

Art.Nr. 10017485

SWITCHOVER BOX - Fronius SYMO GEN24 Plus - „Full Backup“ | 3PH_FRO_BBD3P_20KW_3PH

enwitec electronic GmbH
 Scherrwies 2 | 84329 Wurmanssquick
 Mail info@enwitec.eu
www.enwitec.eu

Type designation	Switchover Box for Fronius SYMO GEN24 Plus - three-pole - Standard
Application	Fronius SYMO GEN24 Plus System „Full Backup“
Region	Germany
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 - TN-C system only (mains connection) - TN-S system customer's side! NO TN-C in customer's system! NO TT system!

All values in [mm]

Dimensions

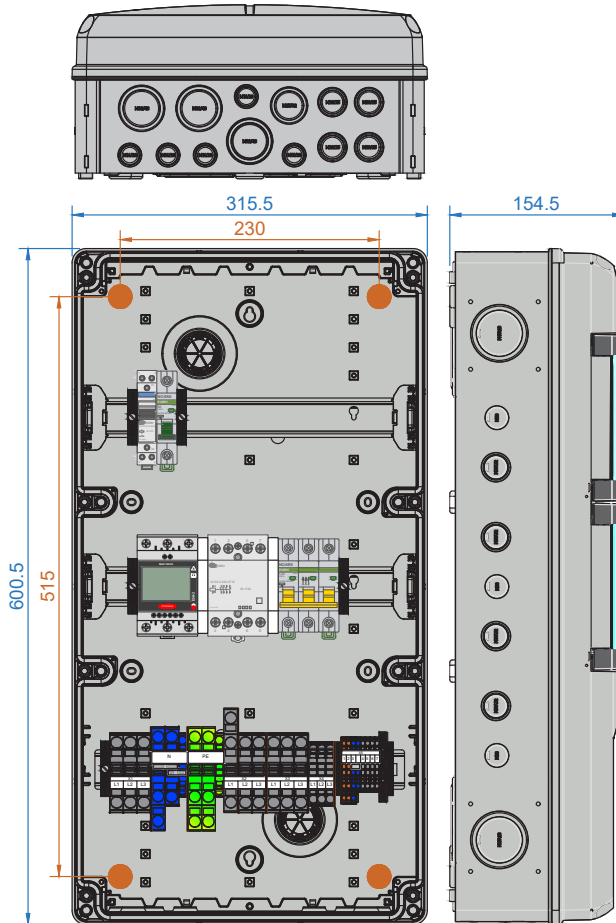
Fastening points

„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 10017485	1	Set protective cover for Fronius Smart Meter
3	Cable gland M40 incl. locknut	1	Warning label „dangerous voltage“
4	Cable gland M32 incl. locknut	1	Fronius label „Backup power“
2	Cable gland M20 incl. locknut	1	Operating instructions Fronius Smart Meter
1	Set cover caps (grommets) for fastening screws	1	Installation instructions

