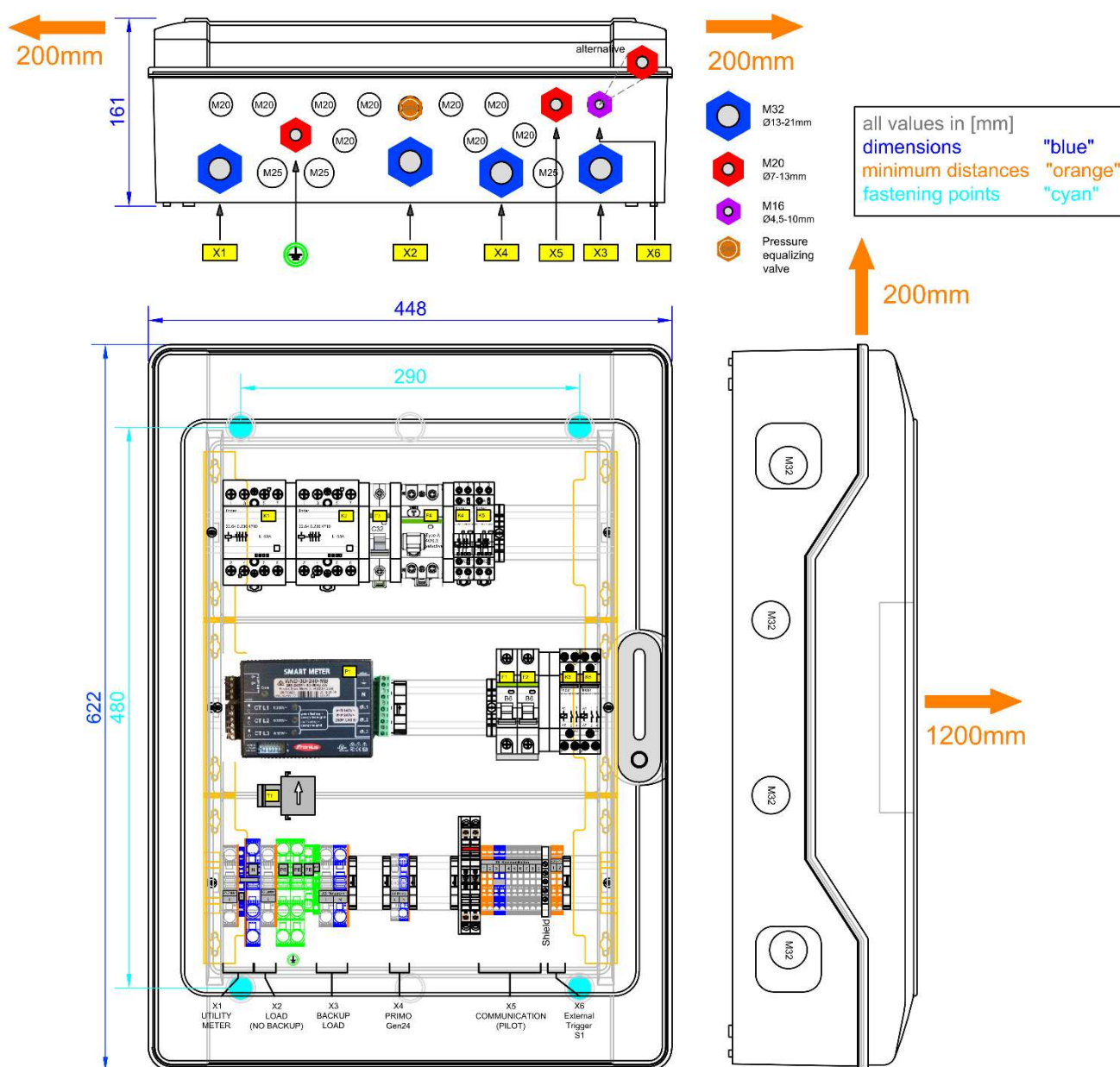


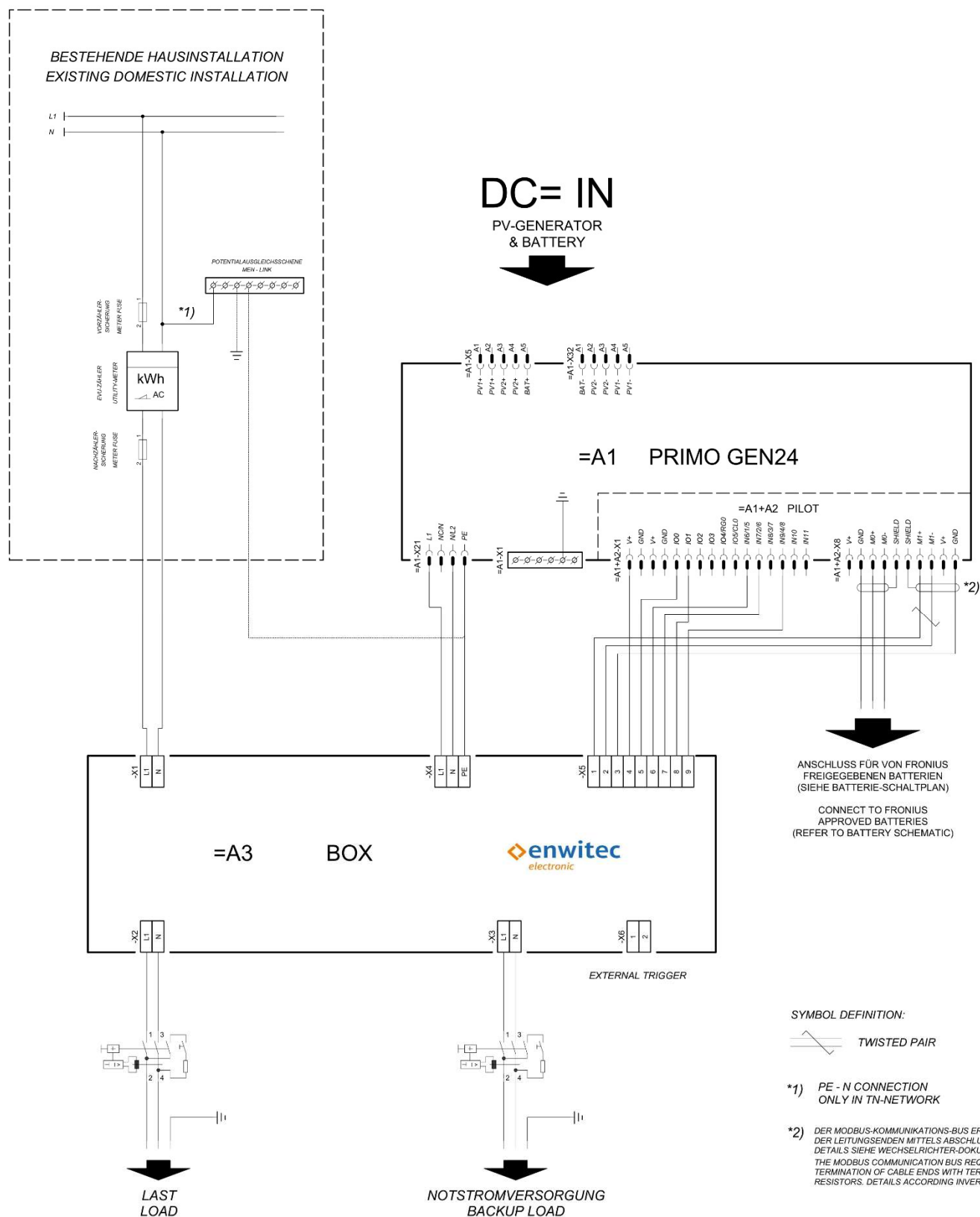
Switchover Box for the Fronius Energy Package

