

Art.Nr. 10015613

SWITCHOVER BOX - Fronius SYMO GEN24 Plus - „Full Backup“ | 3PH_FRO_BBDAP_20KW_3PH

enwitec electronic GmbH
Scherrwies 2 | 84329 Wurmansquick
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www.enwitec.eu

Type 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 230/400 V - TT oder TN-S system, NO TN-C in customer's!

All values in [mm]

Dimensions

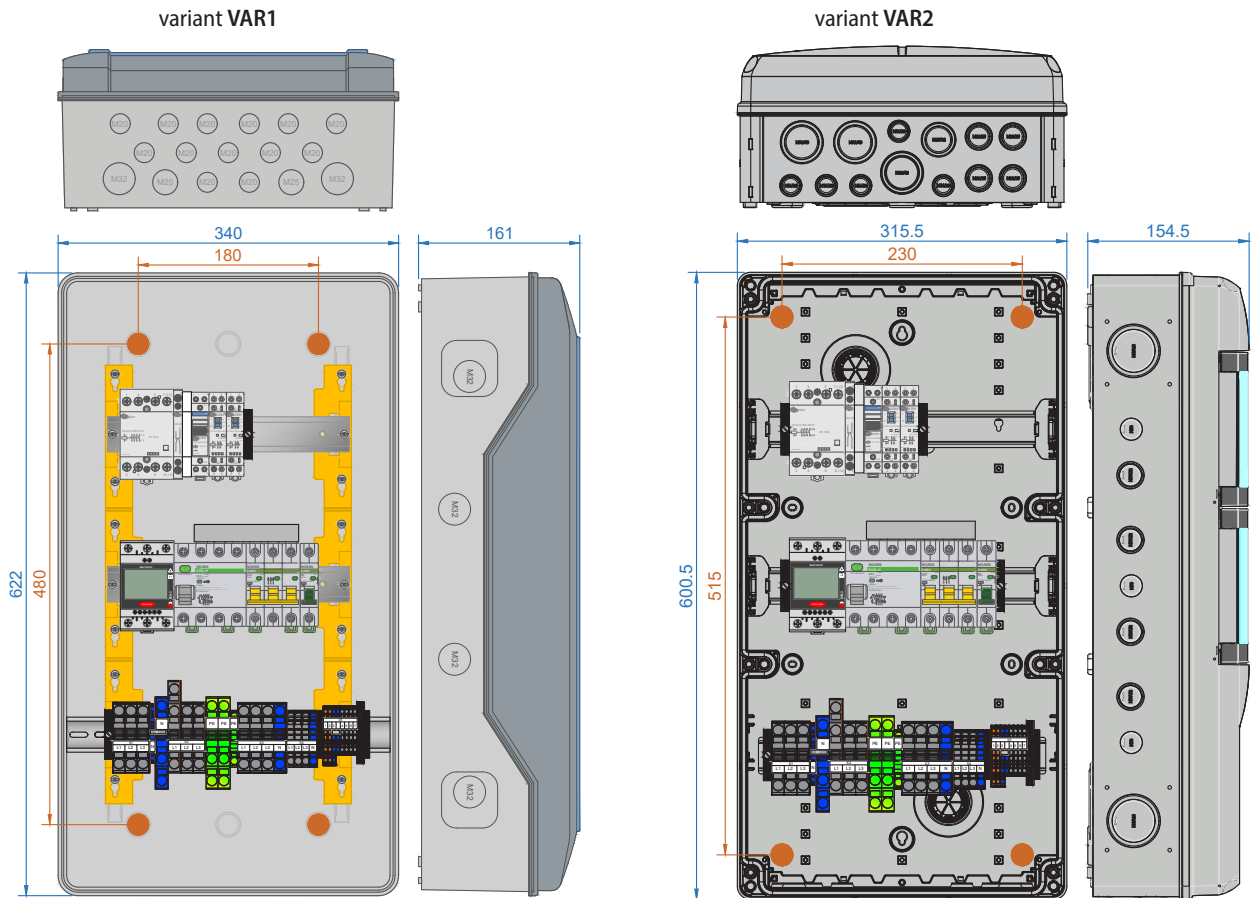
Fastening points

„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	Switchover Box 10015613 - VAR1 or VAR2	2	Locknut M25
3	Cable gland M40 x 1,5	2	Locknut M20
4	Cable gland M32 x 1,5	1	Set protective cover for Fronius Smart Meter
2	Cable gland M20 x 1,5	1	Set cover caps for fastening screws
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

