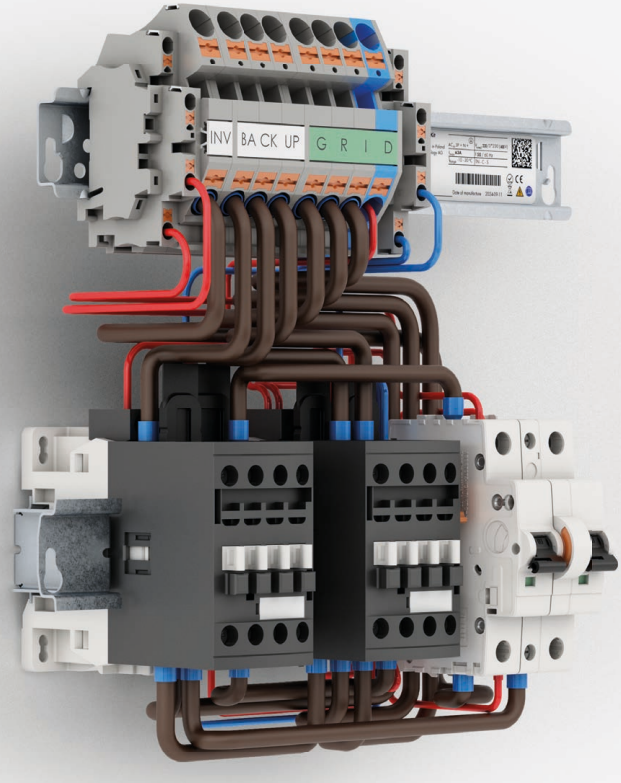
/ BU-SBSE-3P-50



SMA Backup 3P Kit

High-performance and reliable backup power supply
Automatic switching device with phase coupling

Flexible
- Compatible with the Sunny Boy Smart Energy in the TN-C-S grid configuration
- Protection of all single-phase loads (max. 63 A final fuse)
- Adjustable switching times between backup and grid operation

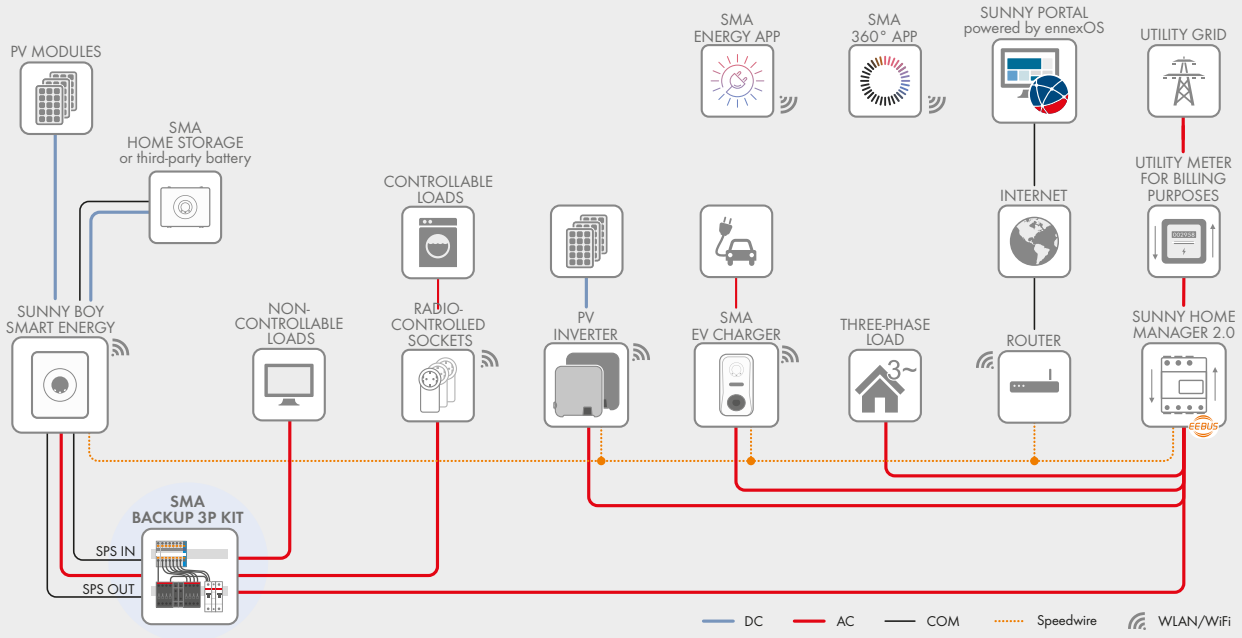
Easy installation
- Rail mounting in the meter cabinet
- Wiring made easy through push-in terminals

Convenience and safety
- Automatic supply of the loads in the event of a grid failure through grid failure detection
- Low self-consumption in parallel grid operation (below 1 W)

The SMA Backup 3P Kit offers a high-performance and reliable automatic backup solution that supplies your home with power on all three phases during a grid failure, thanks to phase coupling.

In the event of a grid failure, the system supplies single-phase loads on all phases of the house connection via the single-phase hybrid inverter Sunny Boy Smart Energy (SB-SExx-50 in the TN-C-S grid configuration). Thanks to phase coupling, high single-phase loads can be operated on all line conductors, while only three-phase loads remain unsupplied.
The SMA Backup 3P Kit can be easily integrated into the existing meter cabinet without the need for replacement. During parallel grid operation, the energy consumption is extremely low and is less than 1 W.
Thanks to the automatic switching between grid and backup operation, residents remain well supplied, even in the event of a power outage.

