

Art.Nr. 10012549

BATTERY-BACKUP-DISTRIBUTION | 3PH_IPC_SMA.SI_BBDAP_20KW_1PH_PREP_DACH

enwitec electronic GmbH
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Type designation	Battery-Backup-Distribution 1PH prepared for retrofitting SMA-Energy Meter/Home Manager 2.0
Application	Battery-Backup Function - SMA „Flexible Storage System“
Region	Germany, Switzerland
Battery-inverter	Sunny Island 4.4M-12 / -13 from firmware-version 1.00.xx.R Sunny Island 6.0H-12 / -13 from firmware-version 1.00.xx.R Sunny Island 8.0H-12 / -13 from firmware-version 1.00.xx.R TT or TN-S system Sunny Island feed in: 1 phase (=1 Sunny Island)

All values in [mm]

Dimensions

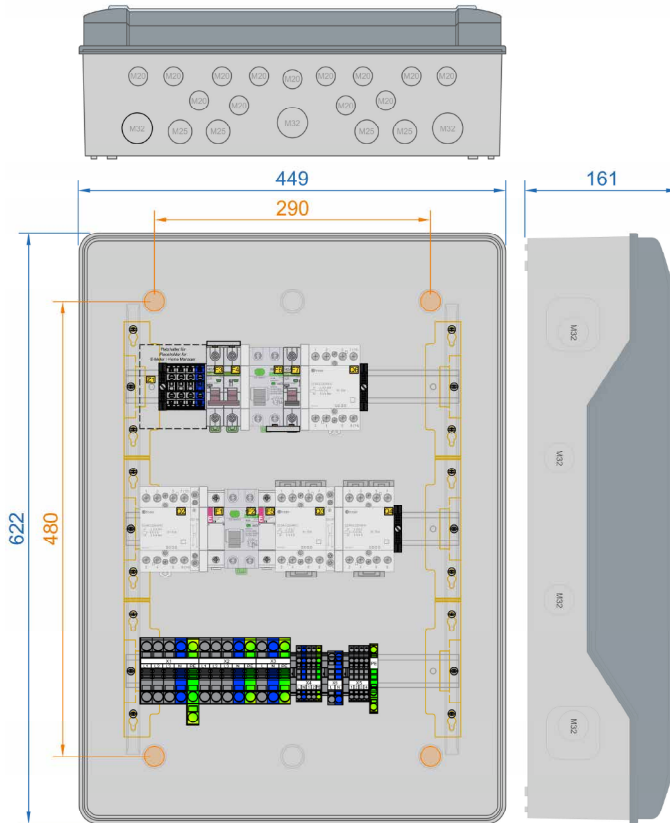
Fastening points

„blue“
 „orange“

Inner construction as well as choice of components may differ within the variants!

