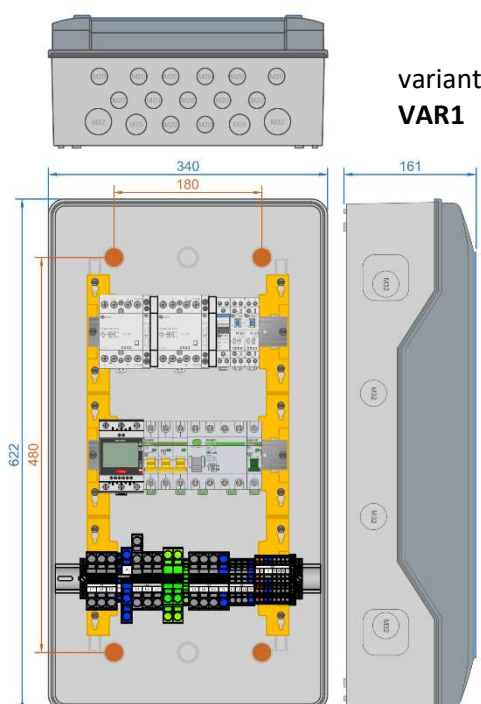
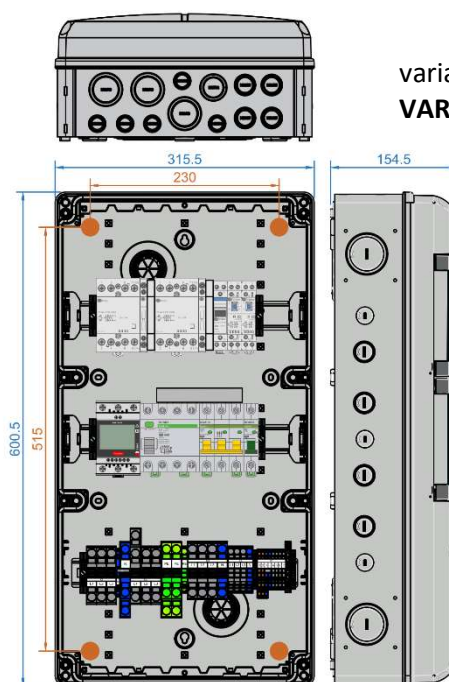


Designation	Switchover Box for Fronius SYMO GEN24 Plus – All-pole - Standard
Application	Fronius SYMO GEN24 Plus System „Full Backup“
Region	Germany - Switzerland
Battery inverter	Symo GEN24 6.0 Plus /8.0Plus/10.0 Plus
Monitoring & Control	Fronius Smart Meter TS65A-3 – „Touchscreen“ is integrated
Grid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