Status: June 2023

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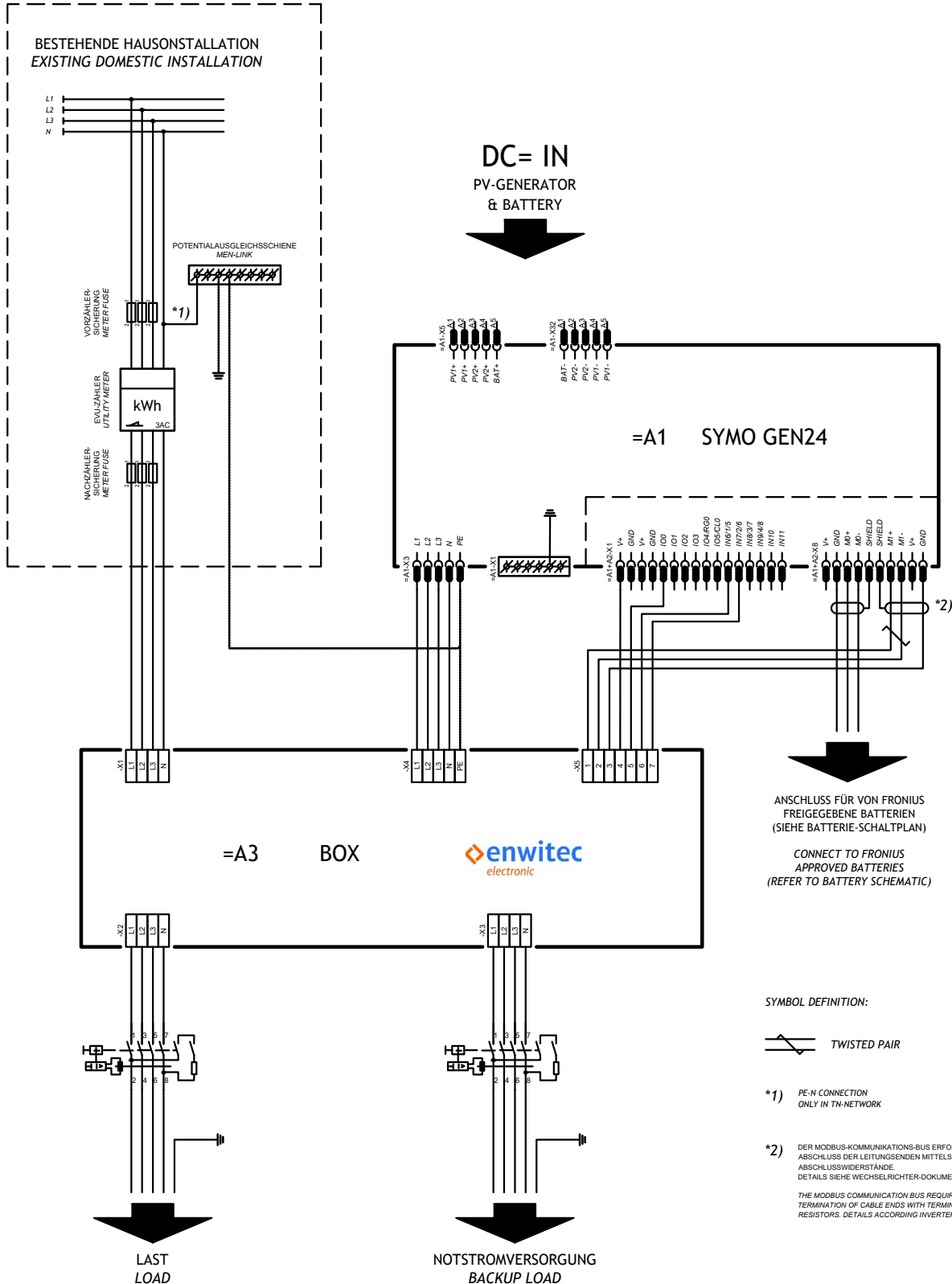
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