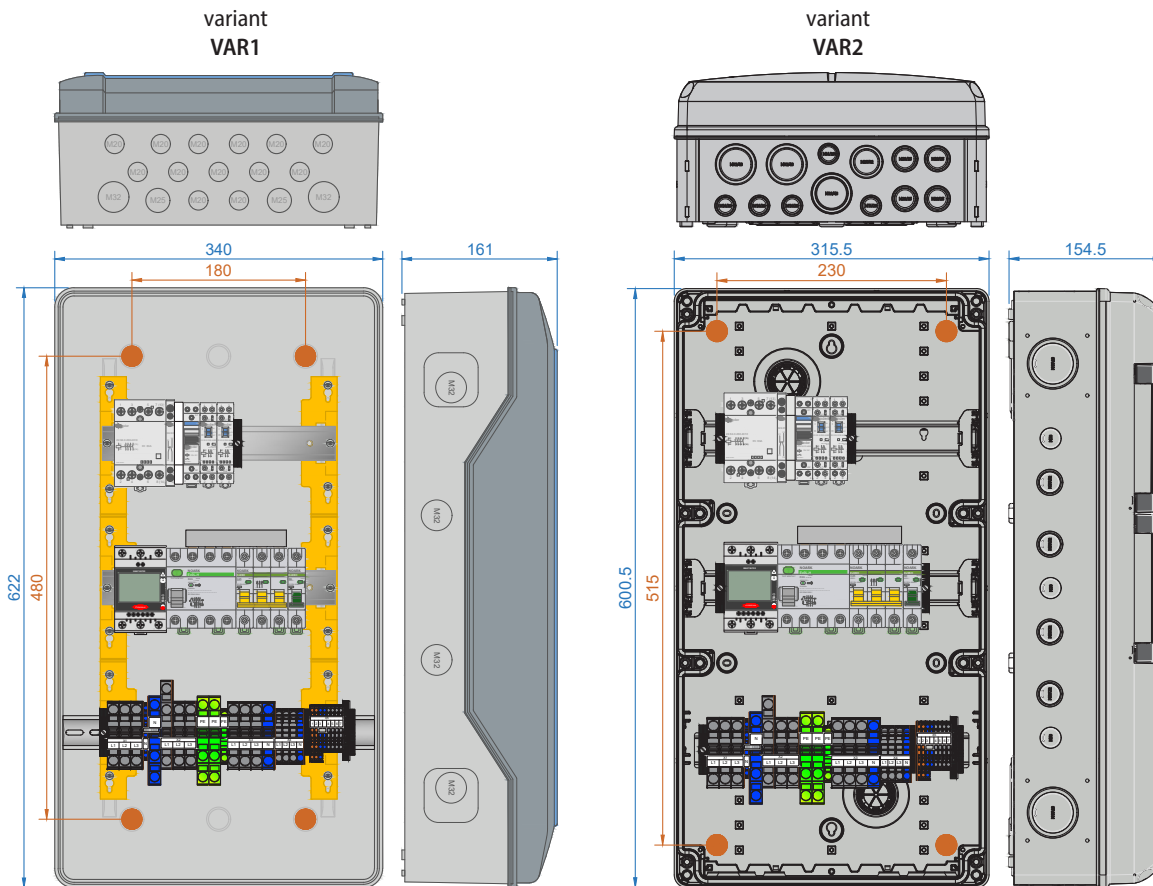


## Switchover Box - Fronius SYMO GEN24 Plus - „Full Backup“

3PH\_FRO\_BBDAP\_20KW\_3PH

Art.Nr. 10015613

Designation	Switchover Box for Fronius SYMO GEN24 Plus - All-pole - Standard
Application	Fronius SYMO GEN24 Plus System „Full Backup“
Region	Germany - Switzerland
Battery inverter	Symo GEN24 6.0 Plus/8.0 Plus/10.0 Plus
Monitoring & Control	Fronius Smart Meter TS65A-3 - „Touchscreen“ is integrated
Grid structure	3PH 230/400V - TT oder TN-S system, <b>NO</b> TN-C in customer's system!