Minimum distances

top	200
bottom	400
lateral	200
front	1200



SCOPE OF DELIVERY

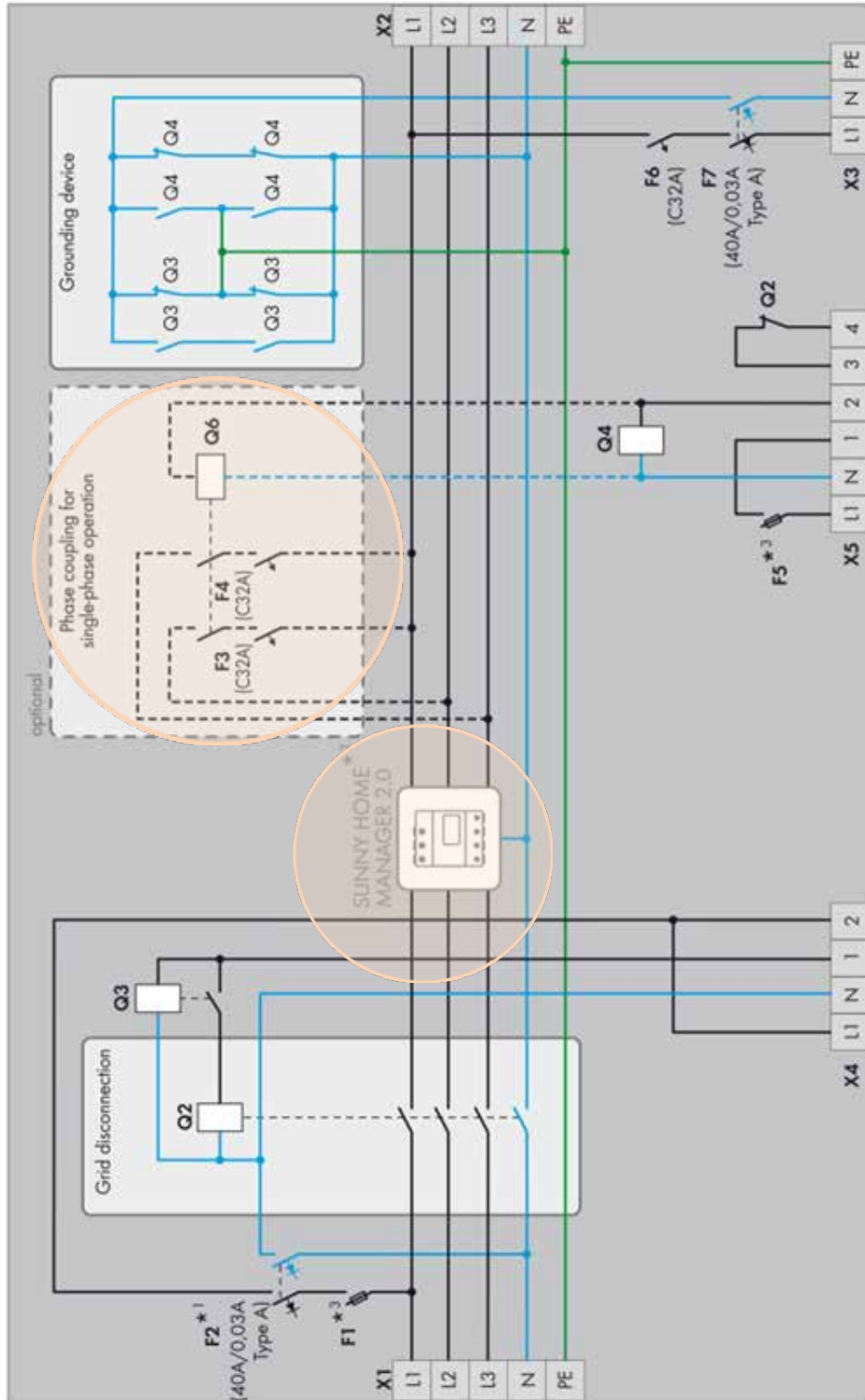
Quantity	Designation	Quantity	Designation
1	Installation instructions standard SMA-Sunny Island	2	Locknut M25
1	Set cover caps for fastening screws	6	Locknut M20
2	Cable gland M40	2	Enlargement adaptor M32/M40
3	Cable gland M32	1	Reduction adaptor M20/M12
2	Cable gland M25	1	Pressure equalization element M12
5	Cable gland M20	1	Special sealing insert M25
3	Locknut M32	1	Ferrule-fuse 10x38mm

Status: May 2024

10012549_datasheet_3PH_IPC_SMA.SI_BBDAP_20KW_1PH_PREP_DACH_2024_05_07

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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.

