



PRODUCT PRESENTATION PROTECT C (6-10kVA)

DATA & IT, C-UPS

AEG
POWER SOLUTIONS

AEG'S COMMERCIAL COMPACT-UPS PRODUCT PORTFOLIO AND FIELD APPLICATION

Surge protection	Home, SoHo	PROTECT BASIC Power strip for all standard applications 	PROTECT TRAVEL Security on the move for safety charging of your devices 	PROTECT ENTERTAINMENT Intelligent protection for entertainment equipment with master-slave-function 	PROTECT TWINPOWER Security for flexible connectivity and safe power supply 	PROTECT BUSINESS Business solution with surge protection and USB-Charger 	PROTECT OFFICE Compact protection for PC and peripheral equipment 
		PROTECT HOME 600 VA Complete protection for multimedia applications 	PROTECT alpha 450 bis 1200 VA Suitable protection for SoHo applications, telephone equipment, NAS systems, PCs 	PROTECT A 500 bis 1400 VA Protection for PCs, workstations and telephone equipment 	PROTECT B 500 bis 1500 VA sinusoidal outputvoltage, Surge protection for telephone, fax, router and network 		
Compact UPS	Office, SoHo, IT segment	PROTECT B.PRO 750 bis 3000 VA Efficient rack / tower UPS for small server and network components with sinusoidal output 	PROTECT C 1000 bis 10000 VA Tower UPS for sensitive networks, intranet and internetserver 	PROTECT D 1000 bis 10000 VA Compact UPS for rack mounted protection of server, network and IT equipment 	PROTECT 1 10000 bis 20000 VA For small data centres, protection of cash till systems & building facilities 	PROTECT 1.M 4000 bis 24000 VA Scalable and modular high performance UPS system for the IT sector 	

CLASSIFICATION ACC. TO UPS PRODUCT NORM IEC 62040-3



	Voltage Phenomenon	Time	e.g.	IEC 62040-3	UPS solution	Arrester solution
PROTECT C	1. Outage - blackouts	> 10 ms		VFD Voltage + Frequency Dependent	Classification 3 Offline	_____
	2. Sags / brownouts					_____
	3. Dynamic overvoltage					_____
	4. Undervoltage	continuous		VI Voltage Independent	Classification 2	_____
	5. Overvoltage	continuous			Line-Interactive	_____
	6. Transients (Surge)	< 4 ms		VFI Voltage + Frequency Independent	Classification 1	Limited protection via UPS (extended protection recommended (10.))
	7. Frequency variations	sporadic			(true) Online	_____
	8. Voltage distortion (Burst)	periodic			real Double-Conversion	see as well 10.
	9. Voltage harmonics	continuous				_____
	10. Lightning	sporadic			_____	Surge- and Over-voltage protection (IEC 60364-5-534)

PRODUCT HIGHLIGHTS



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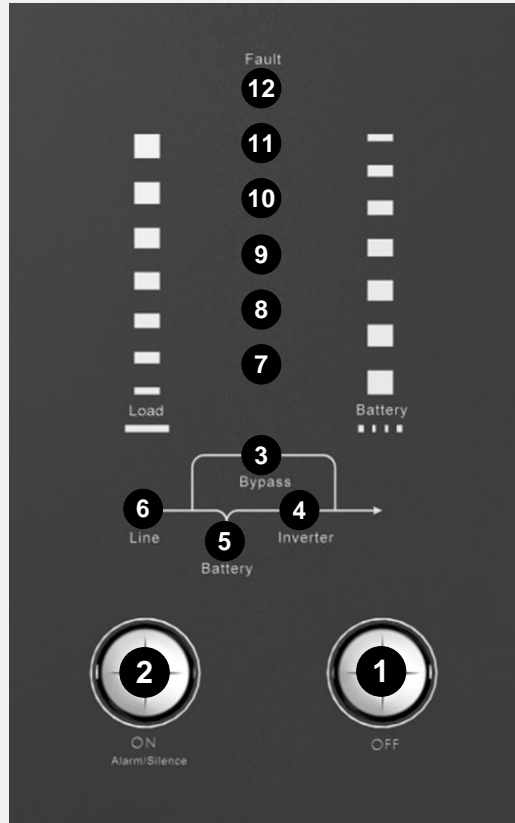
PRODUCT HIGHLIGHTS