All values in [mm]

Dimensions „blue“  
Fastening points „orange“

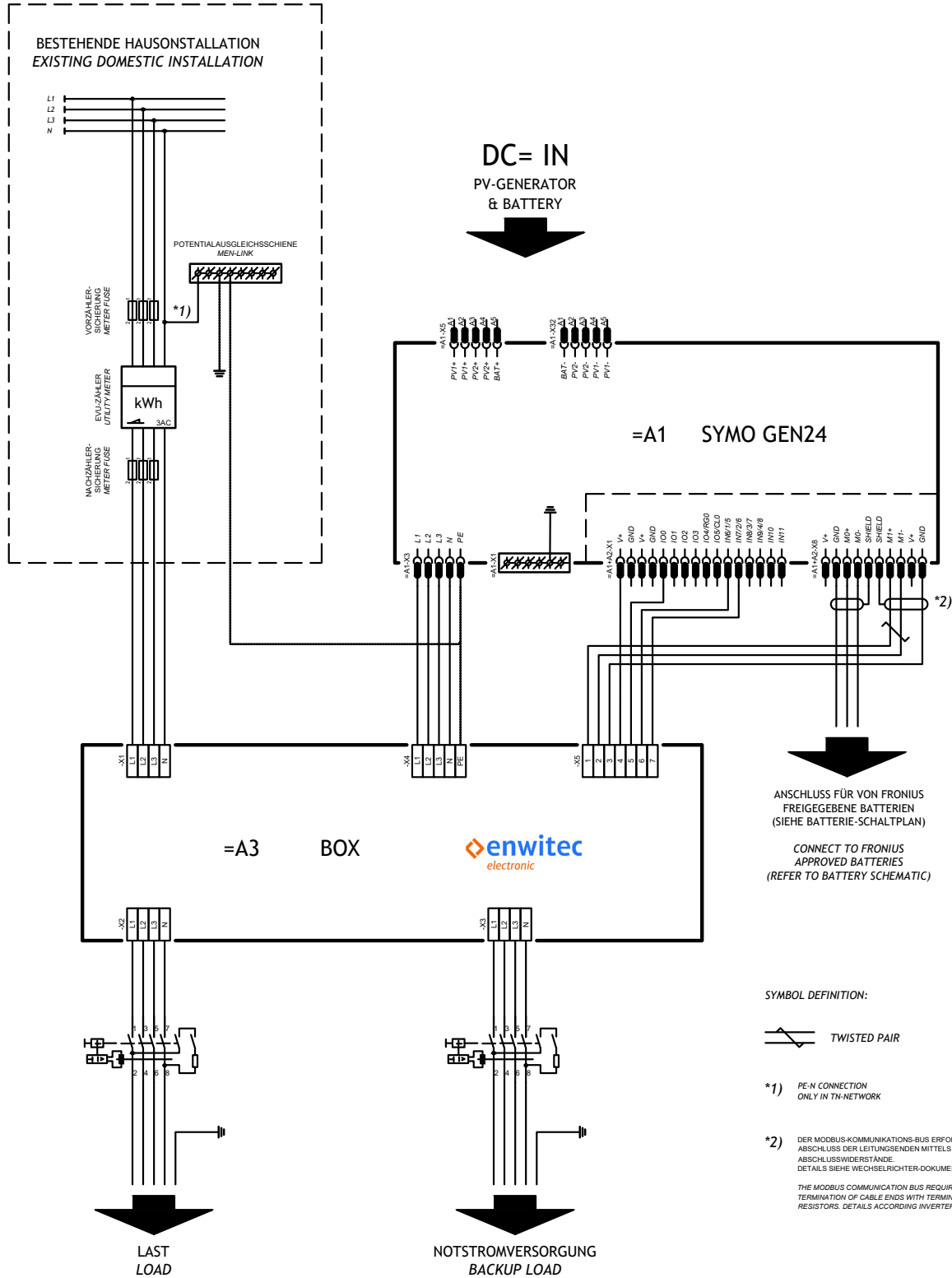
### Minimum distances

Top	200
bottom	400
lateral	200
front	1.200

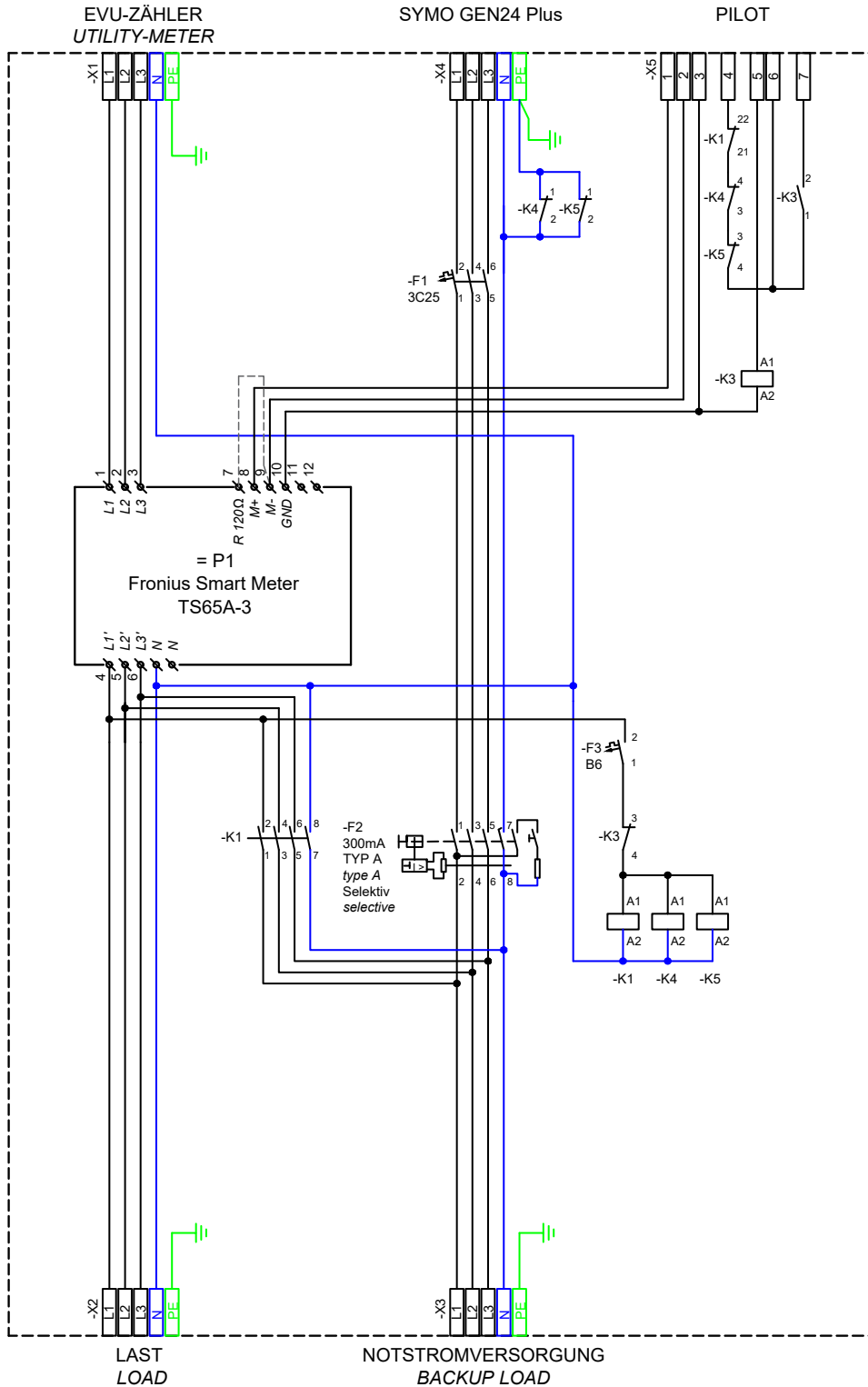
## SCOPE OF DELIVERY

Quantity	Designation	Quantity	Designation
1	Switchover Box 10015613 - VAR1 or VAR2	2	Locknut M25
3	Cable gland M40x1,5	2	Locknut M20
4	Cable gland M32x1,5	1 set	Cover caps (grommets) for fastening screws
2	Cable gland M20x1,5	1 set	Protective cover for Fronius Smart Meter
2	Enlargement adaptor from M32 to M40	1	Warning label „dangerous voltage“
2	Enlargement adaptor from M25 to M32	1	Fronius label „Backup power“
3	Locknut M40	1	Operating instructions Fronius Smart Meter
4	Locknut M32	1	Installation instructions