enwitec order number	10014304_V1.1	Single Phase (PRIMO GEN24)
Type designation	Switchover Box / Automatic transfer switch box “ITALY” 	
Matchcode	<i>1PH_FRO_BBDAP_12KW_1PH_1.1_IT</i>	
Application	Fronius Energy Package - Energy storage system	
Battery-inverter	• Primo GEN24 PLUS (3.0/3.6/4.0/4.6/5.0/6.0)	
Monitoring & Control	• Fronius Smart Meter + Current transformer are included	
Grid structure	• Single Phase -1PH- 230V/Neutral - TT or TN-S System; NOT ANY TN-C System in the load circuits!	



Circuitry overview – PRIMO GEN24 Plus

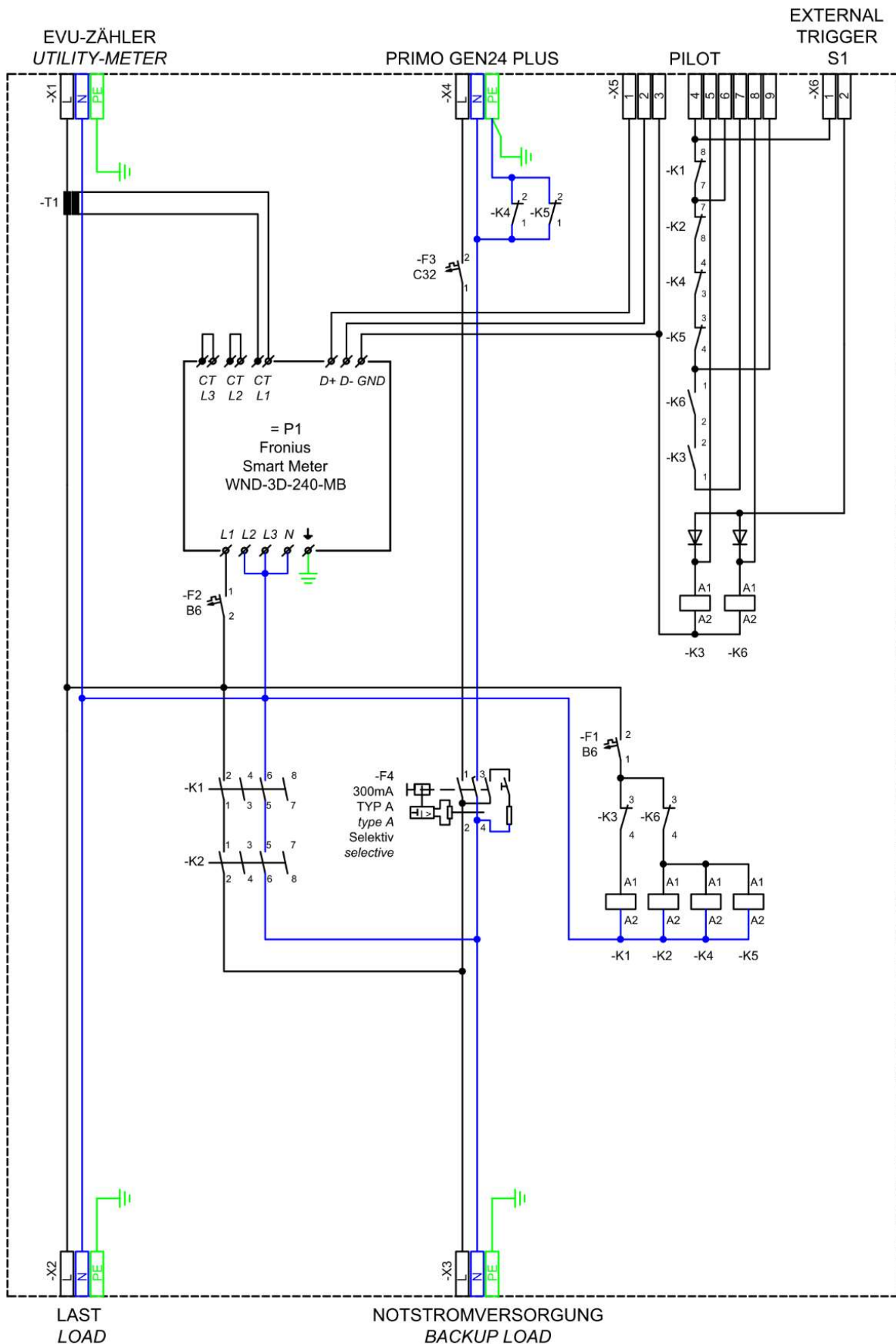
(Please refer to the original FRONIUS circuit diagram)