variant
VAR1



variant
VAR2

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

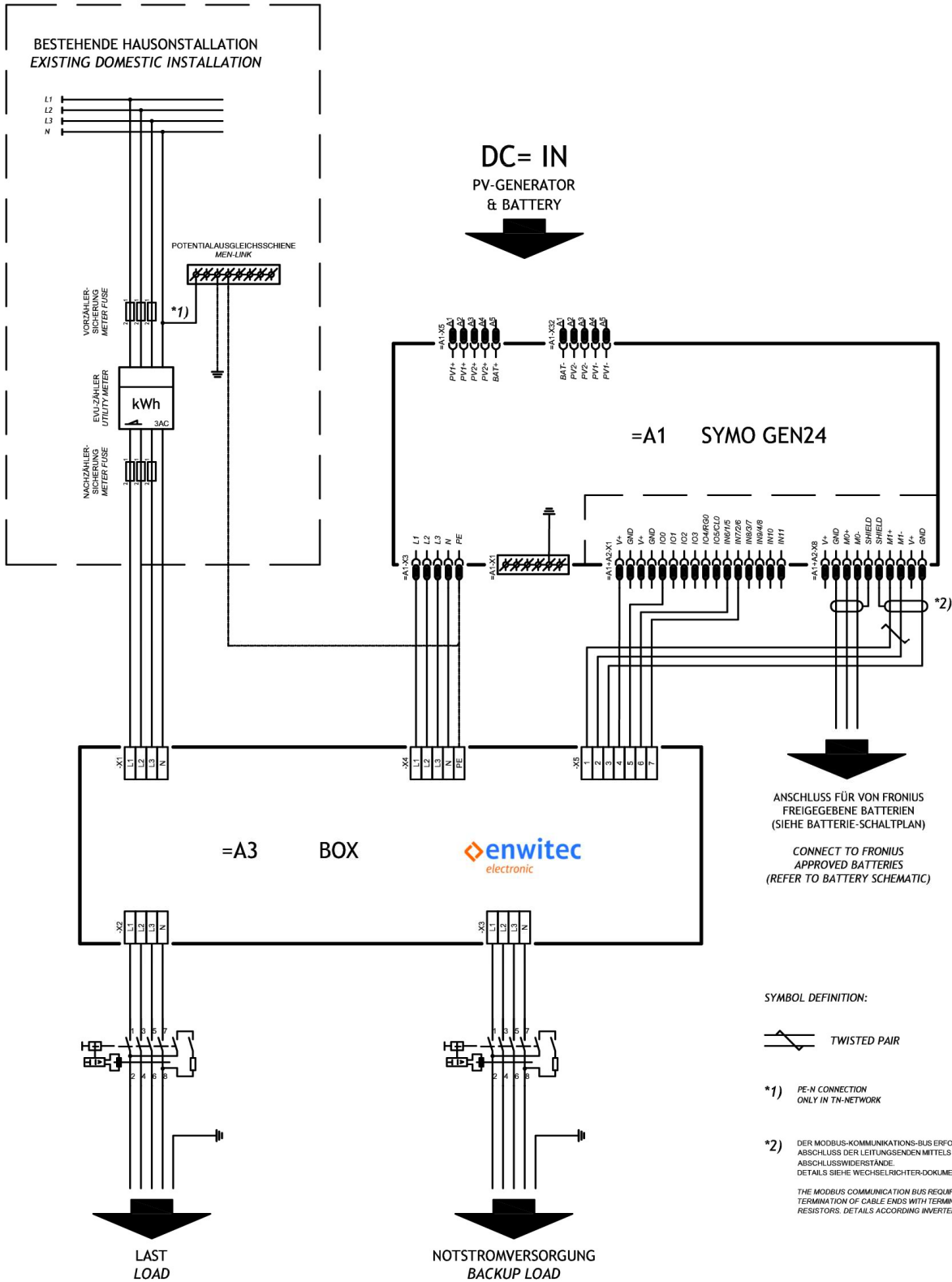
Minimum distances	
Top	200
bottom	400
lateral	200
front	1.200

