

Art.Nr. 10015613

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

enwitec electronic GmbH
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| | |
|----------------------|--|
| 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 Plus 6.0/8.0/10.0/12.0 SC |
| 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

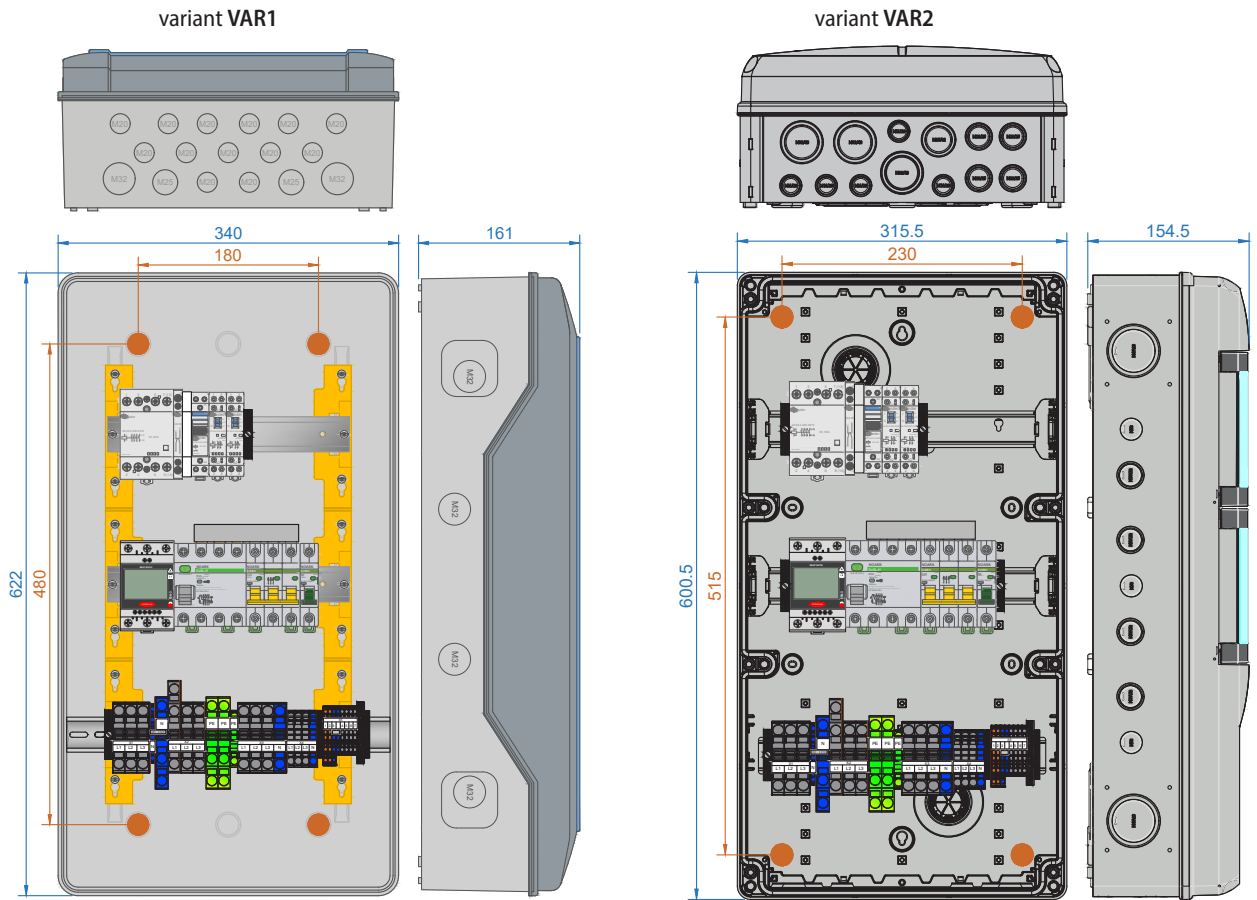
