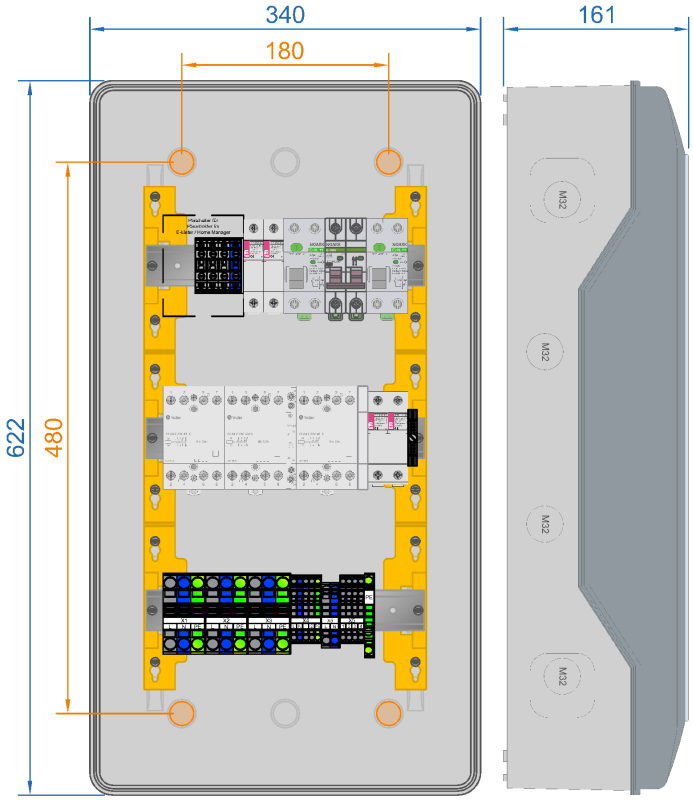
DATA SHEET

1PH-Battery Backup Distribution for 1 x Sunny Island

1PH_EPC_SMA.SI_BBDAP_12KW_1PH_PREP_FR_1.0 Art.No. 10013676

Designation	Battery Backup Distribution 1PH - **prepared for retrofitting** of SMA - Energy Meter/Home Manager 2.0
Application	Battery Backup Function - SMA Flexible Storage System
Region	France - Netherlands - Belgium
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
Grid structure	TT or TN-S system - Single phase **Sunny Island feed in: 1 phase ! (=1 x Sunny Island)**



Alle values in [mm]
Dimensions „blau“
Fastening points „orange“

Minimum distances

top	300
bottom	300
lateral	200
front	800

SCOPE OF DELIVERY

Quantity	Designation
1	Battery Backup Distribution
3	Cable gland M32 x 1,5 (clamping range Ø 13 – 21mm)
2	Cable gland M25 x 1,5 (clamping range Ø 9 – 17mm)
5	Cable gland M20 x 1,5 (clamping range Ø 6 – 13mm)
1	Reduction adaptor -M20 to M12- (pressure equalisation valve)
3	Locknut M32
2	Locknut M25
6	Locknut M20
1	Special sealing insert (CAT 5e cable „RJ45 plug“-M25-)

Quantity	Designation
1	Pressure equalisation valve
1	Cover caps for fastenting screws
2	Ferrule fuse 10x38mm (1A - fast acting; either Littelfuse #KLKD or Bussmann #KTK) all fuses inserted (Fuse-holders), Accessory pack as spare part
1	Installation instructions
1	Warning label “high voltage“
1	Warning label C15-712 (only for France)
1	Label - image „with reference to an island mode system ability“

