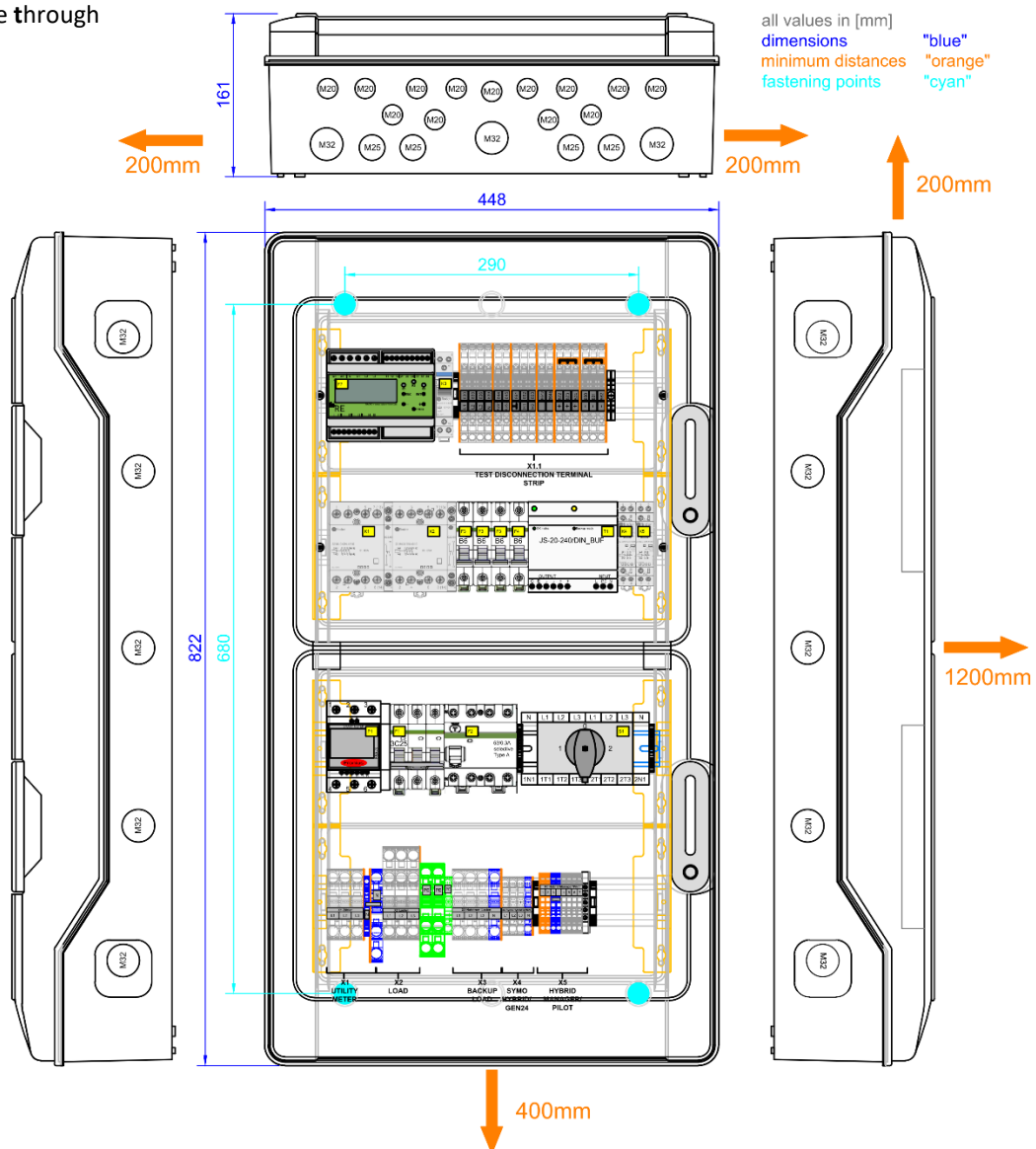


# DATA SHEET

## Switchover Box for the Fronius Energy Package

|                      |   |
|----------------------|---|
| enwitec order number | <b>10015612_V1.0</b> -All-pole; -incl. NA-protection Tele; incl. source changeover switch and suitable for FRT* demand-<br>(previous 10011645_V1.3)   |
| Type designation     | <b>Switchover Box / Automatic transfer switch box</b>   |
| Matchcode            | <b>3PH_FRO_BBDAP_20KW_3PH_FRT_1.0_NA_Tele_QU</b>  |
| Application          | Fronius Energy Package - Energy storage system  |
| Battery-inverter     | <ul style="list-style-type: none"> <li>• Symo GEN24 6.0 Plus/8.0 Plus/10.0 Plus</li> <li>• Symo Hybrid 3.0-3-S/4.0-3-S/5.0-3-S</li> </ul>   |
| Monitoring & Control | <ul style="list-style-type: none"> <li>• Fronius Smart Meter TS65A-3 is integrated</li> <li>• Integrated NA-protection - type Tele NA003-M64; inclusive test disconnection terminal strip - testsockets <math>\varnothing</math> 4mm</li> <li>• Integrated manually operated source changeover switch for the backup-loads (due to a bypass operation -GRID/0/Backup )</li> </ul> |
| Grid structure       | • 3PH 230/400V - TT or TN-S System; <b>NOT ANY</b> TN-C System  |