Status: May 2023

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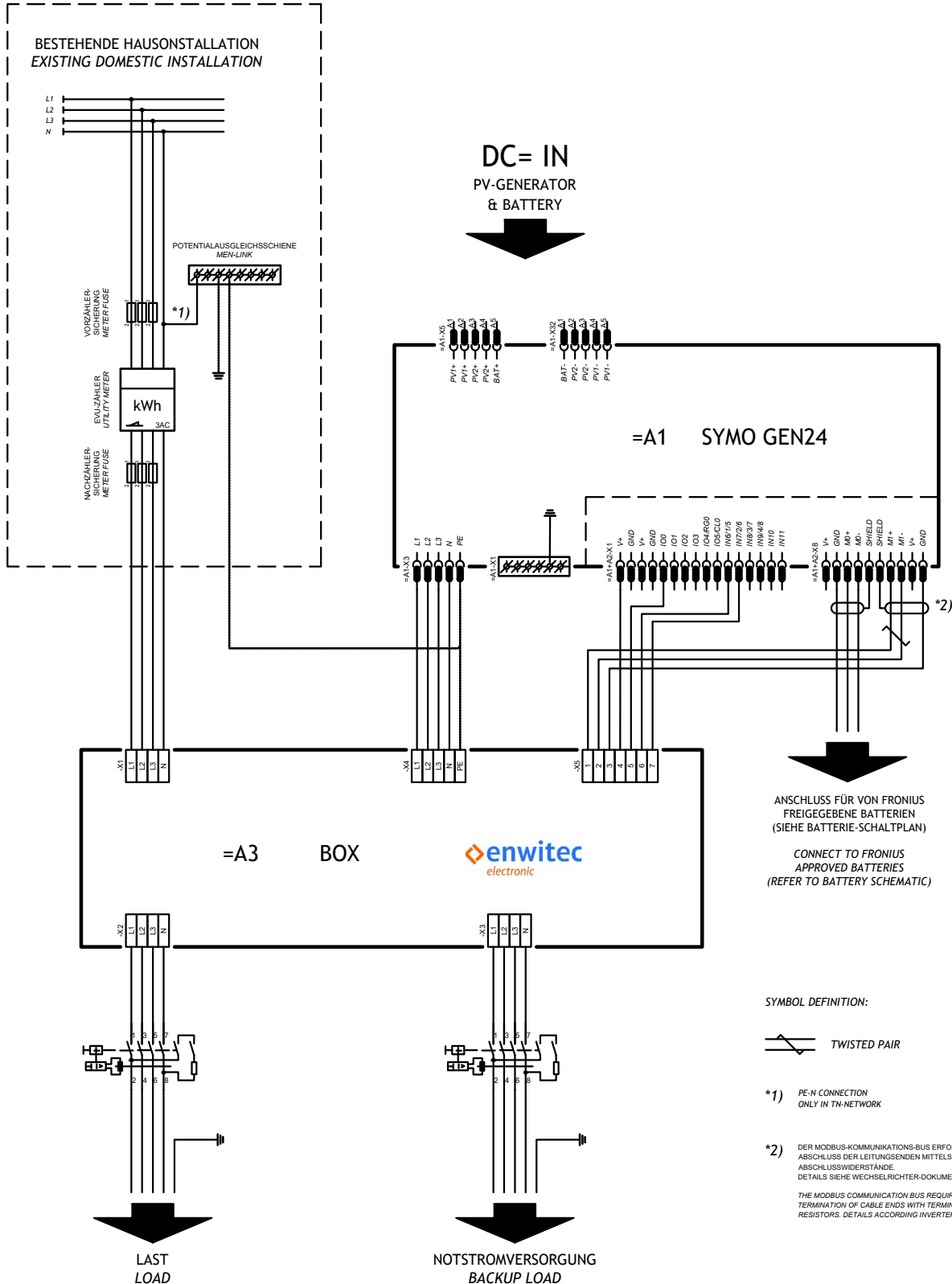
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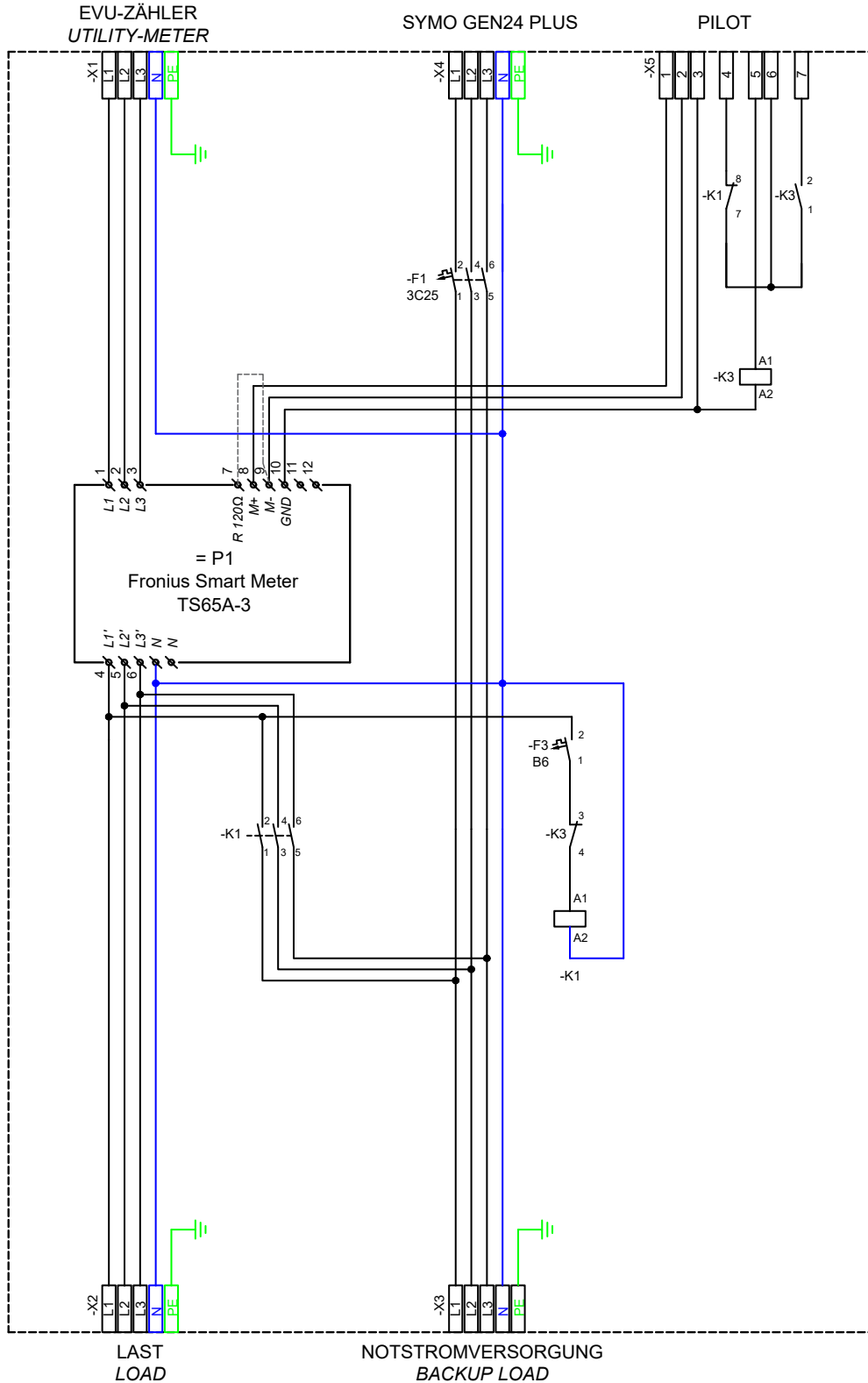
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INTERCONNECTION ENVIRONMENT - SYMO GEN24 PLUS



