

# Power Safety

## AC 7000 CAN

Modular switch-mode rectifier  
designed for industrial applications



Output Rating from a single rectifier:  
60 A (at 110 Vdc)  
30 A (at 220 Vdc)



PERFECT IN FORM AND FUNCTION

**AEG**

# Power Safety

## AC 7000 CAN

### Applications

For all industrial applications. Provides secured DC power in combination with a parallel battery, for supply of all types of DC consumers including constant voltage and current sources such as Central Control Rooms in Nuclear and Non-Nuclear Power Plants as well as on-board power supplies for rail vehicles and ships.

### Communication

The unit offers full functionality in stand-alone mode but can additionally be controlled and monitored via the digital CAN-BUS which is immune to interference. This can be achieved by using our PSC 100 control unit (option). Together with this controller complex DC systems can be built up on a low cost basis. In addition to the SMR power cabling only simple BUS wiring between the SMR's and the PSC 100 is required to complete the DC system.

### Easy operation

The connections can easily accessed from the front panel. Programming is simple thanks to the illuminated LCD-display (2 x 16 characters) controls and indicators which are installed on the front panel.

### Key features

- Compact 19" design
- n+1 parallel redundant systems can be provided due to the compact design as a 19" plug-in module with 5 height units
- Seismic approved version in accordance with KTA 3503
- Low weight
- Low inrush current
- Resistant to sustained short circuit
- Communication capable (CAN-BUS)
- Operation with PSC 100 control unit:
  - Active current sharing
  - 4 charge characteristics
  - Temperature compensated battery charging
- Advanced microprocessor technology
- Illuminated LCD-display

TYPE AC 7000 CAN	110 V/60 A D400 G 110/60 BWrug-CFpü	220 V/30 A D400 G 220/30 BWrug-CFpü
Part number	3000000533	3000000534
<b>INPUT</b>		
Nominal input voltage	3 x 400 Vac $\pm$ 10 %	
Frequency	47-63 Hz	
Current consumption	3 x 12 Aac	
Inrush current	$\leq$ nominal input current	
Required mains fuse	gL 3 x 16 A or circuit breaker C-characteristic	
<b>OUTPUT</b>		
Output voltage	122.7 Vdc $\pm$ 1 %	245.3 Vdc $\pm$ 1 %
Setting range	90 to 155 Vdc	180 to 310 Vdc
Output current	60 Adc $\pm$ 2 %	30 Adc $\pm$ 2 %
Setting range	3 to 60 Adc	1.5-30 Adc
Voltage ripple	$\leq$ 250 mV	$\leq$ 500 mV
Number of battery cells		
lead acid	52 to 56	104 to 112
nickel cadmium	86 to 90	172 to 180
Power factor	0.92	
Efficiency	91 %	
Dynamic behaviour	$\leq$ 5 % for sudden changes in load between 10 %-90 %-10 % of rated output current (correction rate $t < 1$ ms)	
Short circuit response	Resistant to sustained short circuit	
Parallel operation/load sharing	Max. 31 units, load sharing approx. 10 % with inclined characteristic curve; when connected to CAN-BUS load sharing approx. 1 %	
Characteristic line	IU characteristic to DIN 41772/DIN 41773	
<b>MONITORING AND INDICATION</b>		
Mains monitoring	Under-voltage with switch-off, self-acknowledging	
Response value/setting range	OFF/ON 325/350 Vac/OFF $\leq$ 300 V to $\leq$ 365 Vac	
Over-voltage with switch-off, self-acknowledging		
Response value/setting range	OFF/ON 460/445 Vac/OFF $\leq$ 403 V to $\leq$ 460 Vac	
Output monitoring	Heat sink temp. monitoring with current de-rating and switching-off	
DC-under-voltage (Software monitoring)	OFF/ON 110/115 Vdc, OFF/ON 220/230 Vdc	
Setting range	90 to 126 Vdc, 180 to 252 Vdc	
DC-over-voltage (Software monitoring)	OFF/ON 130/125 Vdc, OFF/ON 250/260 Vdc	
Setting range	115 to 155 Vdc, 230 to 310 Vdc	
DC-under-voltage (Hardware monitoring)	OFF/ON 115/155 Vdc, OFF/ON 230/300 Vdc	
DC-over-voltage (Hardware monitoring)	160 Vdc 320 Vdc	
Uout and Iout	By illuminated LCD-display 2 x 16 characters	
Charge	LED; green	
Failure	LED red and potential free change over contact; display of the error memory	

# AC 7000 CAN: Specification

## MECHANICAL

Design	19" plug-in module for installation in sub-frame to DIN 41494
Ingress protection	IP 20
Mechanical strength and vibration resistance	To EN 50178 section 9.4.3.2
Equipment colour	RAL 7035 (front panel)
Dimensions W x H x D (mm)	483 x 221.4 x 400 (19" x 5 HU)
Weight	Approx. 30 kg
Mains connection/DC-Output	Angle plug type GDME 313, included in scope of delivery/threaded bolt M6
Signal interface	CombiCon type MSTB 2.5/3-STF-5.08 3-pole
External Off	CombiCon type MC 1.5/2-ST-3.81 2-pole
Earth bolt terminal	Threaded bolt M6
CAN-Bus interface	16-pole clip connector
RS232 service interface	9-pole Sub-D socket

## ENVIRONMENTAL

Type of cooling	Forced-air cooling
Operating temperature	0 °C to 40 °C, (measured below the module)
Storage temperature	-20 °C to +70 °C
Environmental conditions	EN 60721 part 3-3 class 3K3/3Z1/3B1/3C2/3S2/3M2
Installation height	Up to 1000 m above sea level at nominal load

## STANDARDS

Interference emission	EN 61000-6-4
Interference resistance	EN 61000-6-2
Low voltage function with safe disconnection	EN 60950-1
Safe electrical disconnection	EN 50178, EN 60950-1
Approvals	CE, KTA 3503 – Seismic (option)
Certification	ISO9001

AEG is a registered trademark used under license from AB Electrolux

For further information  
please refer to our website:

[www.aegps.com](http://www.aegps.com)

PERFECT IN FORM AND FUNCTION

**AEG**