Fastening points

„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: July 2024

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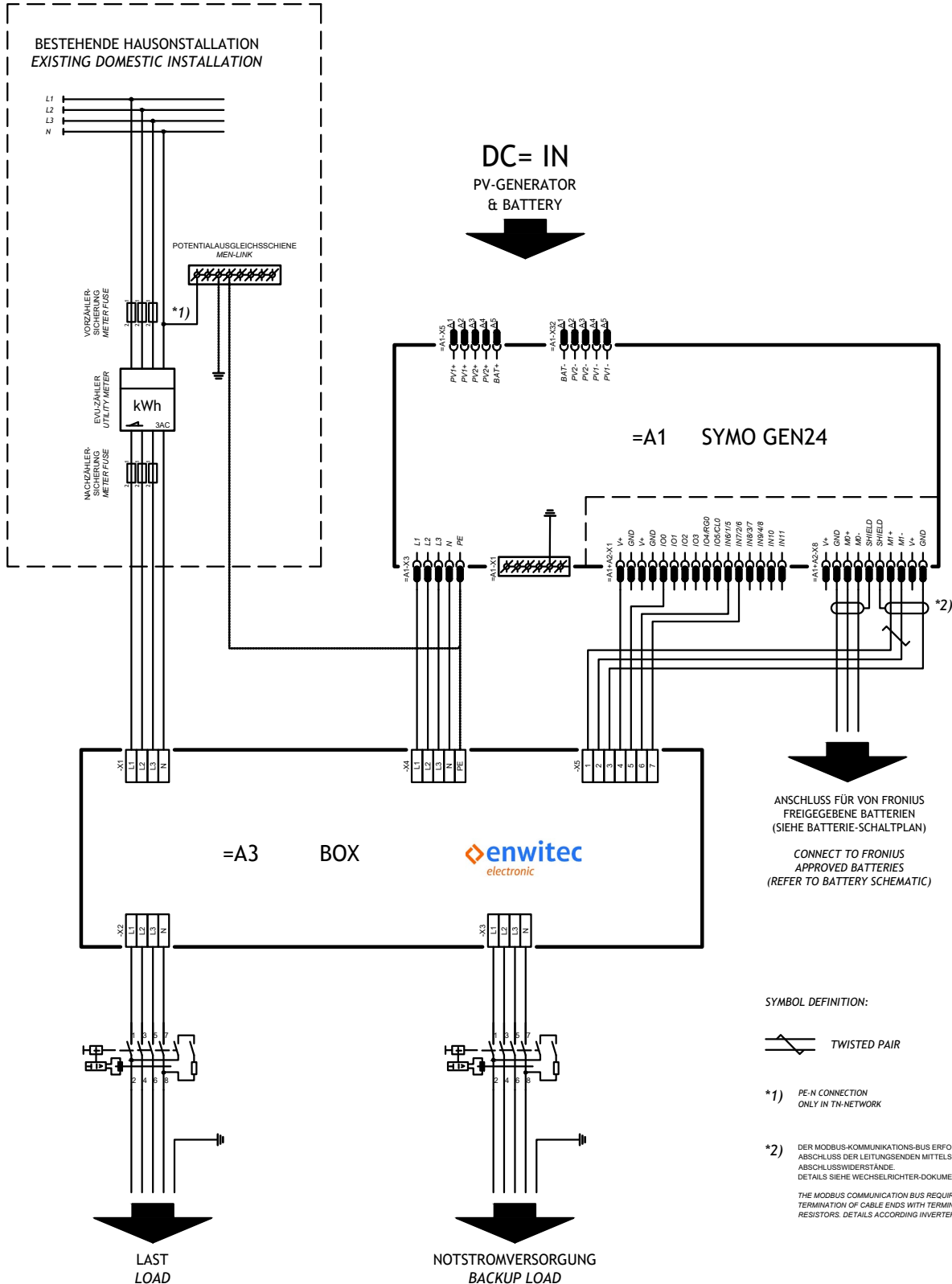
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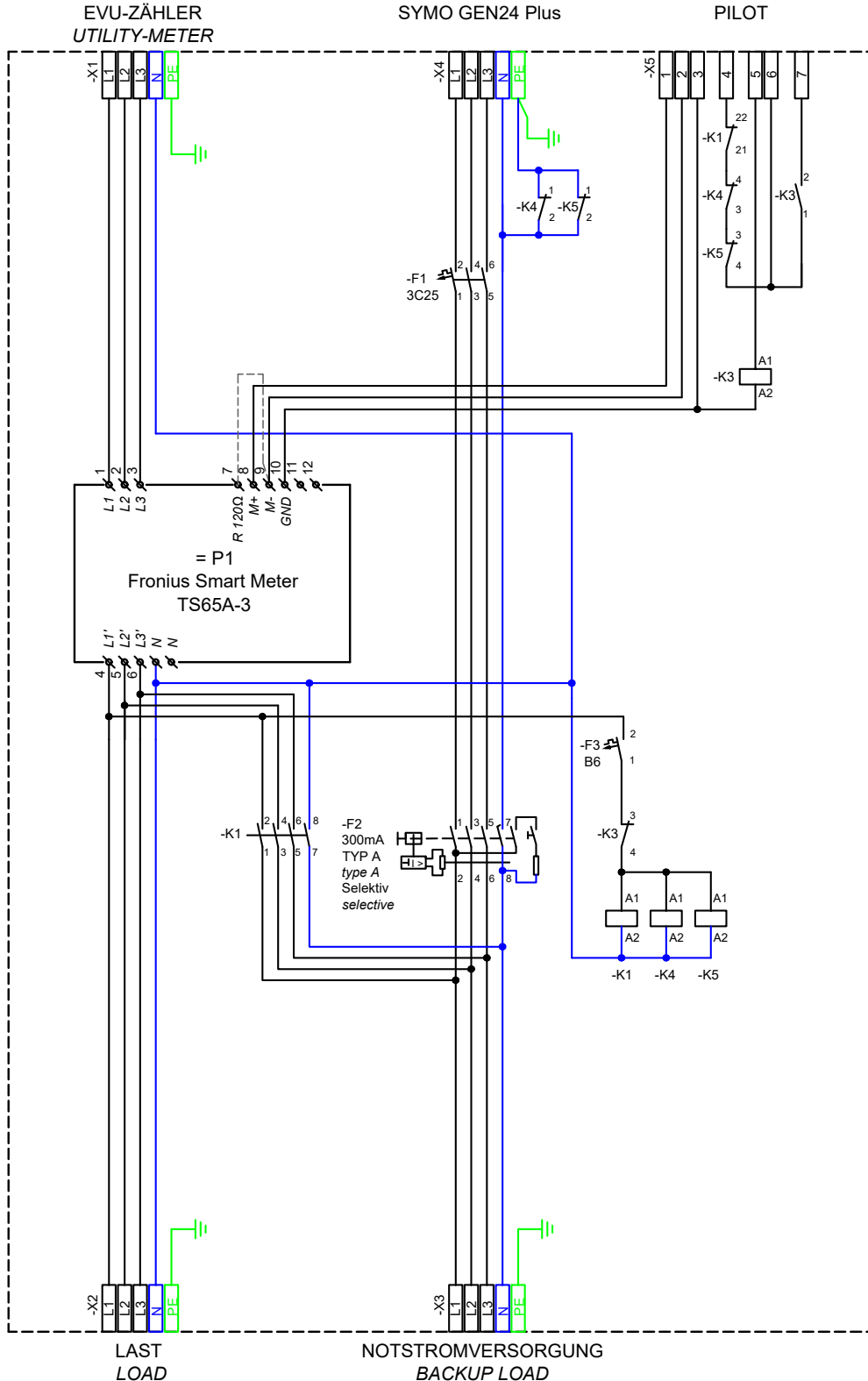
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INTERCONNECTION ENVIRONMENT - SYMO GEN24 PLUS