SCOPE OF DELIVERY

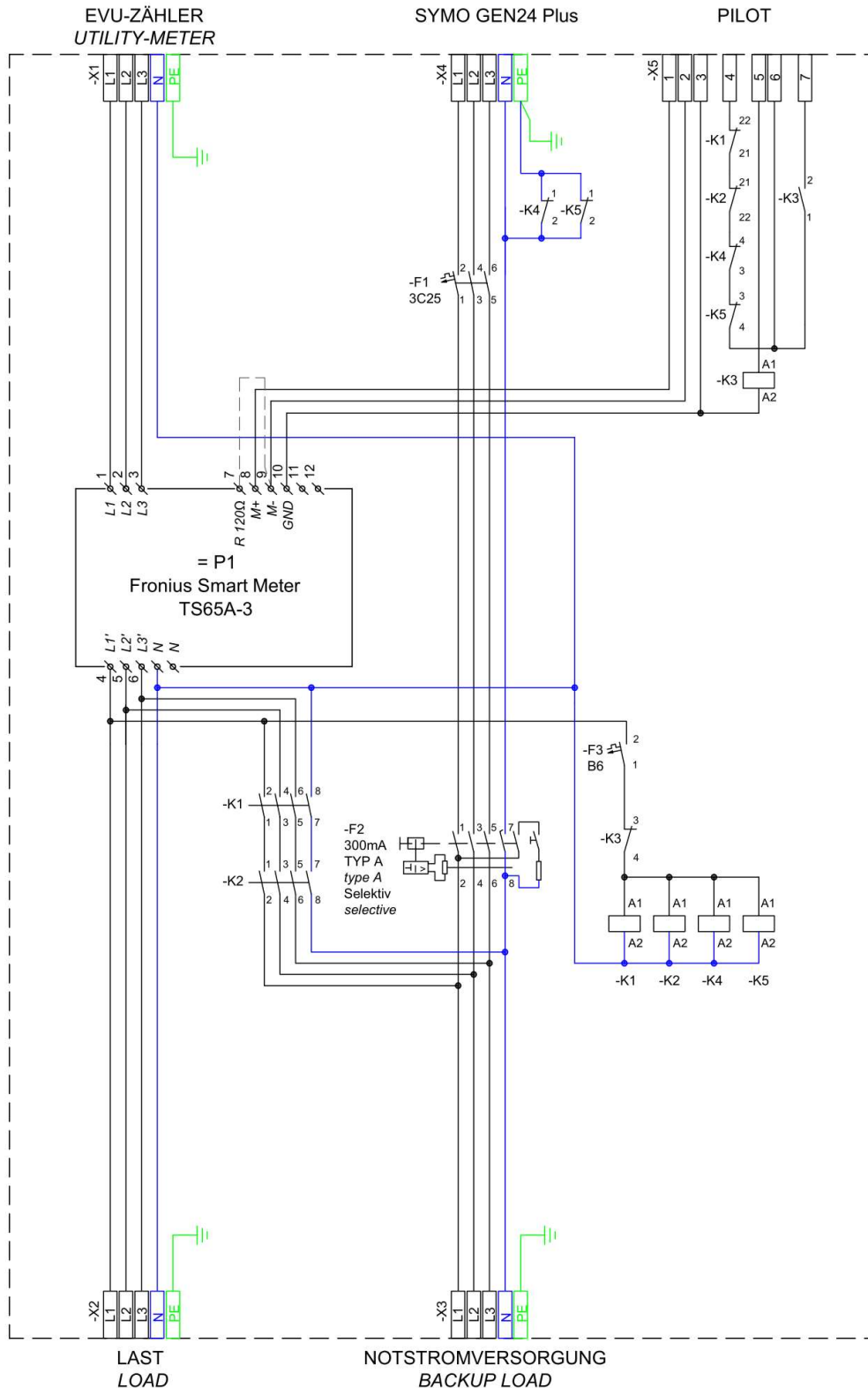
Quantity	Designation
1	Switchover Box 10015613 - VAR1
2	Cable gland M40x1,5
4	Cable gland M32x1,5
2	Cable gland M20x1,5
2	Enlargement adaptor from M32 to M40
2	Enlargement adaptor from M25 auf M32
-/-	-/-
2	Locknut M32
2	Locknut M25
2	Locknut M20
1 set	Cover caps for fastening screws
1 set	Protective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