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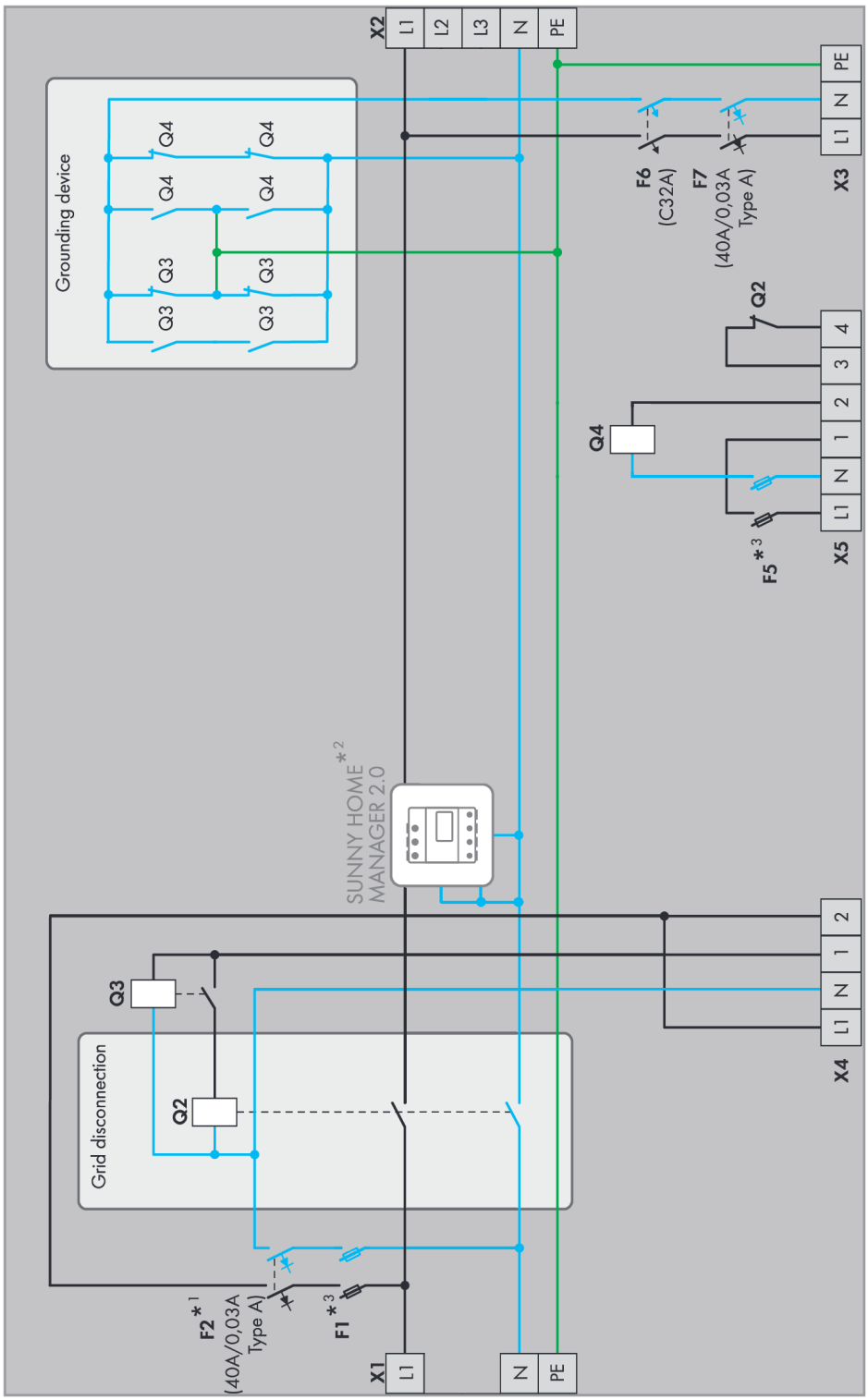
Status: November 2021