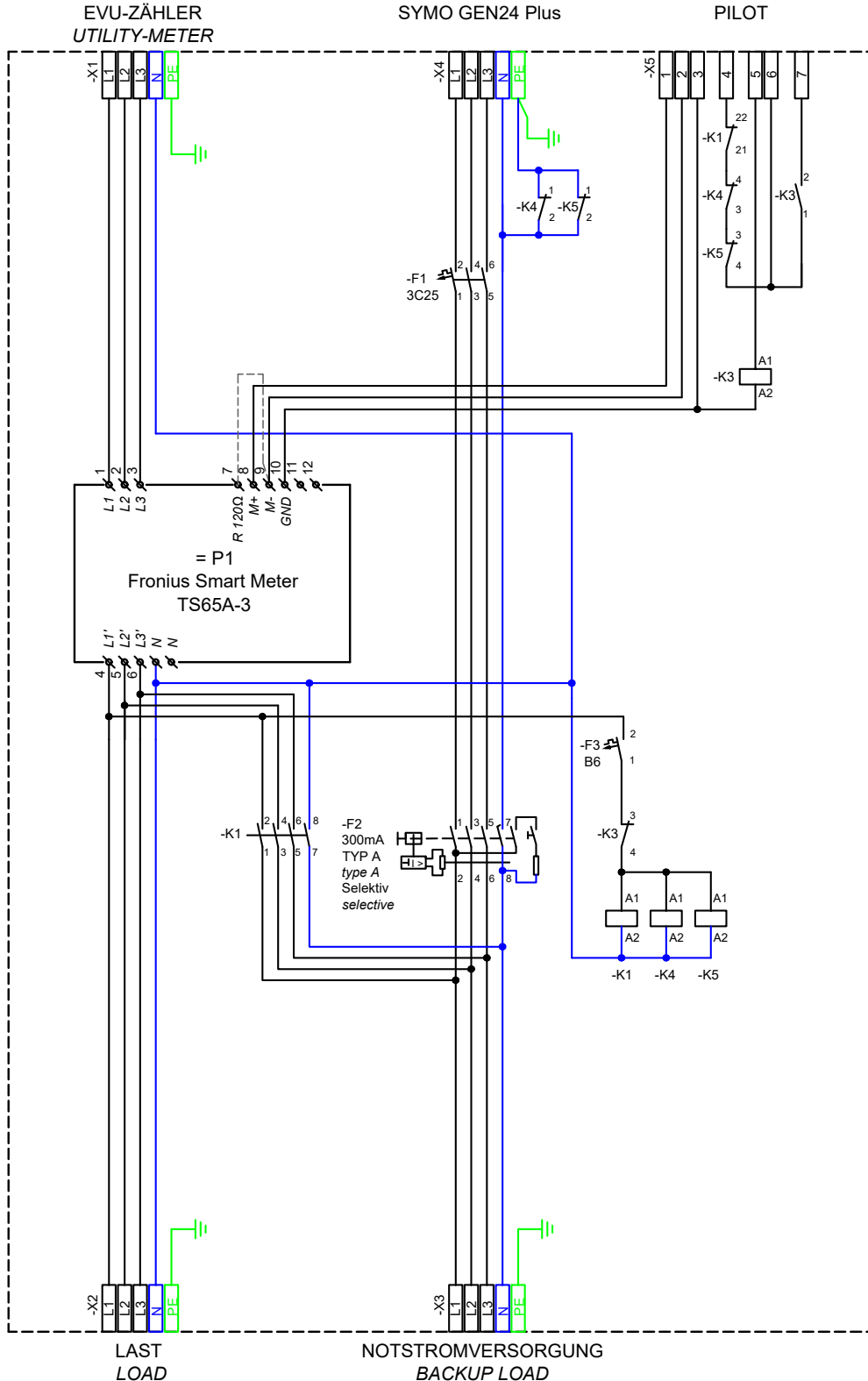
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INTERCONNECTION ENVIRONMENT - SYMO GEN24 PLUS