\*FRT Fault ride through



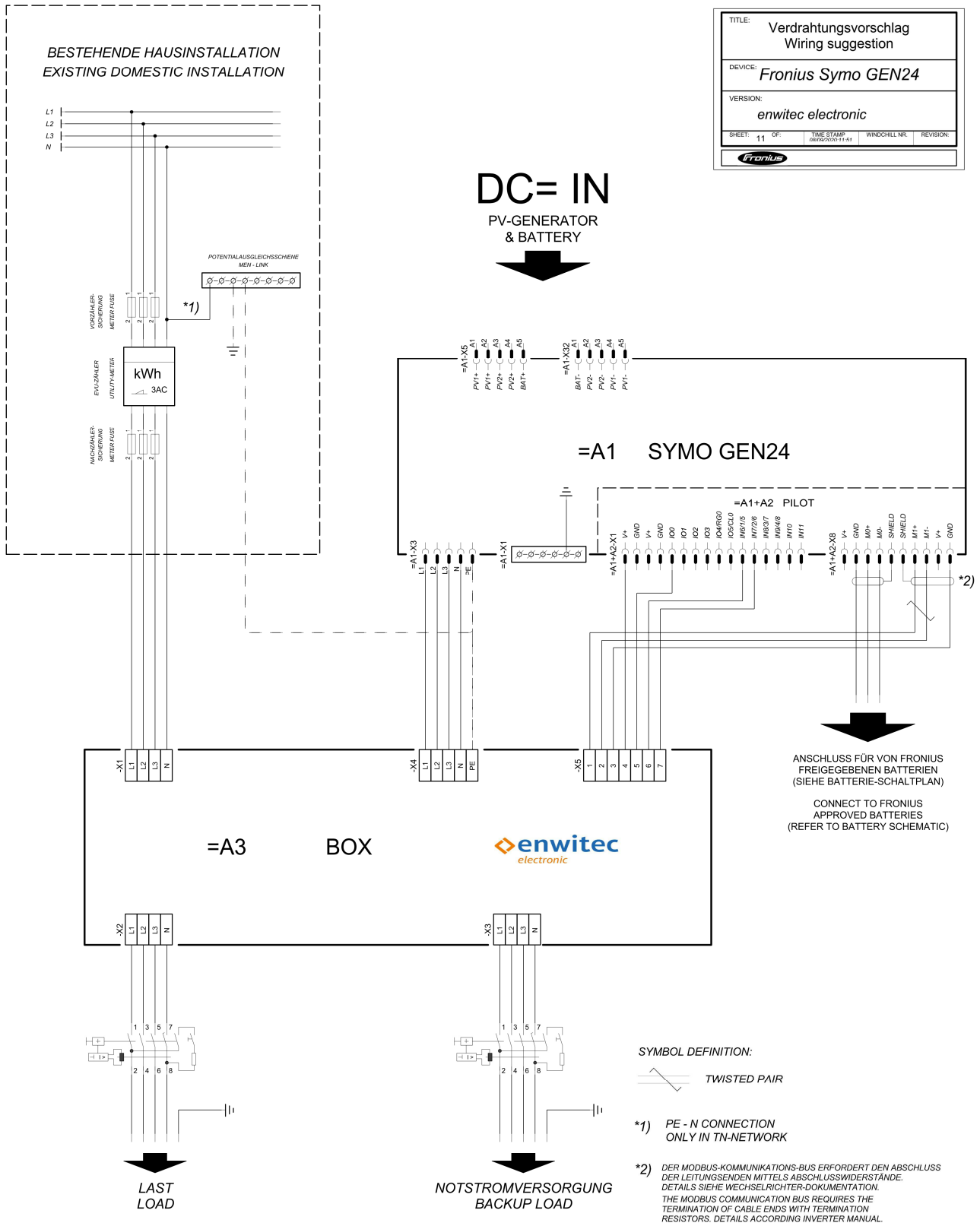
# DATA SHEET

## Switchover Box for the Fronius Energy Package

### Circuitry overview - Symo GEN24 Plus



Please observe the manual "Switchover boxes for Fronius Energy Package"



