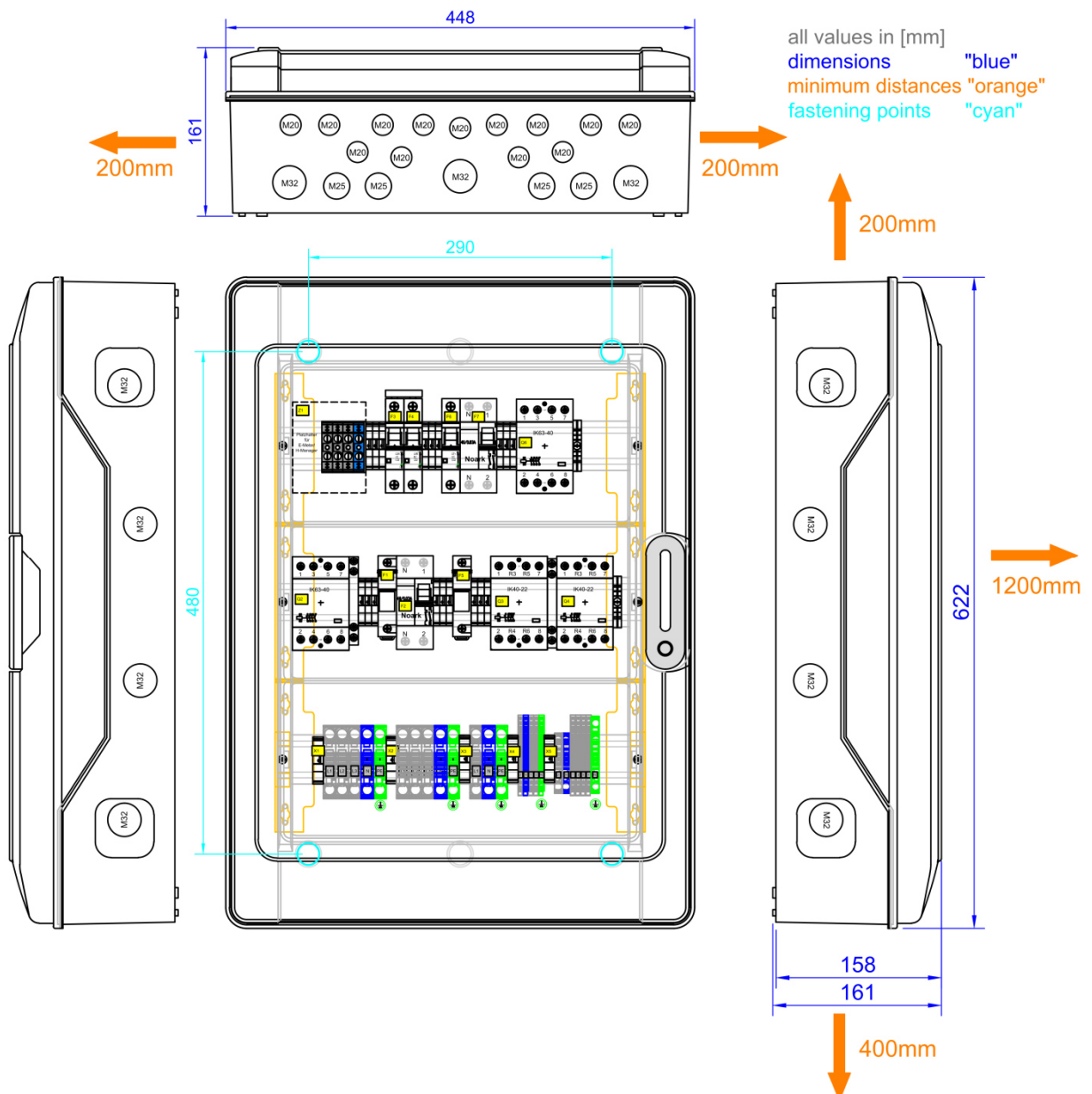


DATA SHEET

3PH-Battery-Backup-Distribution for 1x Sunny Island

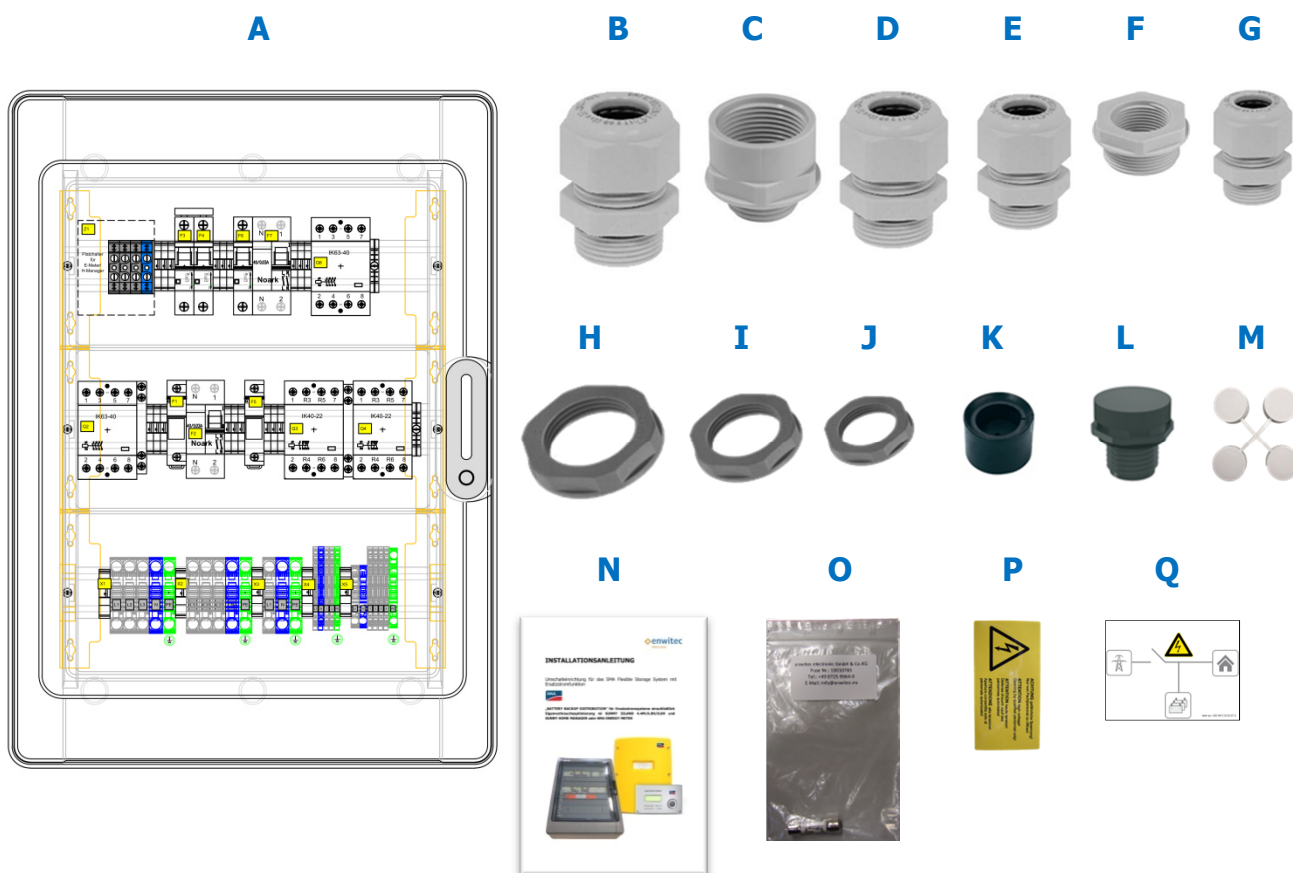
enwitec-order-number	10012549
Customer-article-number	
Type designation	Battery-Backup-Distribution 1PH - prepared for retrofitting SMA - Energy Meter/Home Manager 2.0
Match code	3PH_IPC_SMA.SI_BBDAP_20KW_1PH_PREP_DACH_1.1
Application	Standby power - SMA "Flexible Storage System"
Battery-inverter	Sunny Island 4.4M-12 from firmware-version 1.00.xx.R Sunny Island 6.0H-12 from firmware-version 1.00.xx.R Sunny Island 8.0H-12 from firmware-version 1.00.xx.R
Grid structure	TT or TN-S system <u>Sunny Island feed in: 1 phase! (=1 x Sunny Island)</u>



