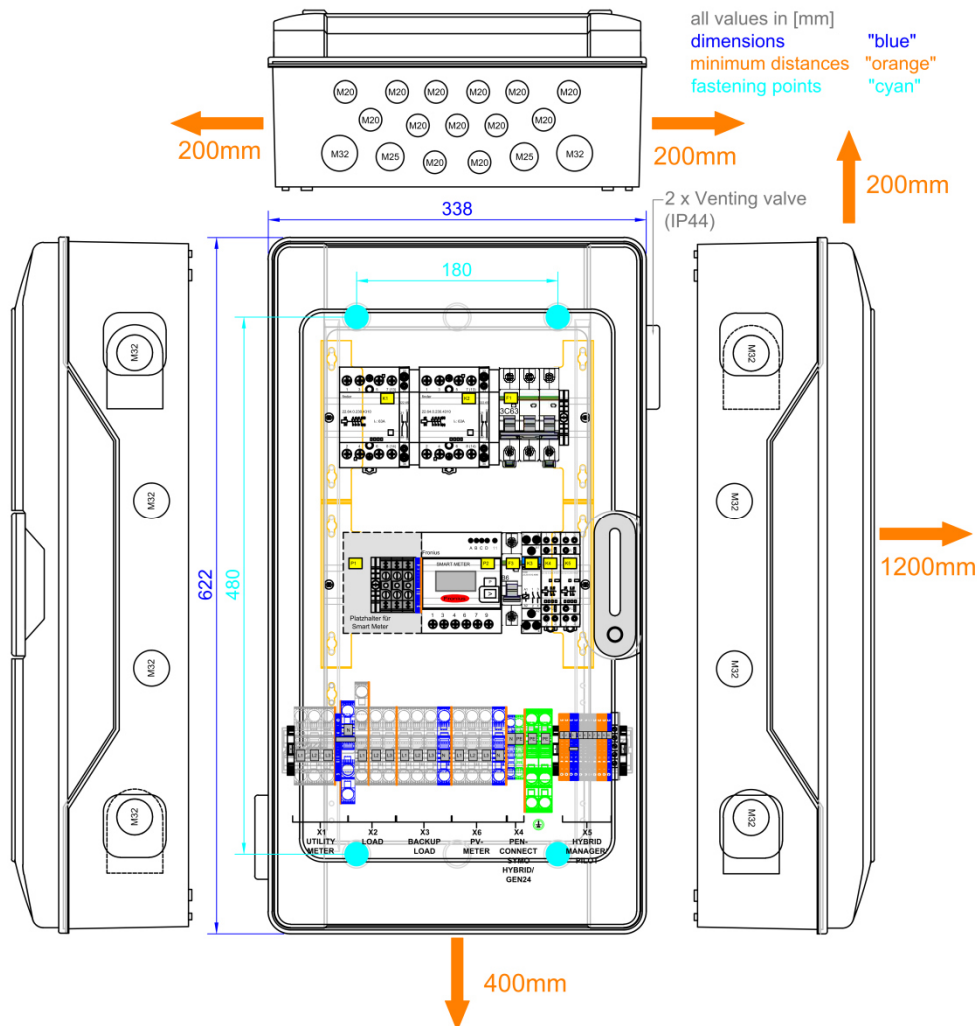


# DATA SHEET

## Switchover Box for the Fronius Energy Package

enwitec order number	<b>10012743_V1.1 All-pole; -more than one PV-inverter (all inverters incl. Symo Hybrid/ GEN24 Plus connected via PV-meter)</b>
Type designation	<b>Switchover Box / Automatic transfer switch box</b>
Matchcode	<i>3PH_FRO_BBDAP_35KW_3PH_1.1_+PV-WR EXT</i>
Application	Fronius Energy Package - Energy storage system
Battery-inverter	<ul style="list-style-type: none"> <li>• Symo GEN24 6.0 Plus/8.0 Plus/10.0 Plus</li> <li>• Symo Hybrid 3.0-3-S/4.0-3-S/5.0-3-S</li> </ul>
PV-inverter	<ul style="list-style-type: none"> <li>• AC Combiner box on site! The maximum Apparent power of all PV-inverters including the Apparent power of Symo Hybrid/GEN24 Plus: <b>35KVA!</b></li> </ul>
PV-meter (Feed in meter)	<ul style="list-style-type: none"> <li>• The PV-meter has to be connected between the AC combiner box and the switchover box (intermediary)</li> </ul>
Monitoring & Control	<ul style="list-style-type: none"> <li>• 1 x Fronius Smart Meter 63A is integrated; retrofitting for another one is possible. This is required, if a feed-in limitation of 50...70% is mandatory and in addition <math>S_{\text{SYMO HYBRID/GEN24 Plus}} &lt; S_{\text{SYMO-PV INVERTER}}</math> !</li> </ul>
Grid structure	<ul style="list-style-type: none"> <li>• 3PH 230/400V - TT or TN-S System; <b>NOT ANY</b> TN-C System</li> </ul>