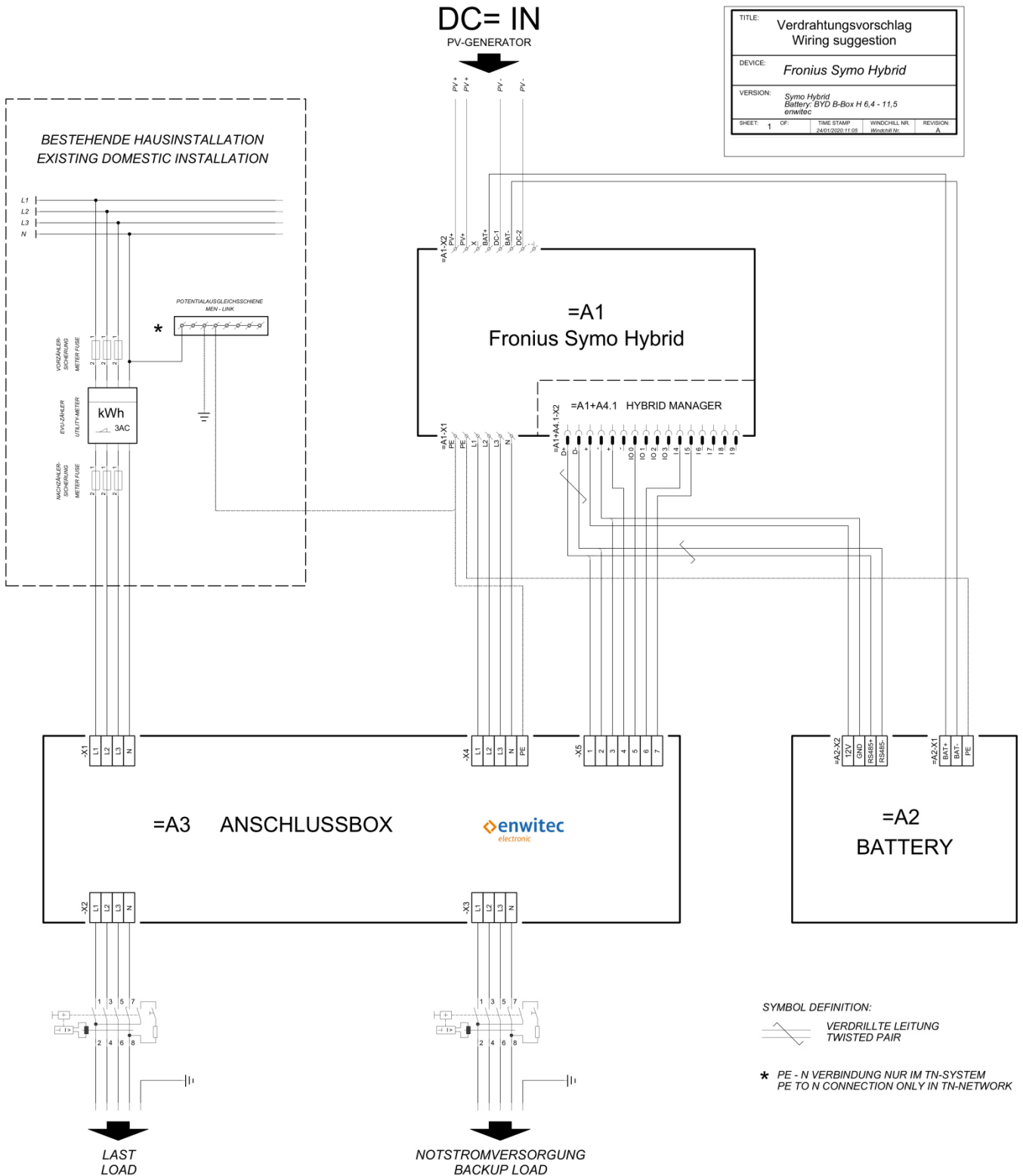
# DATA SHEET

## Switchover Box for the Fronius Energy Package

### Circuitry overview - Symo Hybrid



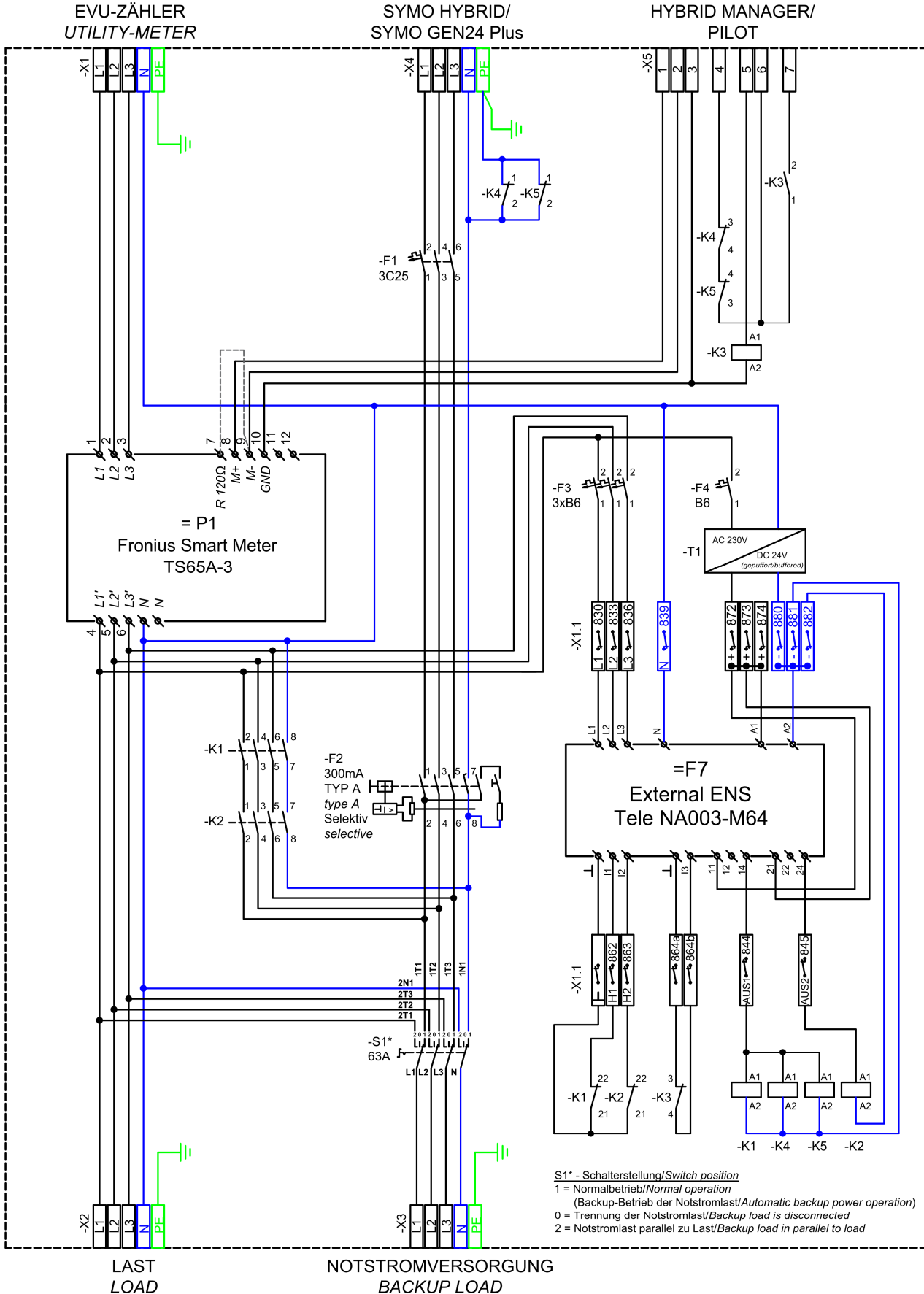
Please observe the manual "Switchover boxes for Fronius Energy Package"