DATA SHEET

3PH-Battery-Backup-Distribution for 1x Sunny Island

SCOPE OF DELIVERY

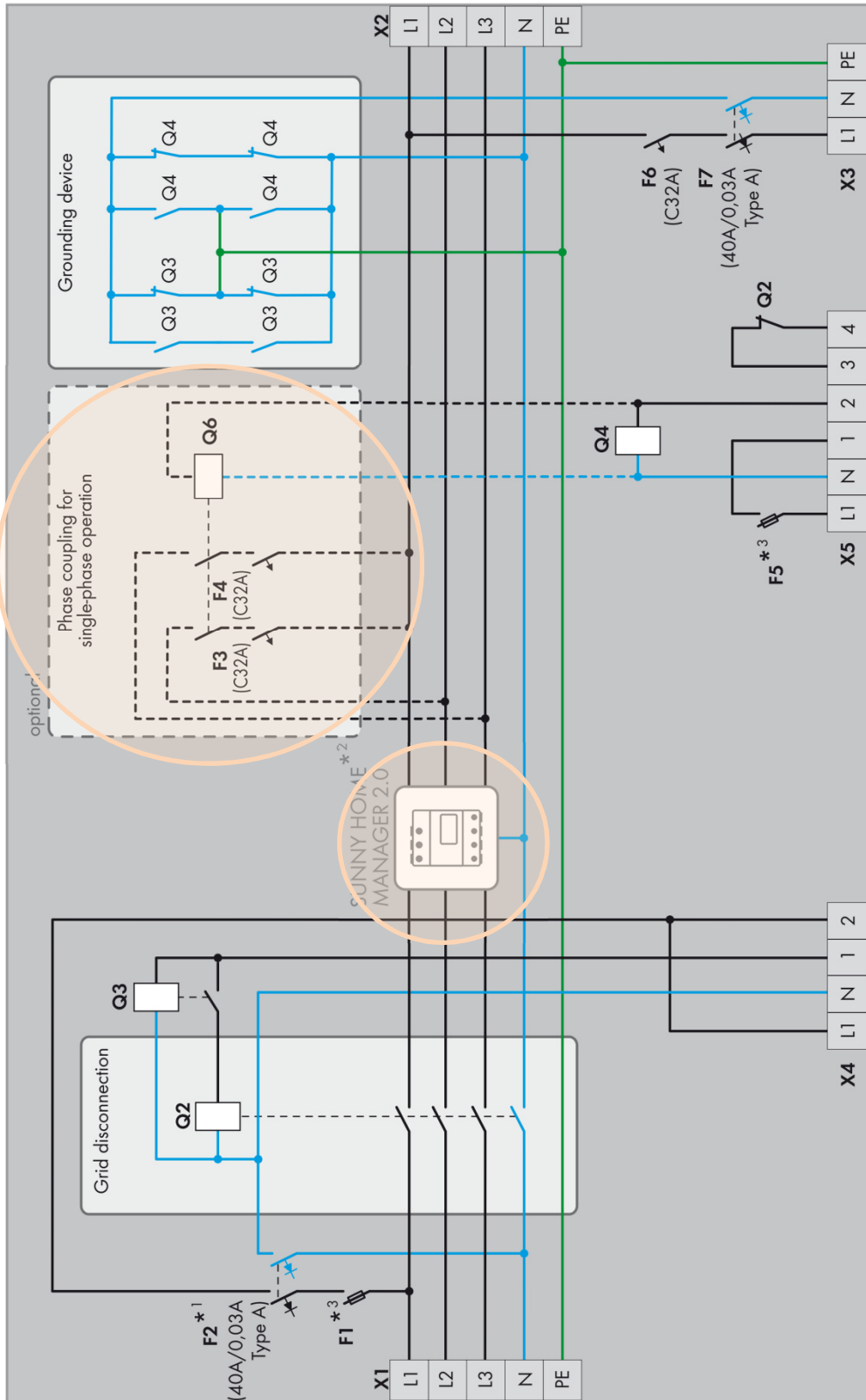


Position	Quantity	Designation
A	1	Battery Backup Distribution 1PH - 10012549
B	2	Cable gland M40 x 1,5 (clamping range Ø 16 – 28mm)
C	2	Enlargement adaptor from M32 to M40
D	3	Cable gland M32 x 1,5 (clamping range Ø 13 – 21mm)
E	2	Cable gland M25 x 1,5 (clamping range Ø 9 – 17mm)
F	1	Reduction adaptor from M20 to M12 (for pressure equalization valve)
G	5	Cable gland M20 x 1,5 (clamping range Ø 6 – 13mm)
H	3	Locknut M32
I	2	Locknut M25
J	6	Locknut M20
K	1	Special sealing insert for CAT 5e cable (M25)
L	1	Pressure equalization element
M	1	Cover caps for fastening screws
N	1	Installation manual 10010371
O	3	Ferrule-fuse 10x38mm (1A - fast; Littelfuse #KLKD or Bussmann #KTK) 2 pieces in the fuse holders; 1 piece in the accessories kit (spare part)
P	1	Warning label „high voltage“
Q	1	Label – image „with reference to an island mode system ability“