- On-Line technologie VFI SS 111*
(double conversion)
- Power factor 0.7 lagging
- Switchable in parallel
- LED display
- Sinus-shaped power feed
- n+x technologie for redundancy and
performance increase
- Micro processor control
- Integrated fault operation security for
manual bypass switch
- Space saving design with integrated
battery system

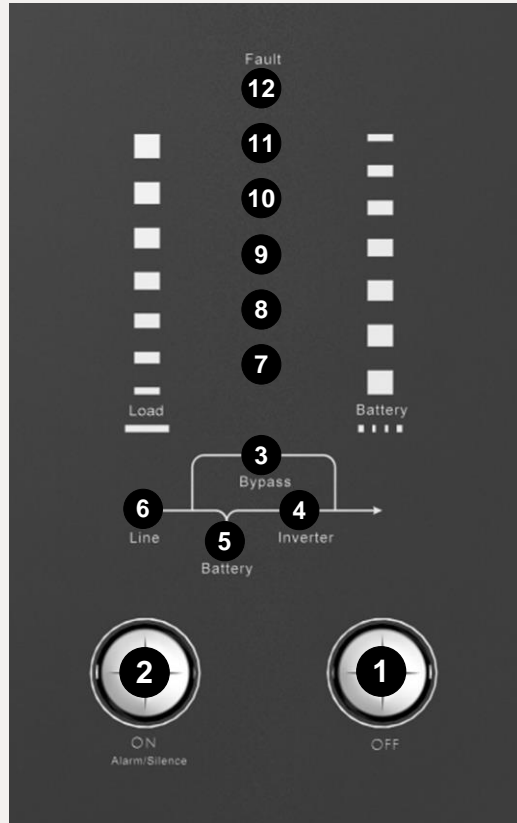
* excl. ECO mode

LED DISPLAY



- 1. OFF push button (OFF):** Press the OFF switch for about 2 seconds to switch on the UPS
- 2. ON push button (ON):** Press the ON switch for about 2 seconds to switch off the UPS.
Deactivate **acoustic alarm**: By pressing this switch for about 2 seconds during the alarm an acoustic alarm can be deactivated.
UPS Test: To execute an UPS self test press this button for about 2 seconds in the normal operation mode.
- 3. LED Bypass:** The orange-coloured LED lights up when the UPS system is supplying voltage provided by the mains power via the bypass.
- 4. LED Inverter:** The green-coloured LED lights up if the UPS system is supplying voltage provided by the mains power via the inverter.
- 5. LED Battery:** The orange-coloured LED lights up when power is supplied by the batteries.
- 6. LED Line (Mains status):** The green LED lights up if mains voltage is in a specified range of tolerance.

LED DISPLAY



7. – 11. LED Bargraph for UPS battery utilization resp. capacity (remaining autonomy time)

These LEDs show the load of the UPS system if the mains power is available (normal operation):

11. orange LED	96%-105%
10. green LED	76%-95%
9. green LED	56%-75%
8. green LED	36%-55%
7. green LED	0%-35%

In the battery operation, the LEDs indicate the capacity of the batteries:

11. orange LED	0%-20%
10. green LED	21%-40%
9. green LED	41%-60%
8. green LED	61%-80%
7. green LED	81%-100%

12. LED Fault: The red LED lights up and an acoustic warning signal is issued continuously when the UPS system is in fault condition.