# DATA SHEET

## Switchover Box for the Fronius Energy Package

### Internal wiring - Switchover Box 10015612\_1.0



# DATA SHEET

## Switchover Box for the Fronius Energy Package

### TECHNICAL DATA

#### NOMINAL VALUES

|   |         |                |
|---|---------|----------------|
| Rated voltage                           | 3PH [V] | 230/400        |
| Rated insulation voltage                | [V]     | 400            |
| Rated frequency                         | [Hz]    | 50/60          |
| Max. prospective* short circuit current | [kA]    | 10             |
| Permitted grid structure                |         | <b>TT/TN-S</b> |
| Max. value of pre-fuses                 | [A]     | 63(gL/gG)      |
| Grid disconnection                      |         | All pole       |
| Max. thermal power                      | [kW]    | 20             |
| Standby-loss ca.                        | [W]     | 17,5           |

#### CIRCUIT BREAKERS (MCBs)

|    |                                    |          |
|----|------------------------------------|----------|
| F1 | Symo Hybrid/Symo GEN24 Plus        | 1 x 3C25 |
| F3 | Measuring circuit – Tele NA003-M64 | 3 x B6A  |
| F4 | Feed – Power supply T1             | 1 x B6   |

#### RESIDUAL CURRENT DEVICE (RCCB) - type "A" selective

|    |                             |       |
|----|-----------------------------|-------|
| F2 | Symo Hybrid/Symo GEN24 Plus | 300mA |
|----|-----------------------------|-------|


#### CONTACTORS IEC/EN61095; IEC/EN 60947-1; IEC 60947-5-1

|             |                      |        |    |
|-------------|----------------------|--------|----|
| K1/K2       | "Grid disconnection" | AC1[A] | 63 |
| K4/K5       | "Grounding device"   | AC1[A] | 25 |
| K3          | "Communication"      | AC1[A] | 20 |
| K1/K2/K4/K5 | "Control voltage"    | DC[V]  | 24 |
| K3          | "Control voltage"    | DC[V]  | 12 |
| Hum-free    |                      |        | •  |