INTERNAL CIRCUITRY



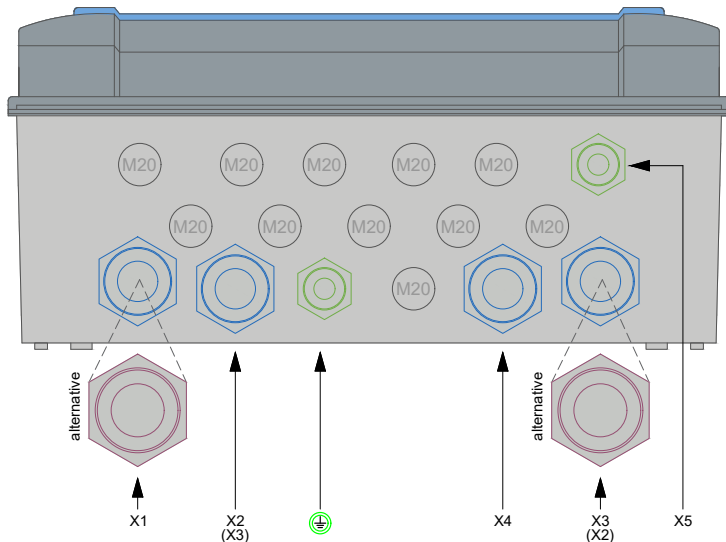
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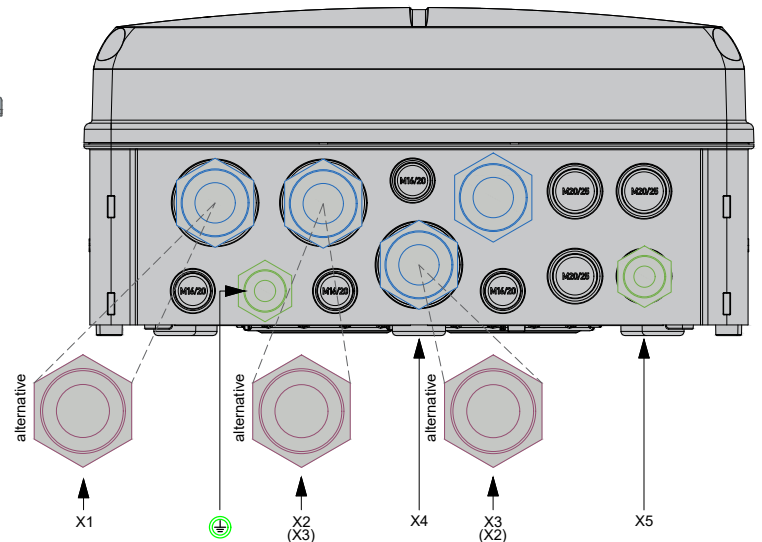
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CABLE ENTRY

Enclosure variant VAR1



Enclosure variant VAR2



Cable gland	Terminal block	Clamping range [mm]	Wire type	Cross section [mm ²]	Stripping length [mm]
<div style="display: flex; gap: 5px;"> <div style="width: 10px; height: 10px; background-color: #0070C0; border: 1px solid black;"></div> M32 <div style="width: 10px; height: 10px; background-color: #800040; border: 1px solid black;"></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: 10px; height: 10px; background-color: #0070C0; border: 1px solid black;"></div> M32 <div style="width: 10px; height: 10px; background-color: #800040; border: 1px solid black;"></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: 10px; height: 10px; background-color: #0070C0; border: 1px solid black;"></div> M32 <div style="width: 10px; height: 10px; background-color: #800040; border: 1px solid black;"></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: 10px; height: 10px; background-color: #0070C0; border: 1px solid black;"></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: 10px; height: 10px; background-color: #70AD47; border: 1px solid black;"></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: 10px; height: 10px; background-color: #70AD47; border: 1px solid black;"></div> M20 </div>	PE – equipotential bonding rail	6 - 13	solid /stranded fine stranded fine stranded + wire end ferrule	16 25 16	18 - 20

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GENERAL DATA

NOMINAL VALUES			• applicable / - not applicable
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	ta = 40°C ta = 25°C	[kW]	20 30#
Standby-loss, ca.		[W]	9

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	[VDC]	20
K1/K4/K5	Control voltage	[VDC]	230
K3	Control voltage	[VDC]	12
Hum-free		•/-	•

ENERGY METER

Manufacturer		Fronius
Type		TS65A-3

* 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.

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TECNICAL DATA

GENERAL DATA			• zutreffend / - nicht zutreffend
Dimensions W x H x D VAR1 (without cable glands)		[mm]	340 x 622 x 161
Dimensions W x H x D VAR2 (without cable glands)		[mm]	315 x 600 x 155
Weight, ca.		[kg]	11
Operating temperature range t _a		[°C]	-5...+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)	ta = 40°C ta = 25°C	IP	65 44#
outdoor-application permitted		•/-	-
Installation type			indoor
Protection against electric shock (EN 61140)			II
Case material			polycarbonate
RoHS-conformity (2011/65/EU)		•/-	•
Case colour			similar RAL 7035
Cover			transparent
Mounting method			wall mounting
Locking system			without tool

MISCELLANEOUS

Customs tariff number			85371098
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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

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EC DECLARATION OF CONFORMITY

The product, designation: **3PH_FRO_BBDAP_20KW_3PH**

variants: **VAR1/VAR2**

article number: **10015613**

manufacturer: **enwitec electronic GmbH
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

Restriction of Hazardous Substances Directive 2011/65/EU (RoHS)

Year of affixing CE-marking: **2021**

Date of issue: **17.11.2020**

enwitec electronic GmbH



Name / Signature

Johann Wimmer
CEO