FRONT VIEW

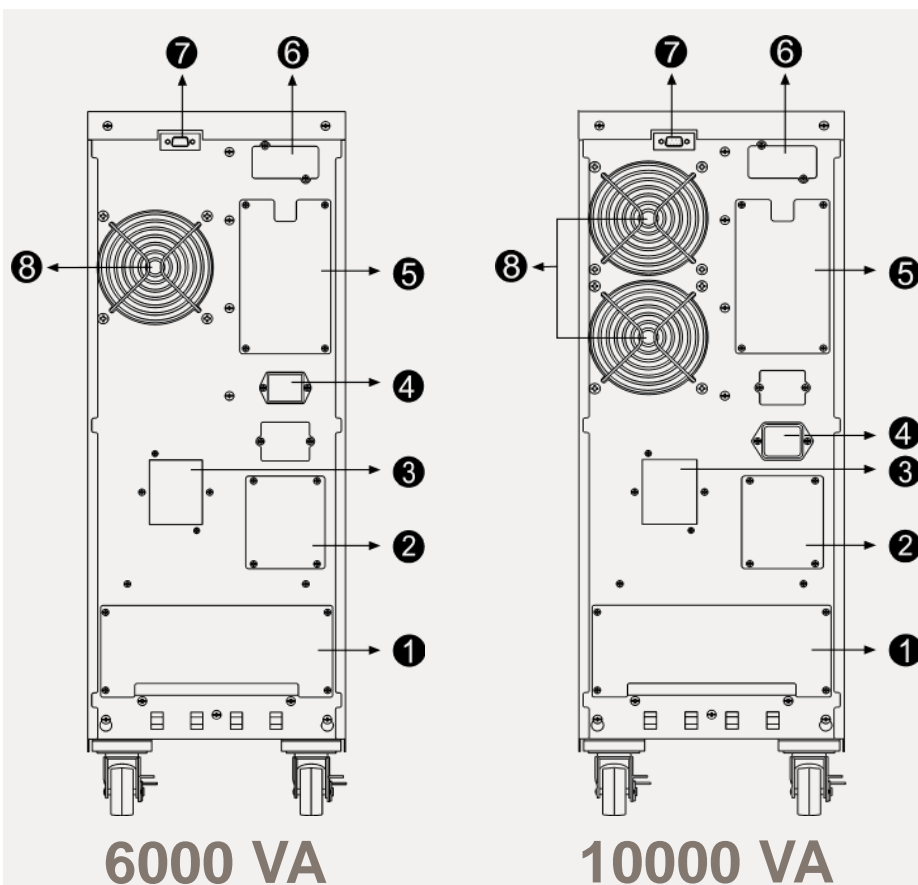


6000 VA



10000 VA

REAR VIEW >> CONNECTIONS



1. Connectors for mains input and output, additional connectors for setting single and parallel operation
2. Manual bypass switch
3. Mains input circuit breaker
4. Connection for external battery module
5. Connector for parallel operation
6. Communication slot for optional expansion cards, e.g. SNMP, USB, AS/400, ...
7. Communication interface RS232 (9-pin SUB-D socket)
8. Vent (Attention: at least 10 cm of free area are required behind the vent for free ventilation!)