remark: "S" = Apparent power



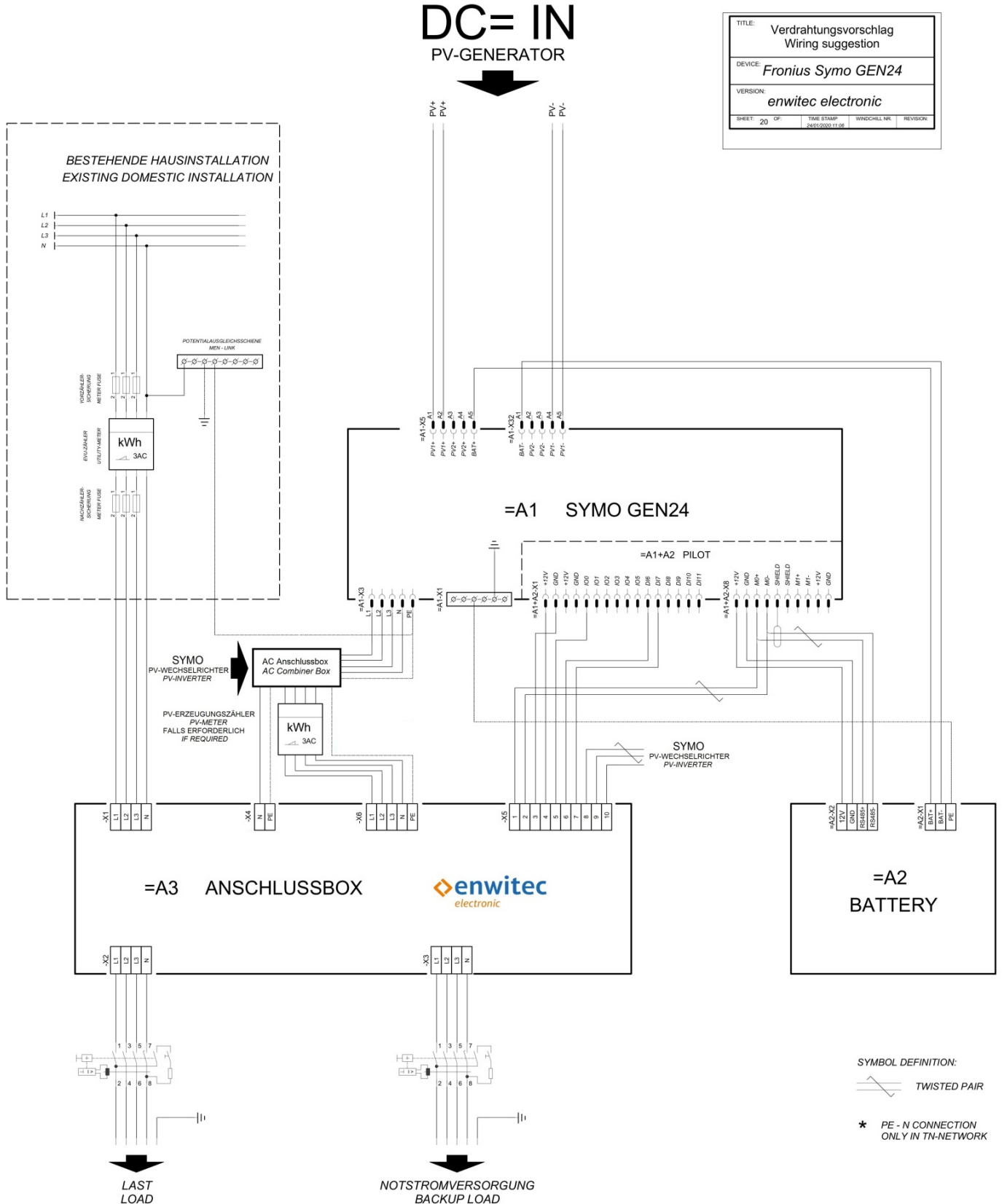
# DATA SHEET

## Switchover Box for the Fronius Energy Package

### Circuitry overview - Symo GEN24 Plus



Please observe the manual "Switchover boxes for Fronius Energy Package"