INTERNAL CIRCUITRY



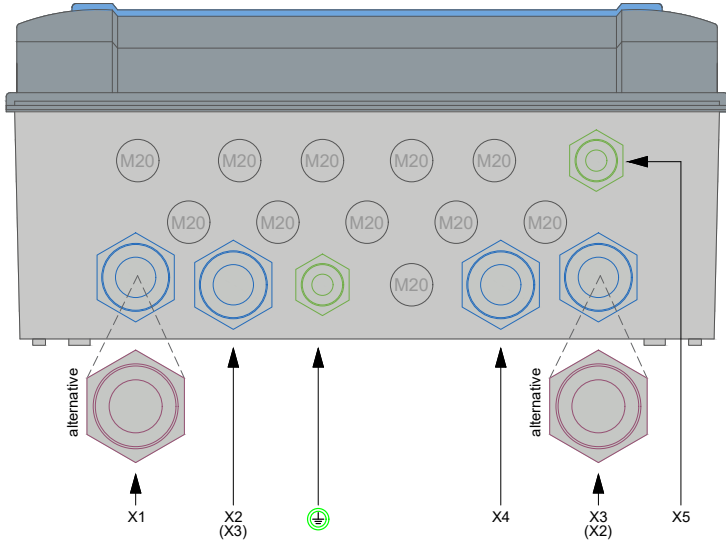
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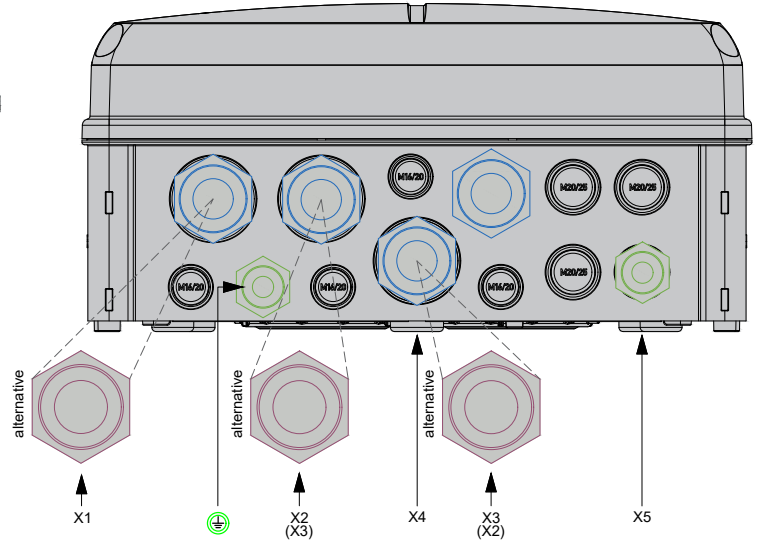
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CABLE ENTRY

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 |
|-----------------------|--|----------|

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