REAR VIEW

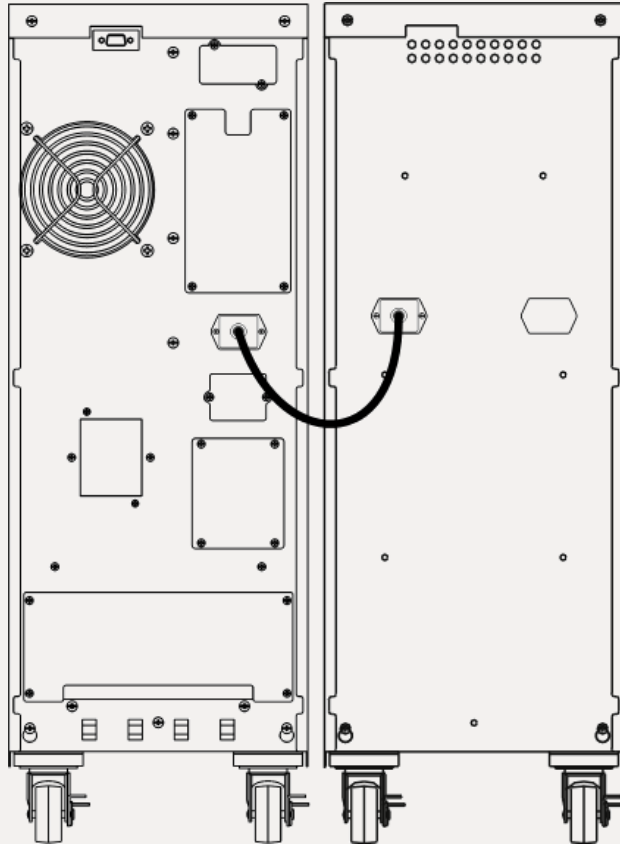


6000 VA



10000 VA

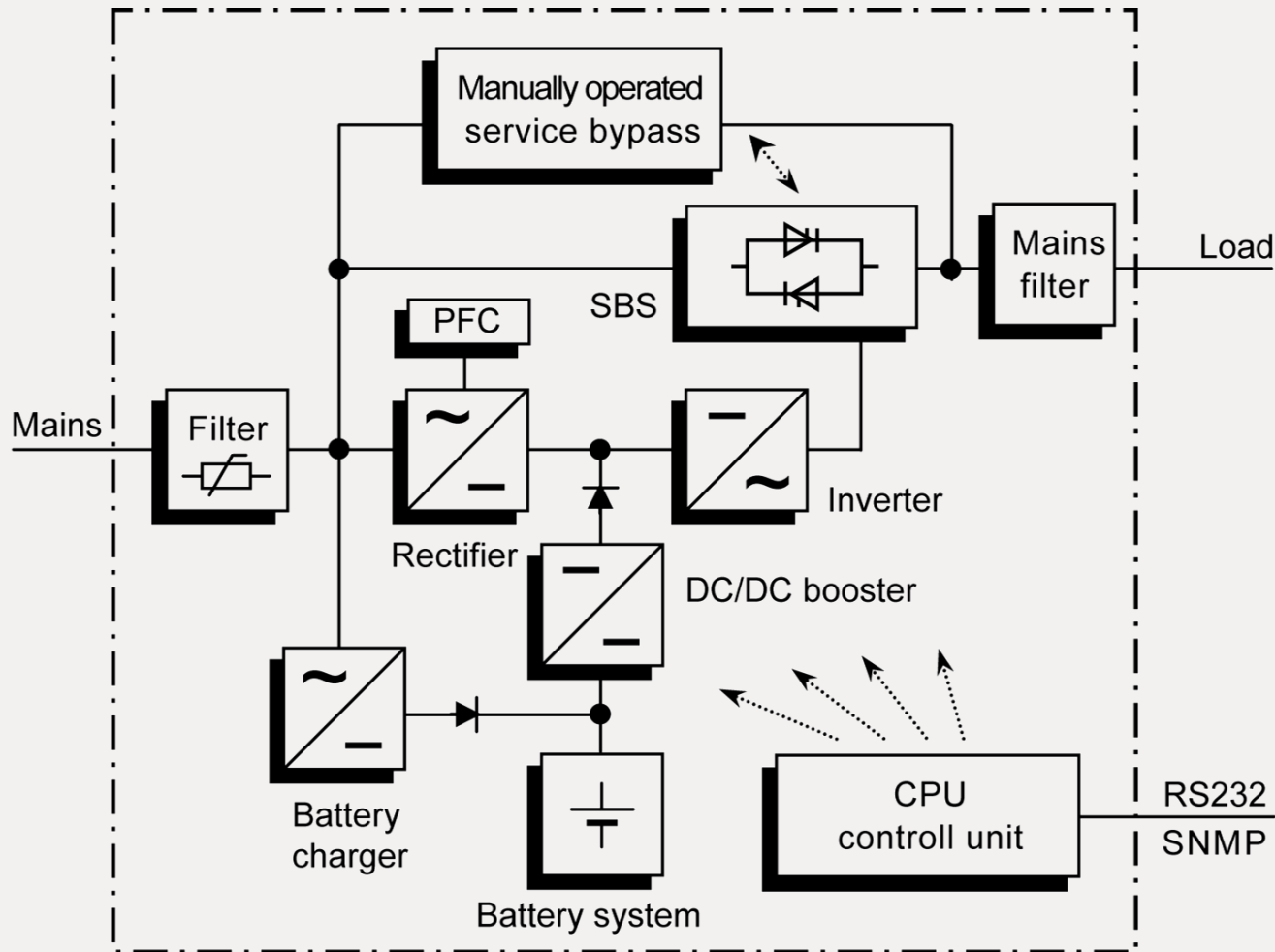
EXTERNAL BATTERY PACKS



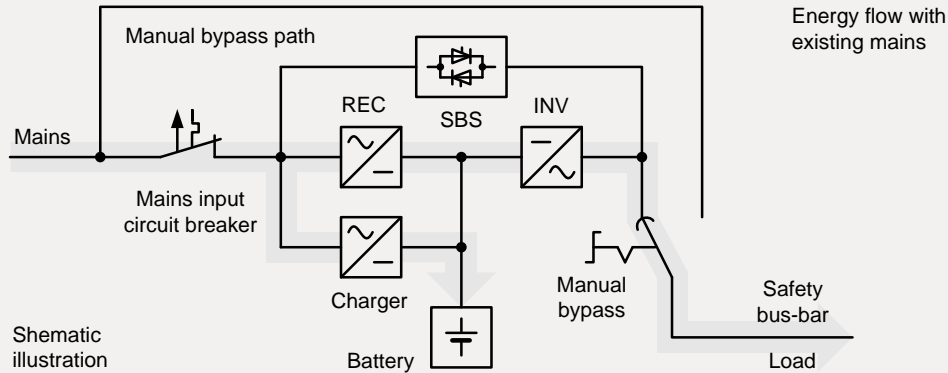
Locked external battery pack connection

To achieve longer backup time, it is possible to connect multi-battery packs. Connect exclusively the following products together:

PROTECT C. 6000	with	PROTECT C. 6000 BP
PROTECT C. 10000	with	PROTECT C. 10000 BP

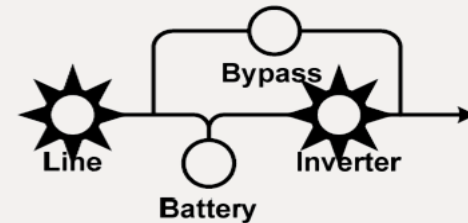


OPERATING MODE >> NORMAL MODE