DATA SHEET

Switchover Box for the Fronius Energy Package

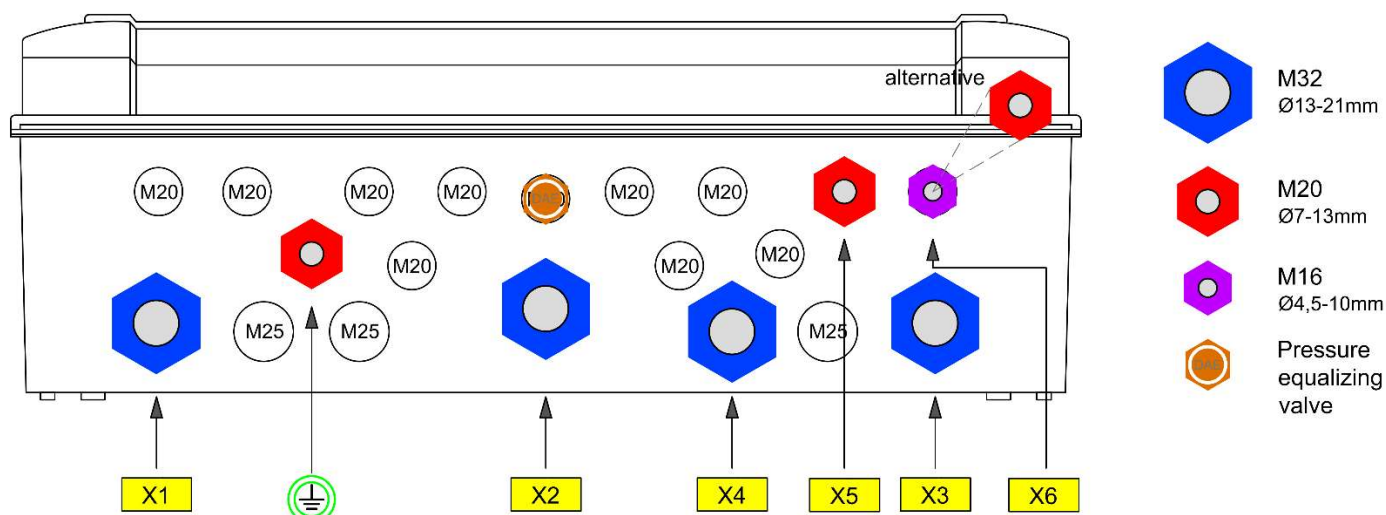
Internal wiring - Switchover Box 10014304_V1.1



DATA SHEET

Switchover Box for the Fronius Energy Package

Cable/wire types/cross section



* Fusing max. 63A!

