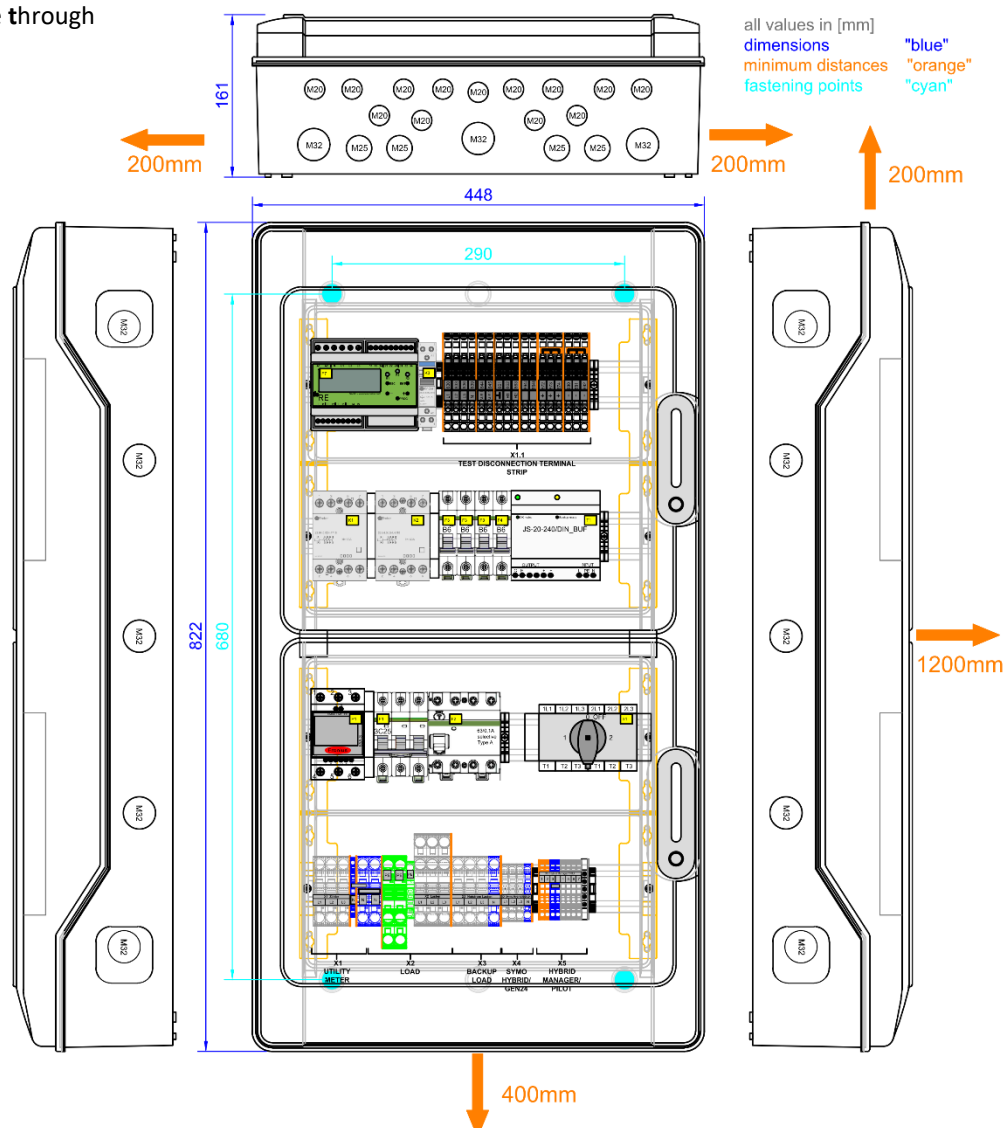


DATA SHEET

Switchover Box for the Fronius Energy Package

enwitec order number	10015585_V1.0 -Three-pole; incl. NA-protection Tele; incl. source changeover switch and suitable for FRT* demand- (vormals 10011638_V1.3)
Type designation	Switchover Box / Automatic transfer switch box
Matchcode	3PH_FRO_BBD3P_20KW_3PH_FRT_1.0_NA_Tele_QU
Application	Fronius Energy Package - Energy storage system
Battery-inverter	• Symo GEN24 6.0 Plus/8.0 Plus/10.0 Plus • Symo Hybrid 3.0-3-S/4.0-3-S/5.0-3-S
Monitoring & Control	• Fronius Smart Meter TS65A-3 is integrated • Integrated NA-protection - type NA003-M64; inclusive test disconnection terminal strip - testsockets Ø 4mm • Integrated manually operated source changeover switch <u>for the backup-loads</u> (due to a bypass operation -GRID/0/Backup)
Grid structure	• 3PH 230/400V - for TN-S System only! NOT ANY TT-System/TN-C System