DATA SHEET

3PH-Battery-Backup-Distribution for 1x Sunny Island

ORIGINAL CIRCUIT DIAGRAM SMA



*¹ Only when connecting to a TT grid, the line conductor and the neutral conductor must be fused.

*² Not required for systems without increased self-consumption.

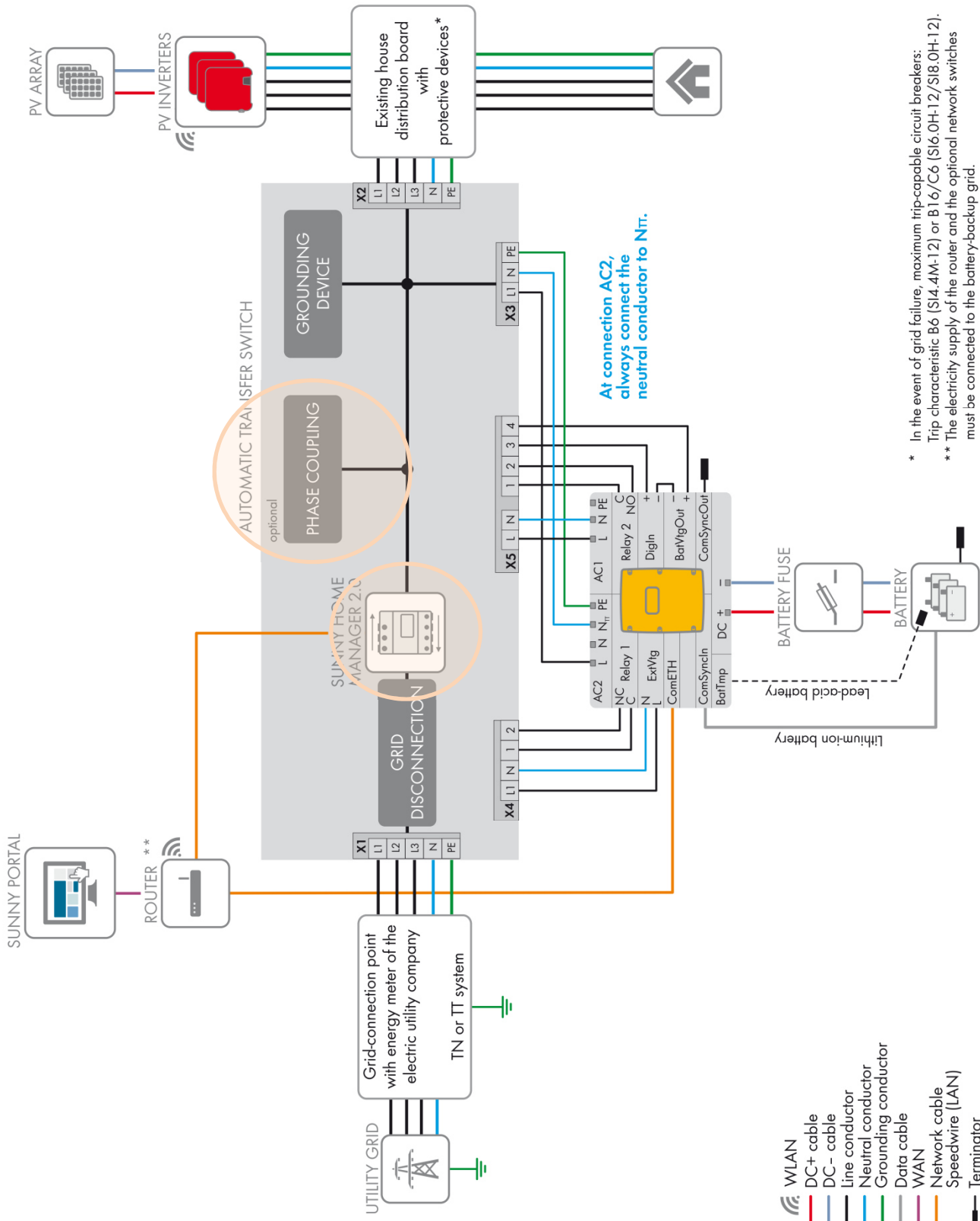
*³ Requirements for thermal fuse used: 1 A, nominal cold resistance of at least 0.2 Ω and melting integral max. 1A2s. The indicated values in brackets are recommended by SMA Solar Technology AG. The electrical devices must be designed in accordance with the locally applicable standards and directives.