### INTERCONNECTION ENVIRONMENT - SYMO GEN24 PLUS

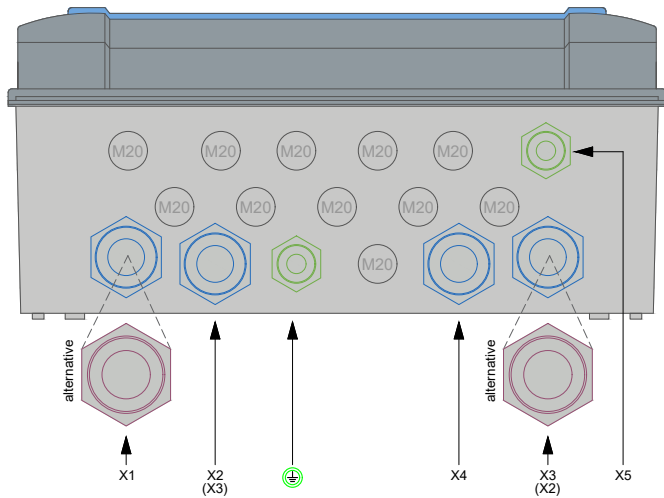


### INTERNAL CIRCUITRY

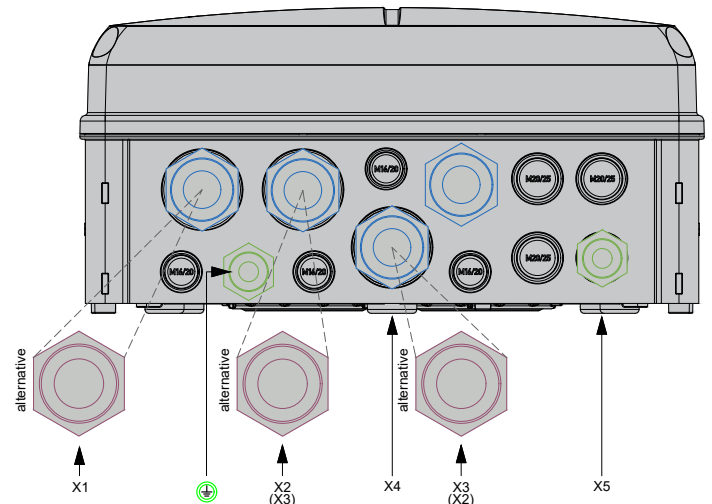


### CABLE ENTRY AND CONNECTION

Enclosure variant  
**VAR1**



Enclosure variant  
**VAR2**



Cable gland	Terminal block	Clamping range ca. [mm]	Type of litz wire	max. cross section [mm <sup>2</sup> ]	Stripping length [mm]
<div style="display: flex; gap: 5px;"> <div style="width: 15px; height: 15px; background-color: #0070C0; border: 1px solid #000;"></div> M32  <div style="width: 15px; height: 15px; background-color: #800040; border: 1px solid #000;"></div> M40                 </div>	X1 – Grid	19 - 25 16 - 28	solid /stranded fine stranded fine stranded + wire end ferrule	16 25 16	18 - 20
<div style="display: flex; gap: 5px;"> <div style="width: 15px; height: 15px; background-color: #0070C0; border: 1px solid #000;"></div> M32  <div style="width: 15px; height: 15px; background-color: #800040; border: 1px solid #000;"></div> M40                 </div>	X2 – Load „Standard“	19 - 25 16 - 28	solid /stranded fine stranded fine stranded + wire end ferrule	16 25 16	18 - 20
<div style="display: flex; gap: 5px;"> <div style="width: 15px; height: 15px; background-color: #0070C0; border: 1px solid #000;"></div> M32  <div style="width: 15px; height: 15px; background-color: #800040; border: 1px solid #000;"></div> M40                 </div>	X3 – Load „Backup“	19 - 25 16 - 28	solid /stranded fine stranded fine stranded + wire end ferrule	16 25 16	18 - 20
<div style="display: flex; gap: 5px;"> <div style="width: 15px; height: 15px; background-color: #0070C0; border: 1px solid #000;"></div> M32                 </div>	X4 – Symo GEN24 Plus	19 - 25	solid /stranded fine stranded fine stranded + wire end ferrule	10 10 6	13 - 15
<div style="display: flex; gap: 5px;"> <div style="width: 15px; height: 15px; background-color: #70AD47; border: 1px solid #000;"></div> M20                 </div>	X5 – Data cable	6 - 13	solid /stranded fine stranded fine stranded + wire end ferrule	2,5 2,5 1,5	10 - 12
<div style="display: flex; gap: 5px;"> <div style="width: 15px; height: 15px; background-color: #70AD47; border: 1px solid #000;"></div> M20                 </div>	PE – equipotential bonding rail	6 - 13	solid /stranded fine stranded fine stranded + wire end ferrule	16 25 16	18 - 20