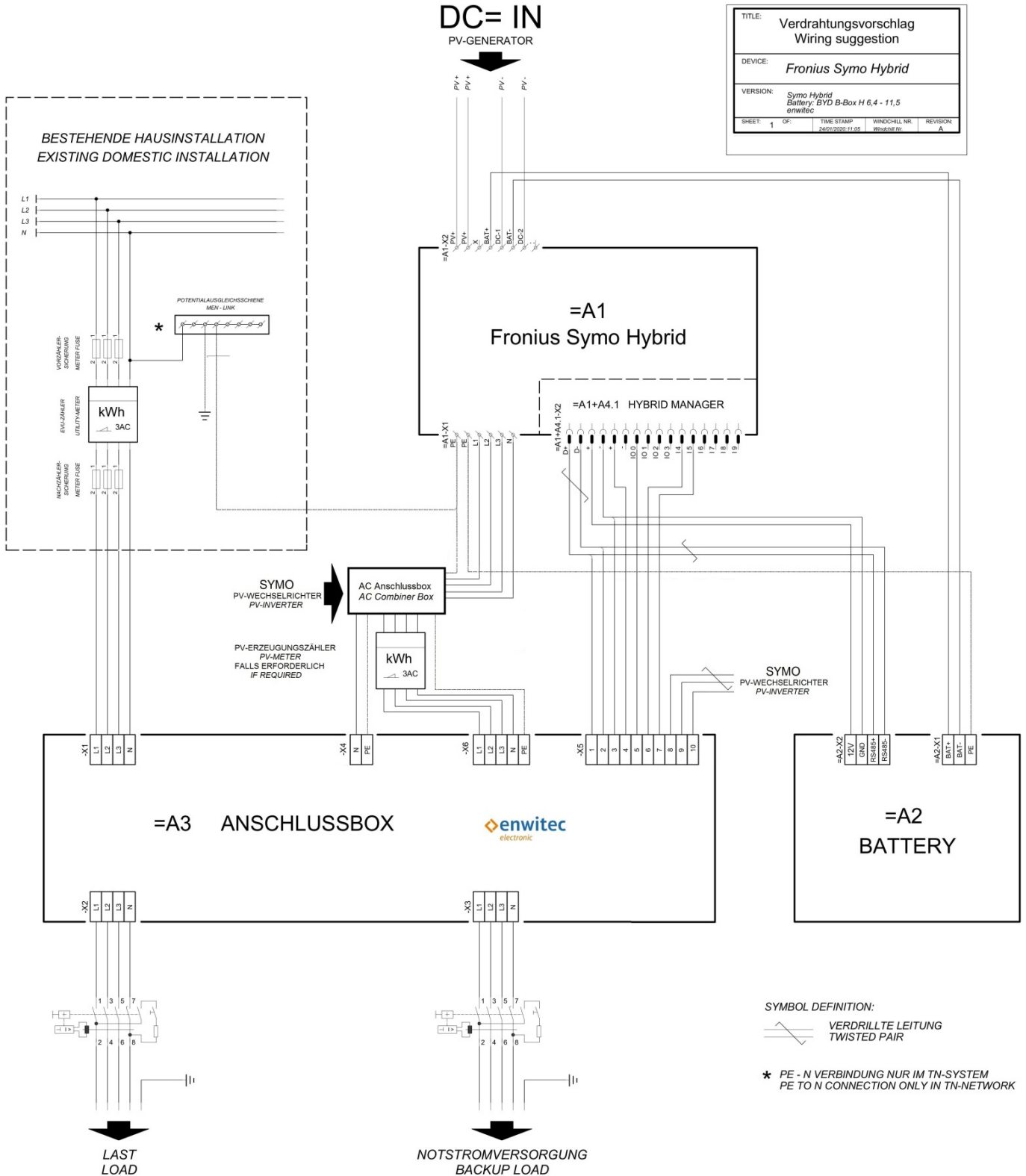
# DATA SHEET

## Switchover Box for the Fronius Energy Package

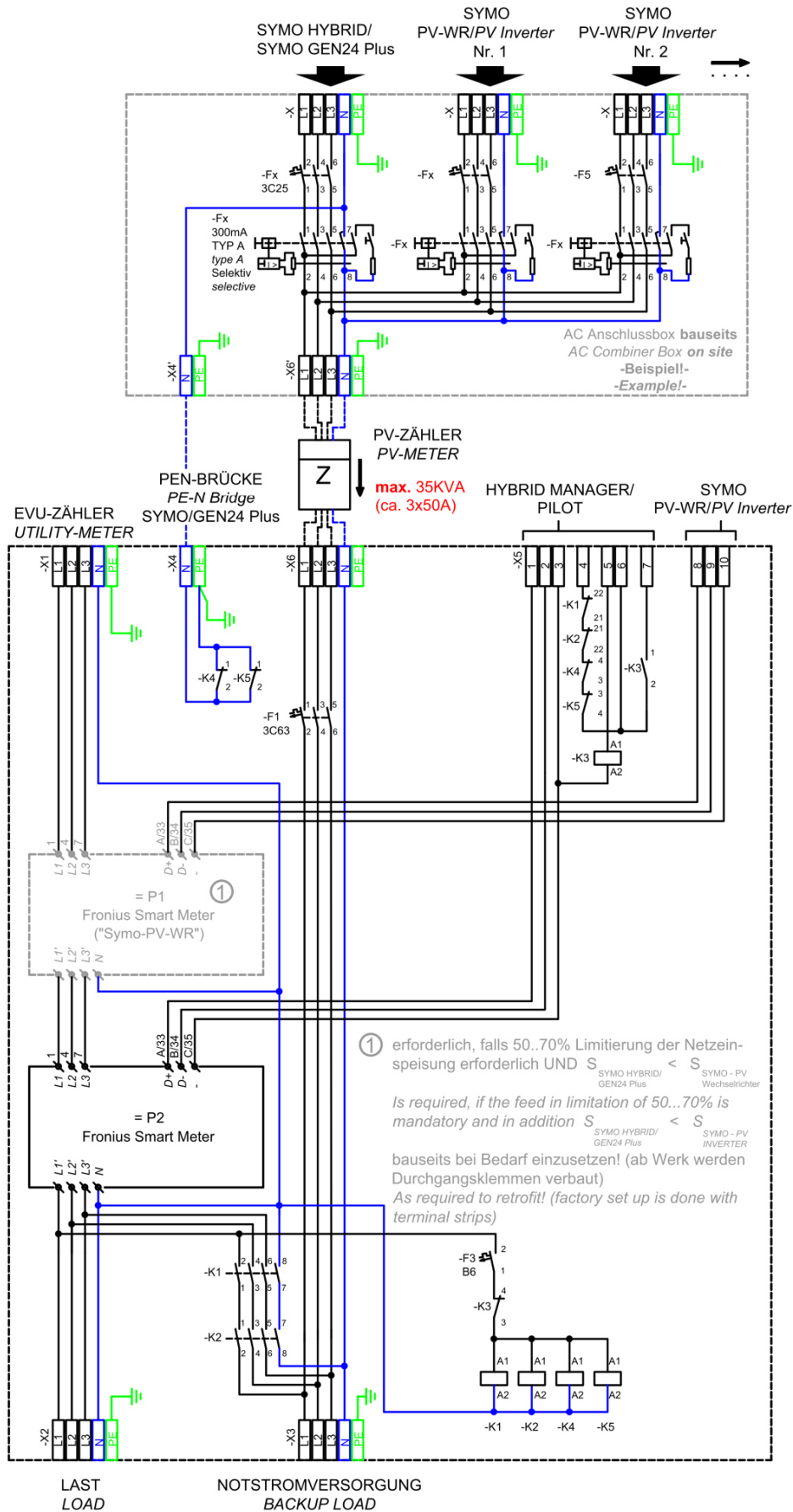
### Circuitry overview - Symo Hybrid



Please observe the manual "Switchover boxes for Fronius Energy Package"



### Internal wiring - Switchover Box 10012743\_1.1



# DATA SHEET

## Switchover Box for the Fronius Energy Package

### TECHNICAL DATA

• = met    "-" = not met

#### NOMINAL VALUES

Rated voltage	3PH [V]	230/400
Rated insulation voltage	[V]	400
Rated frequency	[Hz]	50/60
Max. prospective* short circuit current	[kA]	10
Permitted grid structure		<b>TT/TN-S</b>
Max. value of pre-fuses	[A]	63(gL/gG)
Grid disconnection		All pole