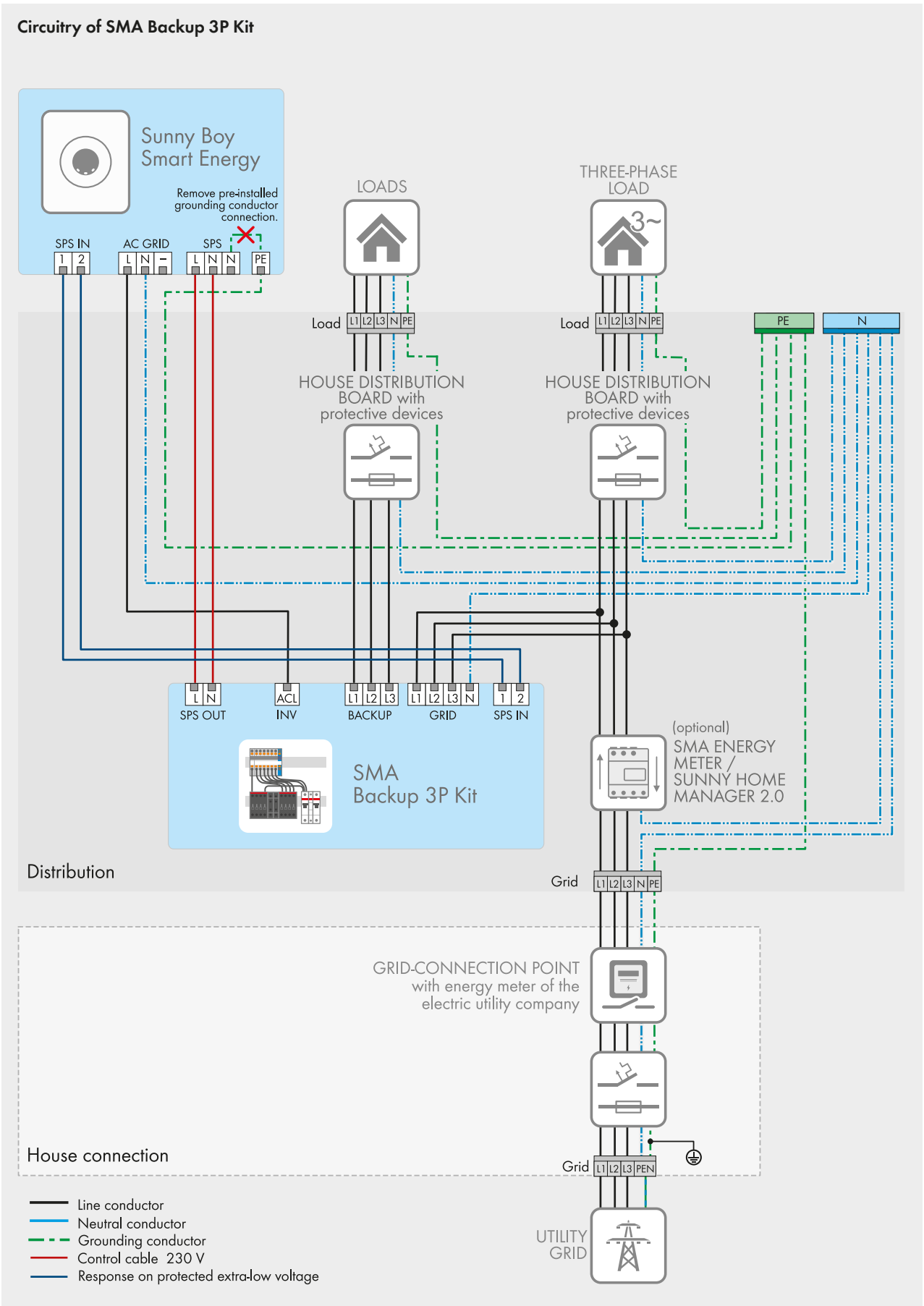
System overview (example)



Technical Data	SMA Backup 3P Kit
Grid-parallel operation	
Input voltage	3PH; 230 V / 400 V
AC grid frequency / range	50 Hz
Maximum pre-fuse on the grid side	63 A
Number of digital inputs (fast stop)	1 (break contact)
Backup	
Rated power (at 230 V, 50 Hz): 7300 W	7300 W
Max. apparent AC power (at 230 V, 50 Hz)	7300 VA
Output power / Output apparent power < 100 ms	11040 W / 11040 VA
Output power / Output apparent power < 30 s	9200 W / 9200 VA
Nominal AC voltage	230 V / 240 V
Active power limit AC frequency	50 Hz
Switching mode	automatically
Switching times:	
Parallel grid operation in backup system	1 s to 600 s (default: 5 s)
Backup system in parallel grid operation	0 s to 600 s (default: 5 s)
Compatible with the following inverters	
Sunny Boy Smart Energy	SBSE3.6-50, SBSE4.0-50, SBSE5.0-50, SBSE6.0-50
Compatible grid configuration	
TN-C-S	TN-C-S
General Data	
Dimensions (W / H / D)	212 mm x 250 mm x 103 mm
Weight	2.3 kg
Installation site	Indoors
Mounting type	Rail mounting in the meter cabinet
Degree of protection (as per IEC 60529)	IP20
Operating temperature range	−10 °C to +30 °C (+14 °F to +86 °F)
Storage/transport temperature range	−40°C to +70°C (−40°F to +158°F)
Maximum permissible value for relative humidity (non-condensing)	4% to 100%
Maximum height above mean sea level	3,000 m
Self-consumption in parallel grid operation	< 1 W
Self-consumption in backup system	4 W (no-load operation)
Model type number	BU-SBSE-3P-50

● Standard features ○ Optional features – Not available Data in nominal conditions Last revision: November 2024

Circuitry of SMA Backup 3P Kit



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