# DATA SHEET

## Switchover Box - Fronius SYMO GEN24 Plus - „Full Backup“

3PH\_FRO\_BBDAP\_20KW\_3PH

Art.Nr. 10015613

### TECHNICAL DATA

• applicable / - not applicable

#### NOMINAL VALUES

Rated voltage	[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
Grid disconnection		all-pole
Max. grid-side pickup fuse (gL/gG)	[A]	63
Max. thermal throughput power	$t_a = 40^\circ\text{C}$ $t_a = 25^\circ\text{C}$ [kW]	20 30 <sup>#</sup>
Standby-lost, ca.	[W]	9

#### CIRCUIT BREAKERS AND RESIDUAL CURRENT CIRCUIT BREAKERS

F1	Symo GEN24 Plus	MCB [A]	3C25
F2	Symo GEN24 Plus	RCD [A]	type A - selectiv 63/0,3
F3	Control circuit „Grid“	MCB [A]	B6

#### CONTACTORS (IEC/EN 61095; IEC/EN60947-1; IEC 60947-5-1)

K1	Grid disconnection	AC1 [A]	63
K4/K5	Earthing device	AC1 [A]	25
K3	Communication	AC1 [A]	20
K1/K4/K5	Control voltage	[VDC]	230
K3	Control voltage	[VDC]	12
Hum-free		•/-	•

#### ENERGY METER

Manufacturer	Fronius
Type	TS65A-3

#### GENERAL DATA

Dimensions WxHxD VAR1 (without cable glands)	[mm]	340x622x161
Dimensions WxHxD VAR2 (without cable glands)	[mm]	315x600x155
Weight, ca.	[kg]	11
Operation temperature range $t_a$	[°C]	-5 ... +40
Temperatur-transport/storage (24 h. 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)	$t_a = 40^\circ\text{C}$ $t_a = 25^\circ\text{C}$	IP 65 IP 44 <sup>#</sup>
Outdoor suitability (protected area)	•/-	-
Installation type		Indoor
Protection against electric shock (EN 61140)		II
Enclosure material		Polycarbonate
RoHS-conformity (2011/65/EU)	•/-	•
Colour of enclosure		similar RAL7035
Cover		transparent
Mounting method		wall mounting
Locking system		tool-free
<b>MISCELLANEOUS</b>		
Customs tariff number		85371098

#### ACCESSORY (not included in scope of delivery)

# Set of ventilation valves – order number	10017652 (enwitec)
Consisting of:	
2 x Ventilation valve – order number	036579 (LeGrand)
2 x Reduction adaptor	M40/M32
2 x Locknut	M40

\* Is the maximum, unaffected continuous short-circuit current of the mains connection.

# When operating the switchover box with 30KW max. thermal throughput power, the use of 2 x ventilation valves is required (diagonal air flow – positioning bottom left and top right e.g.; knockouts are available)  
Protection class is being reduced to IP44.

## EC DECLARATION OF CONFORMITY

The product,	designation:	3PH_FRO_BBDAP_20KW_3PH
	variants:	VAR1 / VAR2
	article number:	10015613
	manufacturer:	enwitec electronic GmbH & Co. KG Scherrwies 2 84329 Rogglfing
	description:	Switchover Box for Fronius system Symo GEN24 Plus – „Full Backup“

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)

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

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

Year of affixing CE-marking 2021

Date of issue: 17.11.2020

enwitec electronic GmbH & Co. KG



Name / Signature

Johann Wimmer  
CEO