10012549: Phase coupling inclusive; prepared for retrofitting SMA - Energy Meter/Home Manager 2.0

DATA SHEET

3PH-Battery-Backup-Distribution for 1x Sunny Island

ORIGINAL CIRCUITRY OVERVIEW SMA



* In the event of grid failure, maximum trip-capable circuit breakers:
 Trip characteristic B6 (S14.4M-12) or B1.6/C6 (S16.0H-12/S18.0H-12).
 ** The electricity supply of the router and the optional network switches must be connected to the battery-backup grid.

10012549: Phase coupling inclusive; prepared for retrofitting SMA - Energy Meter/Home Manager 2.0

DATA SHEET

3PH-Battery-Backup-Distribution for 1x Sunny Island

TECHNICAL DATA

Rated operating voltage AC	[V]	3PH -230/400
Rated insulation voltage	[V]	400
Operating frequency	[Hz]	50/60+/-5%
Max. prospective short circuit current	[kA]	10
Permitted grid structure		TT / TN-S
Max. value of pre-fuses	[A]	63 A
Max. thermal power	[kW]	20
Standby-loss	[W]	ca. 15

Circuit breakers and fuses

F1	Ferrule fuse 10x38mm	1A fast
F2	RCD (residual current protective device)	Type A /40A-0,03A
F3	MCB (circuit breaker - "C"-characteristic)	32A
F4	MCB (circuit breaker - "C"-characteristic)	32A
F5	Ferrule fuse 10x38mm	1A fast
F6	MCB (circuit breaker - "C"-characteristic)	32A
F7	RCD (residual current protective device)	Type A/40A-0,03A

Contactors

IEC/EN 61095; IEC/EN60947-1; IEC 60947-5-1		
Q2 „grid disconnection“	AC1 [A]	63
Q3 „grounding device I“	AC1 [A]	40
Q4 „grounding device II“	AC1 [A]	40
Q6 "phase coupling"	AC1 [A]	63
Control voltage		230V AC/DC
Hum-free		yes

Connections/terminals (spring-loaded terminals)

Terminal block	Wire type	Cross section [mm ²] max.	Stripping length [mm]	Ferrule
X1/X2/X3	solid	16	18-20	-
	stranded	25		-
	stranded	16		yes
X4	solid	2,5	8-9	-
	stranded	2,5		-
	stranded	2,5		yes
X5 (L1/N/PE)	solid	10	13-15	-
	stranded	10		-
	stranded	6		yes
X5 (1/2/3/4)	solid	2,5	8-9	-
	stranded	2,5		-
	stranded	2,5		yes

Cable glands

Terminal block	Size (metrical)	Clamping range [mm]
X1	M32/M40	13-21/16-28
X1 PE	M20	6-13
X2	M32/M40	13-21/16-28
X3	M32	13-21
X4	M20	6-13
X5 „L1/N/PE“	M25	9-17
X5 „1/2/3/4“	M20	6-13



Consider installation manual!

General data

Dimensions (WxHxD)	[mm]	448x622x161
Weight	[kg]	11,5
Operating temperature range	[°C]	-25..+40
Temperature - transport/storage	[°C]	-25..+55
Temporary max. 24 hours	[°C]	70
Humidity-condensing allowed	•/-	-
Humidity – permitted range [%]		5 ... 95
max. altitude above sea level	[m]	2000
Protection class IP (EN 60529)		65
Outdoor-application permitted	•/-	-
Installation type		Indoor area
Protection against electric shock (EN 61140)		II
Case material		Polycarbonate
RoHS-conformity (2011/65/EU)		•
Colour of case		similar RAL7046
Way of mounting		wall mounting
cover		transparent
Locking system		without tool

Relevant standards

Switching devices	EN 61439-1 EN 61439-2 EN 61439-3
„distribution boards – operated by ordinary people“ (DBO)	
Miscellaneous	
Customer tariff number	85371098