* FRT Fault ride through



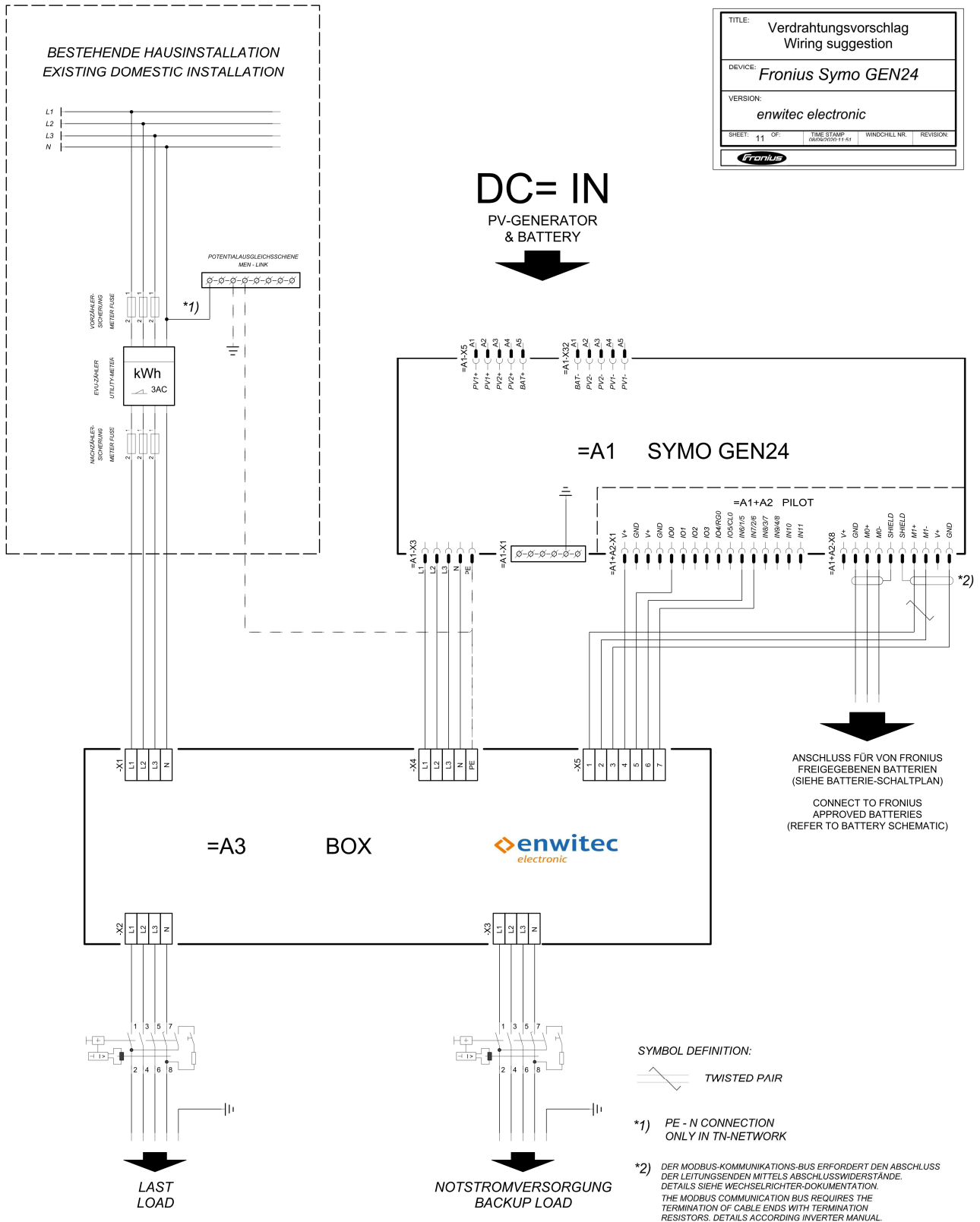
DATA SHEET

Switchover Box for the Fronius Energy Package

Circuitry overview - Symo GEN24 Plus



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



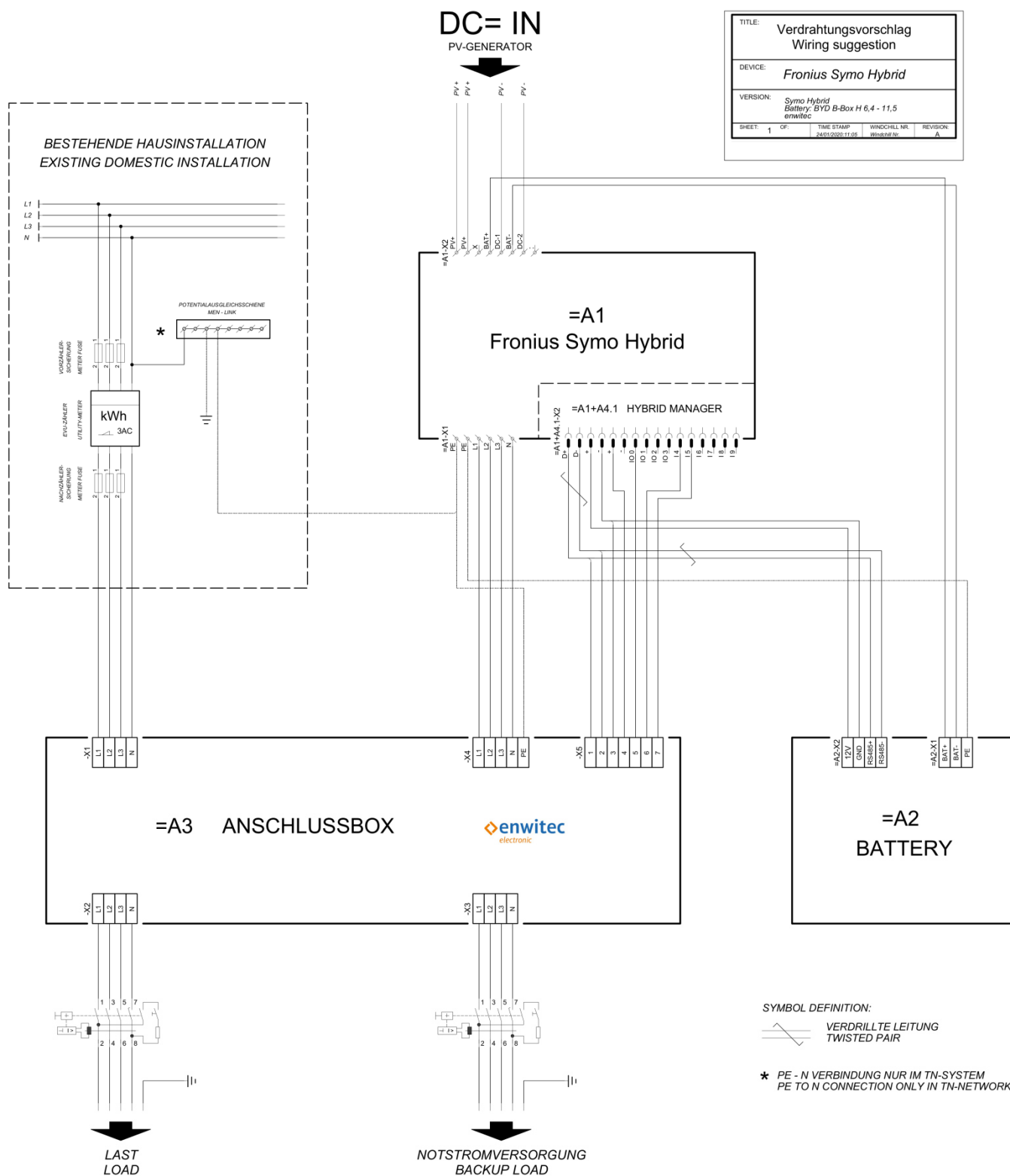
DATA SHEET

Switchover Box for the Fronius Energy Package

Circuitry overview - Symo Hybrid



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



**EVU-ZÄHLER
UTILITY-METER**

**SYMO HYBRID/
SYMO GEN24 Plus**

**HYBRID MANAGER/
PILOT**

**LAST
LOAD**

**NOTSTROMVERSORGUNG
BACKUP LOAD**

**= P1
Fronius Smart Meter
TS65A-3**

**= F7
External ENS
Tele NA003-M64**

S1* - Schalterstellung/ Switch position
 1 = Normalbetrieb/ Normal operation
 (Backup-Betrieb der Notstromlast/ Automatic backup power operation)
 0 = Trennung der Notstromlast/ Backup load is disconnected
 2 = Notstromlast parallel zu Last/ Backup load in parallel to load

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		TN-S
Max. value of pre-fuses	[A]	63(gL/gG)
Grid disconnection		Three-pole
Max. thermal power	[kW]	20
Standby-loss ca.	[W]	13,5

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	100mA
----	-----------------------------	-------

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

K1/K2	"Grid disconnection"	AC1[A]	63
K3	"Communication"	AC1[A]	20
K1/K2	"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 ²]	16(25)
X2	"Loads - Not backed up"	[mm ²]	16(25)
X3	"Backup Load"	[mm ²]	16(25)
X4	Symo Hybrid/Symo GEN24 Plus	[mm ²]	6(10)
	"Equipotential bonding"	[mm ²]	16(25)
X5	Hybrid Manager/Pilot	[mm ²]	1,5(2,5)

CABLE GLANDS - Clamping range [Ø mm]

X1	"AC-Grid"	M32/M40	13-21/16-28
X2	"Loads - Not backed up"	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]	16,5
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 OVE TOR R25 NS ASYNC	•	
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)