Once you have connected the UPS to a suitable mains connection, you can start operation using the UPS main switch. Normally, the UPS operates continuously. The UPS now supplies the output with voltage, this being signalled by the symbols mains (LED Line) and inverter (LED Inverter) symbols which light up permanently.

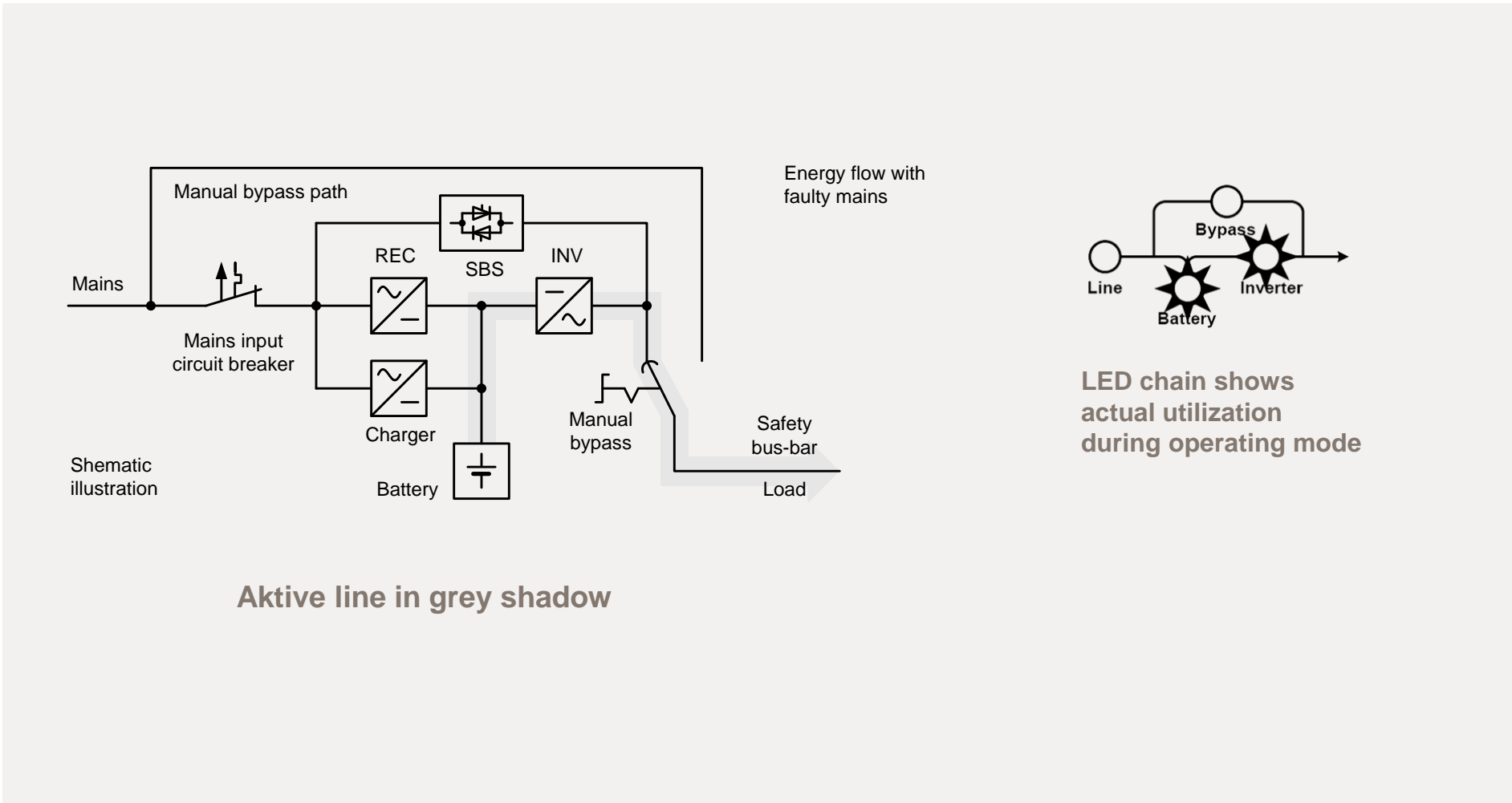
This is often referred to as “online” mode. It offers the greatest protection, in particular when there are mains fluctuations and mains failures, because the loads are supplied continuously with voltage with no interruptions in this operating mode.