Screw fitting	To terminal strip/connection	Cable cross-section (Cu)	Cable type/conductor e.g.
 M32	X1 Mains supply/Utility Meter	16(25) mm ²	NYY/NYM 3 x 16(25) *
 M32	X2 Loads (not supported by Backup)	16(25) mm ²	NYY/NYM 3 x 16(25)
 M32	X3 Backup Loads	16(25) mm ²	NYY/NYM 3 x 16(25)
 M32	X4 PRIMO GEN24 PLUS	4(6) mm ²	NYY/NYM 3 x 4(6)
 M20	X5 Communication (PILOT)	≥ 0,5mm ² /≥ AWG21/1	Li2YCY* 4x2x0,5 CAT6a* 4x2xAWG21/1
 M20  M16	X6 External Trigger S1	1(1,5/2,5mm ²)	NYY/NYM 3x1,5
 M20	Main equipotential bonding 	16(25) mm ²	NYY/NYM 1x16

* acc. to Fronius specifications

• Li2YCY: minimum section 0,5mm² • CAT6a: minimum section AWG21 • maximum length for data cable: 300m

TECHNICAL DATA

NOMINAL VALUES

Rated voltage	1PH [V]	230/N
Rated insulation voltage	[V]	400
Rated frequency	[Hz]	50/60
Max. prospective* short circuit current	[kA]	10
Permitted grid structure		TT/TN-S
Max. value of pre-fuses	[A]	63(gL/gG)
Grid disconnection		All pole
Max. thermal power	[kW]	12
Standby-loss ca.	[W]	18

CIRCUIT BREAKERS (MCBs)

F1	Control circuit „Grid“	1 x B6A
F2	Measuring circuit Smart Meter	1 x B6A
F3	PRIMO GEN24	1 x C32

RESIDUAL CURRENT DEVICE (RCCB) - type "A" selective

F4	PRIMO GEN24	300mA
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CONTACTORS IEC/EN61095; IEC/EN 60947-1; IEC 60947-5-1

K1/K2	"Grid disconnection"	AC1/AC3 [A]	63/30
K4/K5	"Grounding device"	AC1/AC3 [A]	25/10
K3/K6	"Communication"	AC1 [A]	20
K1/K2/K4/K5	"Control voltage"	AC[V]	230
K3/K6	"Control voltage"	DC[V]	12
Hum-free			•

CONNECTIONS/TERMINALS - Max. cross section (Cu)

X1	"Mains supply/Utility meter"	[mm ²]	16(25)
X2	"Loads - Not supported"	[mm ²]	16(25)
X3	"Backup Load"	[mm ²]	16(25)
X4	"PRIMO GEN24 Plus"	[mm ²]	6(10)
 X5	"Equipotential bonding"	[mm ²]	16(25)
X5	"Communication/PILOT"	[mm ²]	1,5(2,5)
X6	"External Trigger S1"	[mm ²]	1,5(2,5)

CABLE GLANDS - Clamping range [Ø mm]

X1	„Mains supply/Utility meter“	M32	13-21
X2	„Loads – Not supported“	M32	13-21
X3	"Backup Load"	M32	13-21
X4	"PRIMO GEN24 Plus"	M32	13-21
 X5	"Equipotential bonding"	M20	7-13
X5	"Communication/PILOT"	M20	7-13
X6	„External Trigger S1“	M20/M16	7-13/4,5-10

• = met "-" = not met

GENERAL DATA

Width	[mm]	448
Height	[mm]	622
Depth	[mm]	161
Weight ca.	[kg]	13,5
Operating temperature range	[°C]	-5...+40
Temperatur - transport/storage	[°C]	-25...+55
Temporary max. 24 hours	[°C]	+70°C
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	(EN61140)	II
Cabinet - material		PC
RoHS-conformity	(2011/65/EU)	•
Cabinet's colour	(similar to RAL)	7035
Way of mounting		Wall
Cover		transparent
Locking system		tool-free

STANDARDS

Switching devices	EN 61439-1	•
	EN 61439-2	•
Distribution boards - operated by ordinary people (DBO)	EN 61439-3	•

SMART METER

Manufacturer	Fronius
Type	WND-3D-240-MB

MISCELLANEOUS

Customer tariff number	85371098
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* characterizes the max. uninfluenced short circuit current of the network-connecting point (mains supply)