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

INTERCONNECTION ENVIRONMENT – SYMO GEN24 PLUS

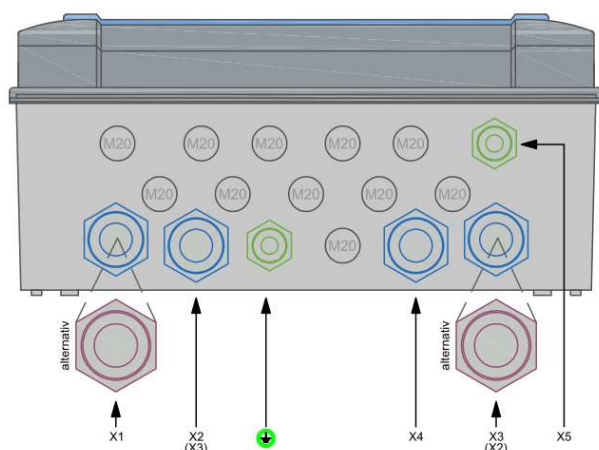


INTERNAL CIRCUITRY

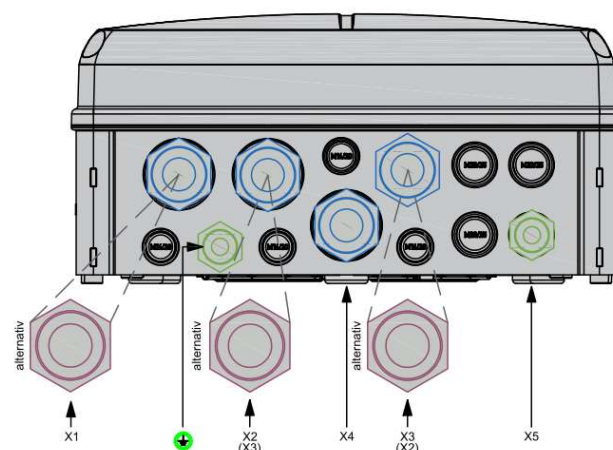


CABLE ENTRY AND CONNECTION

Enclosure variant
VAR1



Enclosure variant
VAR2



Cable gland	Terminal block	Clamping range ca. [mm]	Type of litz wire	Max. cross section [mm ²]	Stripping length [mm]
M32	X1 – Grid	19-25	solid /stranded	16	18 – 20
M40		16-28	fine stranded fine stranded + wire end ferrule	25 16	
M32	X2 – Load „Standard“	19-25	solid /stranded	16	18 – 20
M40		16-28	fine stranded fine stranded + wire end ferrule	25 16	
M32	X3 – Load „Backup“	19-25	solid /stranded	16	18 – 20
M40		16-28	fine stranded fine stranded + wire end ferrule	25 16	
M32	X4 – Symo GEN24 Plus	19-25	solid /stranded	10	13 - 15
			fine stranded	10	
			fine stranded + wire end ferrule	6	
M20	X5 – Data cable	6-13	solid /stranded	2,5	10 – 12
			fine stranded	2,5	
			fine stranded + wire end ferrule	1,5	
M20	PE – equipotential bonding rail	6-13	solid /stranded	16	18 – 20
			fine stranded	25	
			fine stranded + wire end ferrule	16	

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 packup fuse (gL/gG)	[A]	63
Max. thermal throughput power		
t _a = 40°C	[kW]	20
t _a = 25°C	[kW]	30 [#]
Standby-loss, ca.	[W]	14

CIRCUIT BREAKERS AND RESIDUAL CURRENT CIRCUIT BREAKERS

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

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

K1/K2	Grid disconnection	AC1	[A]	63
K4/K5	Earthing device	AC1	[A]	25
K3	Communication	AC1	[A]	20
K1/K2/K4/K5	Control voltage		[VAC]	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 Std. 70°C)	[°C]	-25...+55
Humidity – condensing allowed	•/-	-
Humidity – permitted range	[%]	5...95
Max. altitude above sea level	[m]	2.000
Protection class IP (EN 60529)		
t _a = 40°C	IP	65
t _a = 25°C	IP	44 [#]
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

MISCELLANEOUS

Customs tariff number	85371098
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ACCESSORY (not included in scope of delivery)

Ventilation valves [#]	2 x
Legrand article number	036579
VAR2 requires additionally:	
Reduction adaptor	2 x M40/M32
Locknut	2 x 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 (Wurmannsquick)
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