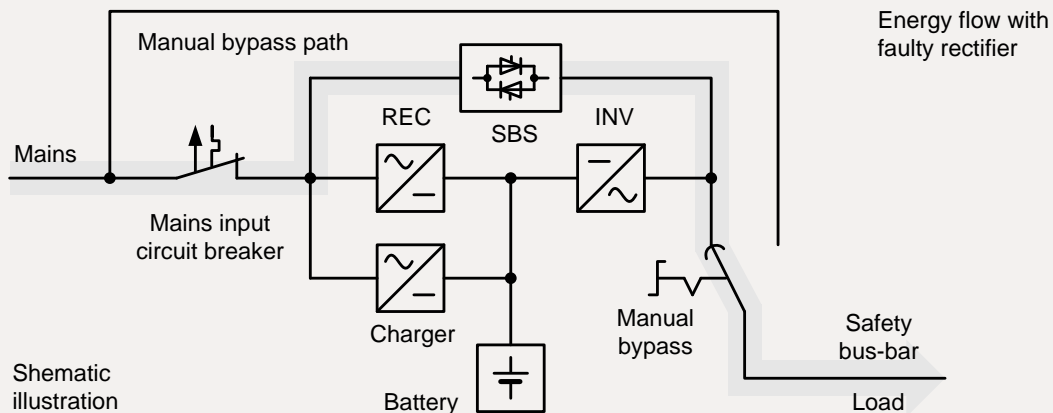
LED chain shows actual utilization during operating mode