INTERNAL CIRCUITRY

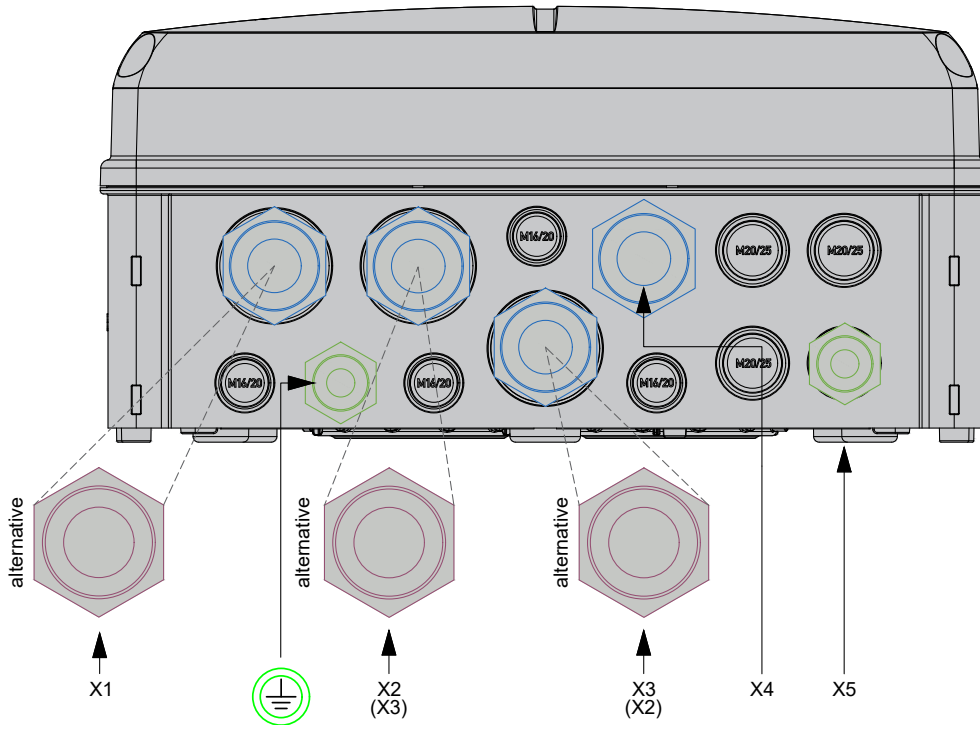


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CABLE ENTRY



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: 15px; height: 15px; background-color: #0070C0; border: 1px solid black;"></div> M32 <div style="width: 15px; height: 15px; 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: 15px; height: 15px; background-color: #0070C0; border: 1px solid black;"></div> M32 <div style="width: 15px; height: 15px; 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: 15px; height: 15px; background-color: #0070C0; border: 1px solid black;"></div> M32 <div style="width: 15px; height: 15px; 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: 15px; height: 15px; 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: 15px; height: 15px; 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: 15px; height: 15px; 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			TN-C ⁺⁺
Grid disconnection			three-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]	6

CIRCUIT BREAKERS

F1	Symo GEN24 Plus	MCB [A]	3C25
F3	Power supply T1	MCB [A]	B6

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

K1	Grid disconnection	AC1 [A]	63
K3	Communication	AC1 [A]	20
K1	Control voltage	[VAC]	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.

⁺⁺ Grid operator's system (mains connection): **TN-C** only! The separation of PEN into PE + N has done before connecting the Switchover Box (point of view: mains connection!)
TN-S system customer's side! **NO** TN-C in customers side! **NO** TT system in general!

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TECNICAL DATA

GENERAL DATA

• zutreffend / - nicht zutreffend

Dimensions W x H x D (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) t _a = 40°C t _a = 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

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)
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EC DECLARATION OF CONFORMITY

The product, designation: **3PH_FRO_BBD3P_20KW_3PH**

article number: **10017485**

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: **2023**

Date of issue: **24.05.2023**

enwitec electronic GmbH



Name / Signature

Johann Wimmer
CEO