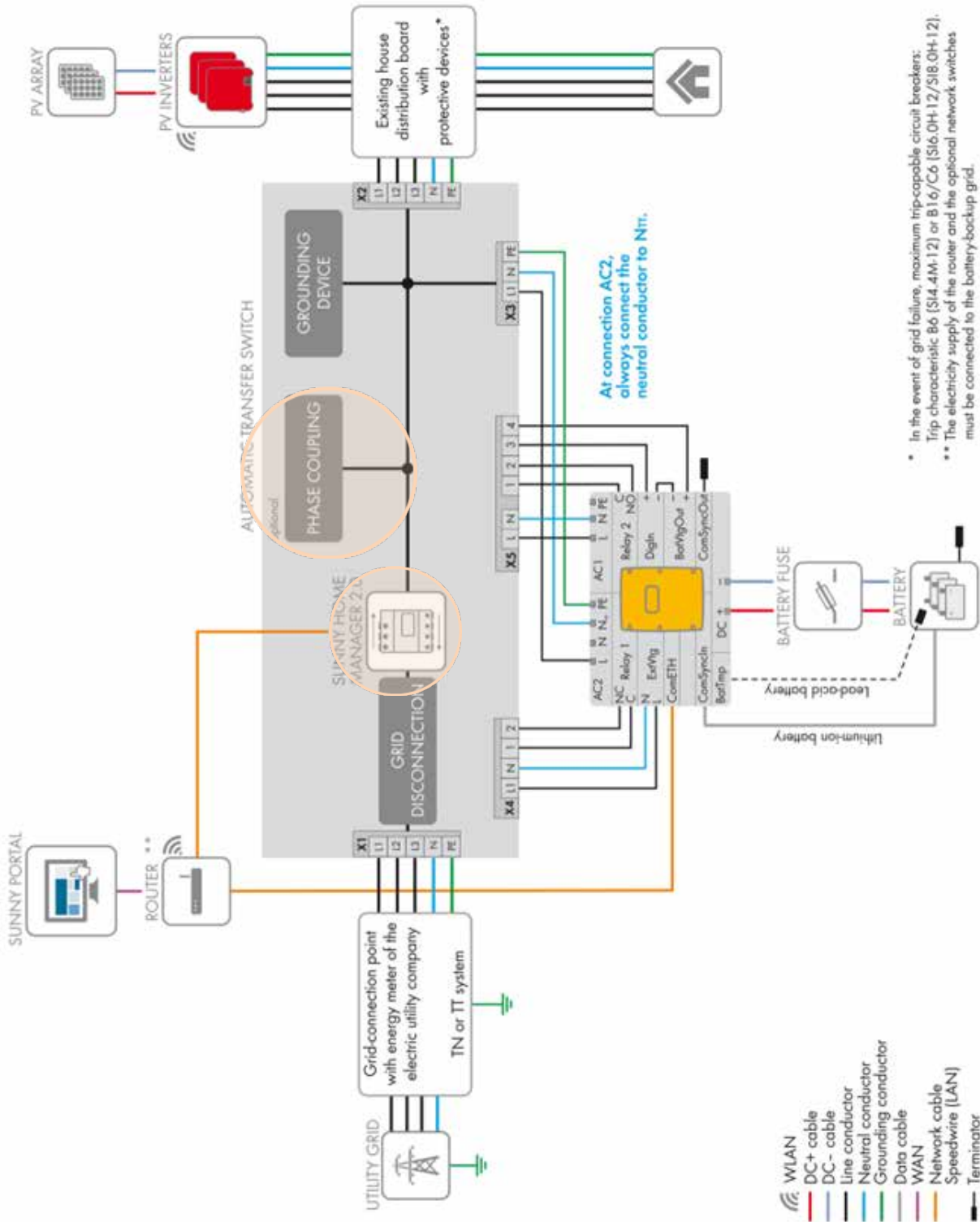
10012549: Phase coupling inclusive; prepared for retrofitting SMA Energy Meter/Home Manager 2.0

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ORIGINAL CIRCUITRY OVERVIEW SMA



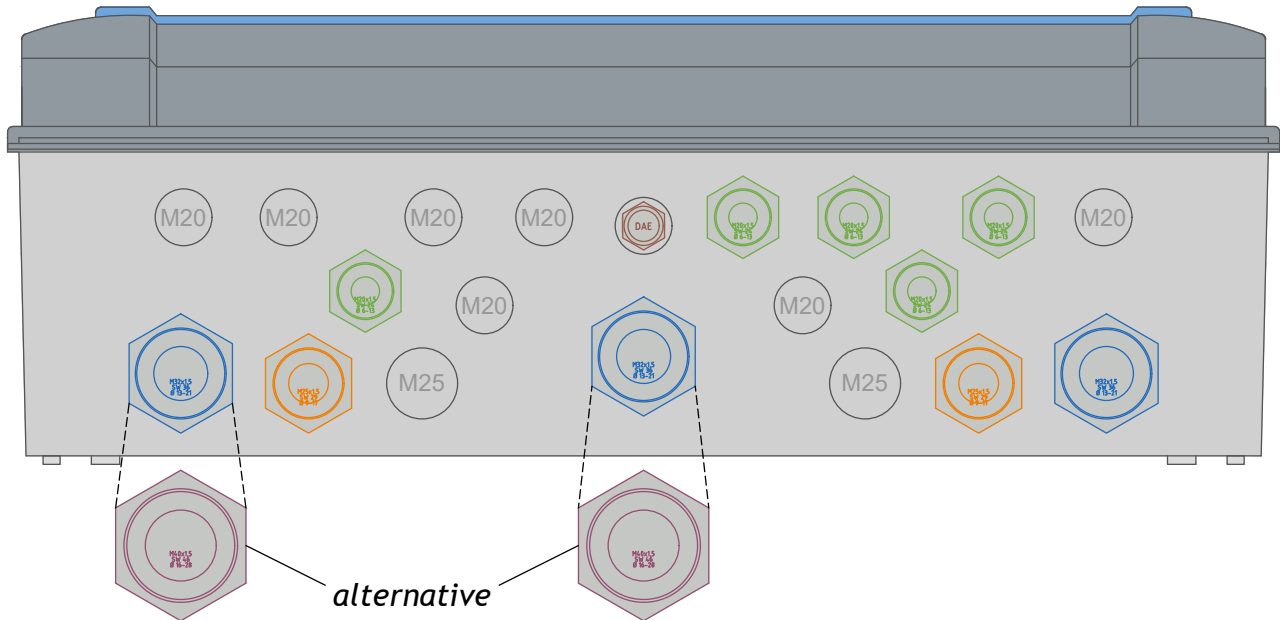
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CABLE ENTRY