Max. thermal power	[kW]	35
Standby-loss ca.	[W]	14

#### CIRCUIT BREAKERS (MCBs)

F1	Total current via PV-meter/ AC combiner box (onsite)	1 x 3C63
F3	Control circuit "Grid"	1 x B6A

#### CONTACTORS IEC/EN61095; IEC/EN 60947-1; IEC 60947-5-1

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

#### CONNECTIONS/TERMINALS - Max. cross section (Cu)

X1	"AC-Grid" [mm <sup>2</sup> ]	16(25)
X2	"Loads - Not backuped" [mm <sup>2</sup> ]	16(25)
X3	"Backup Load" [mm <sup>2</sup> ]	16(25)
X4	<b>PE-N</b> Bridge Symo Hybrid/GEN24 Plus [mm <sup>2</sup> ]	6(10)
<b>PE</b>	"Equipotential bonding" [mm <sup>2</sup> ]	16(25)
X5	Hybrid Manager/Pilot [mm <sup>2</sup> ]	1,5(2,5)
X6	PV-meter/AC combiner (on site) [mm <sup>2</sup> ]	6(10)

#### CABLE GLANDS - Clamping range [Ø mm]

X1	"AC-Grid" M32/M40	13-21/16-28
X2	"Loads - Not backuped" M32/M40	13-21/16-28
X3	"Backup Load" M32	15-25
X4	<b>PE-N</b> Bridge Symo Hybrid/GEN 24 Plus M25	9-17
<b>PE</b>	"Equipotential bonding" M20	7-13
X5	"Communication cable(s)" 2 x M20	7-13
X6	PV-meter/AC combiner (on site) M32	15-25


#### GENERAL DATA

Width	[mm]	338
Height	[mm]	622
Depth	[mm]	161
Weight ca.	[kg]	11
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)		44
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	63A-3
	prepared for retrofitting of another one (if required)

#### MISCELLANEOUS

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