#### MANUALLY OPERATED SOURCE CHANGEOVER SWITCH (S1)

|                          |       |    |
|--------------------------|-------|----|
| Operational current AC21 | AC[A] | 63 |
|--------------------------|-------|----|

#### CONNECTIONS/TERMINALS - Max. cross section (Cu)

|   |                             |                    |          |
|---|-----------------------------|--------------------|----------|
| X1  | "AC-Grid"                   | [mm <sup>2</sup> ] | 16(25)   |
| X2  | "Loads - Not backuped"      | [mm <sup>2</sup> ] | 16(25)   |
| X3  | "Backup Load"               | [mm <sup>2</sup> ] | 16(25)   |
| X4  | Symo Hybrid/Symo GEN24 Plus | [mm <sup>2</sup> ] | 6(10)    |
|  | "Equipotential bonding"     | [mm <sup>2</sup> ] | 16(25)   |
| X5  | Hybrid Manager/Pilot        | [mm <sup>2</sup> ] | 1,5(2,5) |

#### CABLE GLANDS - Clamping range [ Ø mm]

|   |                             |         |             |
|---|-----------------------------|---------|-------------|
| X1  | "AC-Grid"                   | M32/M40 | 13-21/16-28 |
| X2  | "Loads - Not backuped"      | M32/M40 | 13-21/16-28 |
| X3  | "Backup Load"               | M32/M40 | 13-21/16-28 |
| X4  | Symo Hybrid/Symo GEN24 Plus | M32     | 13-21       |
|  | "Equipotential bonding"     | M20     | 7-13        |
| X5  | "Communication cable"       | M20     | 7-13        |

• = met    "-" = not met

#### GENERAL DATA

|                                   |                  |             |
|-----------------------------------|------------------|-------------|
| Width                             | [mm]             | 448         |
| Height                            | [mm]             | 822         |
| Depth                             | [mm]             | 161         |
| Weight ca.                        | [kG]             | 13,5        |
| Operating temperature range       | [°C]             | -5...+40    |
| Temperatur - transport/storage    | [°C]             | -25...+55   |
| Temporary max. 24 hours           | [°C]             | +70°C       |
| Humidity - condensing allowed     | •/-              | -           |
| Humidity - permitted range        | [%]              | 5...95      |
| Max. altitude above sea level     | [m]              | 2000        |
| Protection class IP               | (EN 60529)       | 65          |
| Outdoor-application permitted     | •/-              | -           |
| Installation type                 |                  | Indoor area |
| Protection against electric shock | (EN61140)        | II          |
| Cabinet - material                |                  | PC          |
| RoHS-conformity                   | (2011/65/EU)     | •           |
| Cabinet's colour                  | (similar to RAL) | 7035        |
| Way of mounting                   |                  | Wall        |
| Cover                             |                  | transparent |
| Locking system                    |                  | tool-free   |

#### STANDARDS

|   |            |   |
|---|------------|---|
| Switching devices                                       | EN 61439-1 | • |
|   | EN 61439-2 | • |
| Distribution boards - operated by ordinary people (DBO) | EN 61439-3 | • |

#### SMART METER

|              |         |
|--------------|---------|
| Manufacturer | Fronius |
| Type         | TS65A-3 |

#### GRID- AND PLANT PROTECTION (NA-protection) - RELAY

|   |              |
|---|--------------|
| Manufacturer  | Tele         |
| Type  | NA003-M64    |
| Presettet standard - VDE-AR-N                         | 4105:2018-11 |
| Test-disconnection terminal strip (testsockets Ø 4mm) | •            |
| Power supply T1 (buffered)                            | DC[V] 24     |

#### MISCELLANEOUS

|                        |          |
|------------------------|----------|
| Customer tariff number | 85371098 |
|------------------------|----------|

\* characterizes the max. uninfluenced short circuit current of the network-connecting point (mains supply)