Aktive line in grey shadow

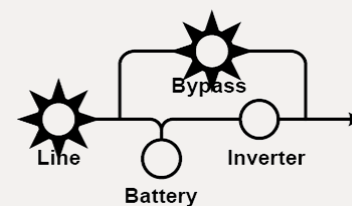
OPERATING MODE >> BATTERY MDOE



OPERATING MODE >> BYPASS MODE

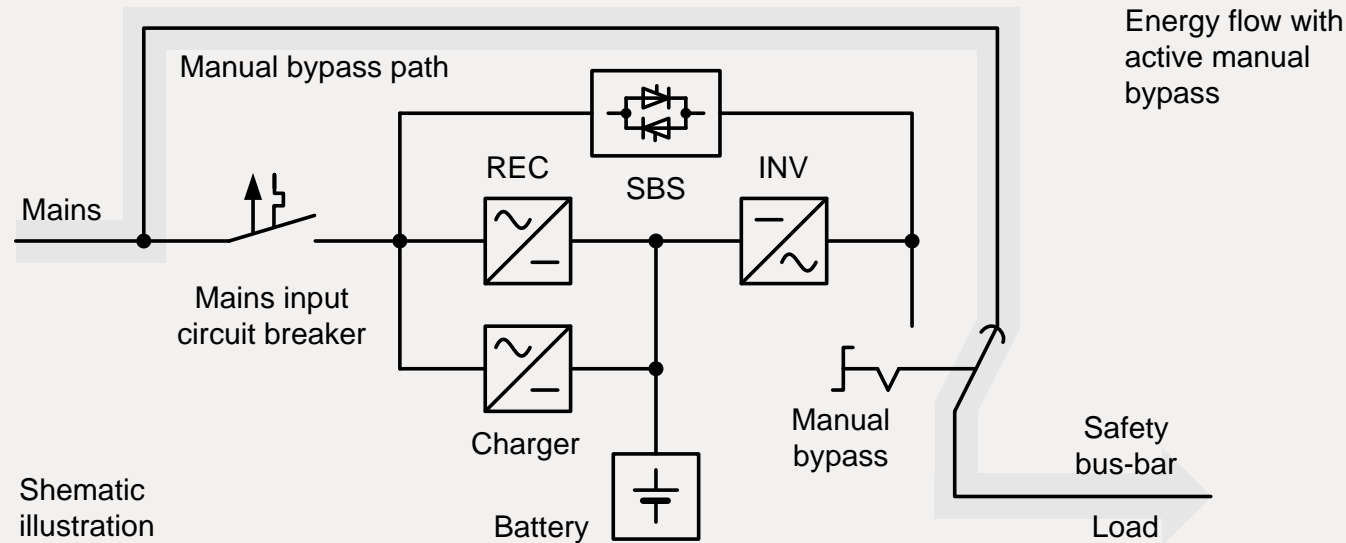


Aktive line in grey shadow

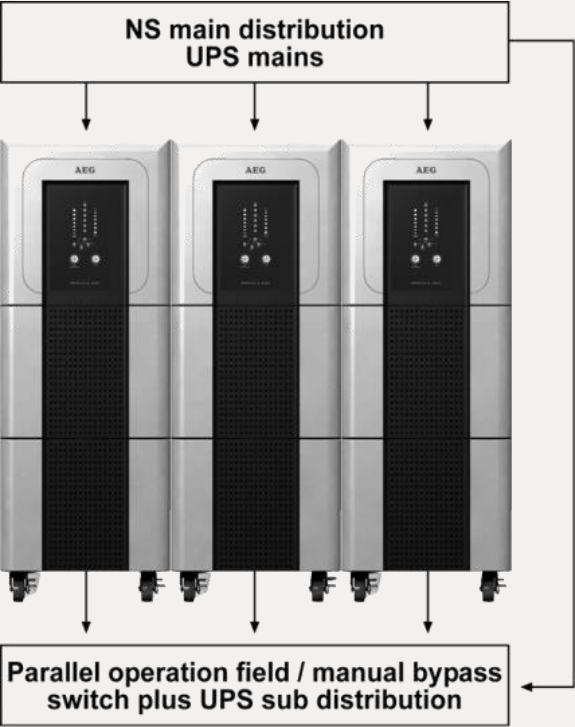


LED chain shows actual utilization during operating mode

OPERATING MODE >> MANUAL BYPASS



Aktive line in grey shadow



Acc. to n+x -technology following constellation are possible:

1 + 0	Use of 1 unit	max. 6 or 10 kVA	No redundancy
1 + 1	Use of 2 units	max. 6 or 10 kVA	Single redundancy
1 + 2	Use of 3 units	max. 6 or 10 kVA	Double redundancy (max. configuration level)
2 + 0	Use of 2 units	max. 12 or 20 kVA	No redundancy
2 + 1	Use of 3 units	max. 12 or 20 kVA	Single redundancy (max. configuration level)
3 + 0	Use of 3 units	max. 18 or 30 kVA	No redundancy (max. configuration level)

AUTONOMY TIME



PROTECT C	Autonomy time (full-/half-load) (min.)	
	6000 VA	10000 VA
Default autonomy time	8/26	5/16
1 additional battery modul	26/67	16/42
2 additional battery modules	47/112	27/60
3 additional battery modules	67/157	42/97
4 additional battery modules	94/203	53/118

Shipment



- **PROTECT C with 6000 VA or 10000 VA**
- **Parallel connection cable**
- **Communications cable**
- **Management software “CompuWatch” on CD**
- **Safety instructions**
- **Operating instruction**