Terminal block	Size (metrical)	Clamping range [mm]	Wire type	Cross section [mm ²]	Stripping length [mm]	Ferrule
X1, X2	M32/M40	13 - 21/16 - 28	solid	16	18 - 20	-
			stranded	25		-
			stranded	16		✓
X1 - PE	M20	6 - 13	solid	2,5	8 - 9	-
			stranded	2,5		-
			stranded	2,5		✓
X3	M32	13 - 21	solid	16	18 - 20	-
			stranded	25		-
			stranded	16		✓
X4	M20	6 - 13	solid	2,5	8 - 9	-
			stranded	2,5		-
			stranded	2,5		✓
X5 (L1/N/PE)	M25	9 - 17	solid	10	13 - 15	-
			stranded	10		-
			stranded	6		✓
X5 (1/2/3/4)	M20	6 - 13	solid	2,5	8 - 9	-
			stranded	2,5		-
			stranded	2,5		✓

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GENERAL DATA

NOMINAL VALUES (Grid connection)			• applicable / - not applicable
Rated insulation voltage AC	[V]		3PH - 230/400
Rated operating 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
Max. thermal power	[kW]		20
Standby-loss, ca.	[W]		15

CIRCUIT BREAKERS AND FUSES

F1	Ferrule-fuse 10x38mm	[A]	1 - fast
F2	RCD (residual current protective device)	[A]	Typ A / 40 - 0,03
F3	MCB (circuit breaker)	[A]	C32
F4	MCB (circuit breaker)	[A]	C32
F5	Ferrule-fuse 10x38mm	[A]	1 - fast
F6	MCB (circuit breaker)	[A]	C32
F7	RCD (residual current protective device)	[A]	Typ A / 40 - 0,03

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		[V]	230
Hum-free		•/-	•

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TECNICAL DATA

GENERAL DATA		• zutreffend / - nicht zutreffend
Dimensions WxHxD (without pedestal)	[mm]	448x622x161
Weight, ca.	[kg]	13
Operating temperature range	[°C]	-25...+40
Temperature - transport/storage (24 h. 70°C)	[°C]	-25...+55
Humidity - condensing allowed	•/-	-
Humidity - permitted range	[%]	5...95
Max. altitude above sea level N.N.	[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)	•/-	•
Case colour		similar RAL 7046
Cover		transparent
Mounting method		wall mounting
Locking system		without tool
MISCELLANEOUS		
Customs tariff number		85371098

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EC DECLARATION OF CONFORMITY

The product, desogmatopm: **3PH_IPC_SMA.SI_BBDAP_20KW_13PH_PREP_DACH**

article number: **10012549**

manufacturer: **enwitec electronic GmbH
Scherrwies 2
84329 Rogglfing**

description: **Battery-Backup-Distribution SMA Flexible Storage System**

to which this declaration relates, is in conformity to the following standards or normative documents:

EN 61439-1	Low-voltage switchgear and controlgear assemblies
EN 61439-2	Power switchgear and controlgear assemblies
EN 61439-3	Installation distributor for non-professional operation

and is in accordance with the provisions of the following EC-directives:

Low-voltage directive 2014/35/EU
Restriction of Hazardous Substances Directive 2011/65/EU (RoHS)

Year of affixing CE-marking: **2014**
Date of issue: **24.08.2017**

enwitec electronic GmbH



Name / Signature

Johann Wimmer
CEO