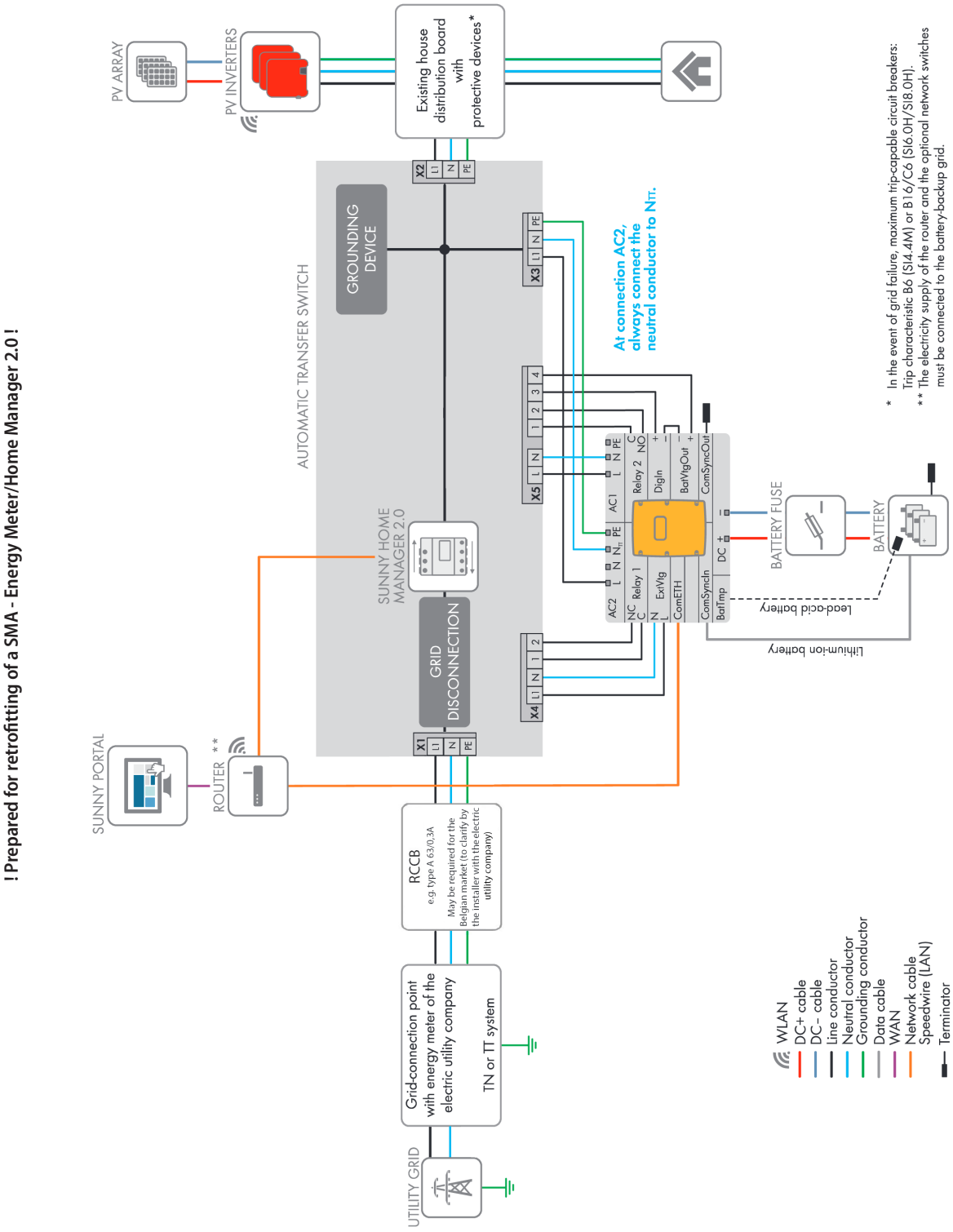
ORIGINAL CIRCUIT DIAGRAM SMA

! Prepared for retrofitting of a SMA - Energy Meter/Home Manager 2.0 !



*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.

ORIGINAL CIRCUITRY OVERVIEW SMA



CABLE ENTRY AND CONNECTIONS

Cable gland	Terminal block	clamping range [mm]	Wire type	Cross section max. [mm²]	Stripping length [mm]	Wire-end sleeve
M32	X1	13 - 21	solid stranded stranded	16 25 16	18 - 20	- - ✓
M32	X2	13 - 21	solid stranded stranded	16 25 16	18 - 20	- - ✓
M32	X3	13 - 21	solid stranded stranded	16 25 16	18 - 20	- - ✓
M20	X4	6-13	solid stranded stranded	2.5 2.5 2.5	8 - 9	- - ✓
M25	X5 (L1/N/PE)	9-17	solid stranded stranded	10 10 6	13 - 15	- - ✓
M20	X5 (1/2/3/4)	6-13	solid stranded stranded	2.5 2.5 2.5	8 - 9	- - ✓
M20	PE	6-13	solid stranded stranded	16 25 16	18 - 20	- - ✓

TECHNICAL DATA

• applicable / - not applicable

NOMINAL VALUES

Rated operating voltage AC	[V]	1PH - 230
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
Max. thermal power	[kW]	12
Standby-loss, approx.	[W]	11

CIRCUIT BREAKERS AND FUSES

F1.1	Ferrule fuse 10x38mm	[A]	1 - fast acting
F1.2	Ferrule fuse 10x38mm	[A]	1 - fast acting
F2	RCD (residual current protective device)	[A]	Type A / 40 - 0,03
F5.1	Ferrule fuse 10x38mm	[A]	1 - fast acting
F5.2	Ferrule fuse 10x38mm	[A]	1 - fast acting
F6	MCB (circuit breaker)	[A]	32
F7	RCD (residual current protective device)	[A]	Type 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
Control voltage		[V]	230
Hum-free		•/-	•

GENERAL DATA

Dimensions WxHxD (without cable glands)	[mm]	338x622x161
Wight, approx.	[kg]	10,5
Operating temperature range	[°C]	-25 ... +40
Temperature - transport/storage (24h 70°C)	[°C]	-25 ... +55
Humidity - condensing allowed	•/-	-
Humidity - permitted range	[%]	5...95
Max. altitude above sea level	[m]	2000
Protection class IP (EN 60529)		65
Outdoor suitability (protected area)	•/-	-
Installation type		Indoor area
Protection against electric shock (EN 61140)		II
Case material		Polycarbonate
RoHS-conformity (2011/65/EU)	•/-	•
Case colour		similar RAL7046
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,	designation:	**1PH_EPC_SMA.SI_BBDAP_12KW_1PH_PREP_FR_1.0**
	article number:	**10013676**
	manufacturer:	**enwitec electronic GmbH** **Scherrwies 2** **84329 Rogglfing**
	description:	**Battery Backup Distribution for the 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	**Distribution boards intended to be operated by ordinary persons (DBO)**
NF C15-100	**Low-voltage electrical installations (FR)**
UTE C15-712	**Photovoltaic installations without storage and connected to the public distribution network (FR)**

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: **2019**

Date of issue: **01.06.2019**

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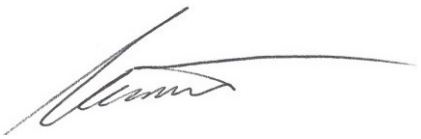

Name / Signature

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