

AC 2800 CAN

MODULAR SWITCH-MODE CONVERTER FOR INDUSTRIAL APPLICATIONS

Output current of a single power supply:
20 A (for 110 V DC)
10 A (for 220 V DC)

Applications

The smart switch mode power supply AC 2800 CAN from AEG Power Solutions consists of two different types of devices with 110 V DC or 220 V DC. It is conceived for a variety of applications such as: Supply of process control to conventional power plants and nuclear power plants, secure supply of energy in conjunction with parallel connected batteries, direct power supply to DC consumers of all kinds, constant voltage and power source, on-board power supplies in railway vehicles and ships powering the DC loads.

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. By using the optional controller complex PSC 100 control unit, 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 be easily accessed from the front panel. Programming is made simple due to the front panel access controls.



Compact Design

The item boasts a compact design as a 1/3-19" module with a height of 6HE, that even when there is very little space available, redundant systems can be connected in parallel using the n+1 principle.

Key Features

- » Sinusoidal input current by PFC
- » Earthquake-proof design based on KTA 3503 (optional)
- » Capable of communication (CAN-Bus)
- » When operated with PSC 100:
 - active current sharing
 - 4 charge characteristics
 - Temperature compensated battery charging
- » Future-oriented microprocessor technology
- » Low inrush current
- » Short circuit proof
- » ISO 9001 certified
- » CE-compliant

AC 2800 CAN

SPECIFICATIONS

TYPE AC 2800 CAN	110 V/20 A	220 V/10A
Part number	E 230 G 110/20 BWrg-Cpü	230 G 220/10 BWrg-Cpü
E-Number	3 000 000 531	3 000 000 532
INPUT		
Nominal input voltage	230 V AC ± 15 %	
Current consumption	13 A AC	
Inrush current	≤ rated input voltage	
Required mains fuse	gL 16 A or circuit breaker C-Characteristics	
OUTPUT		
Output current	122.7 V DC ± 1 % (2.23 V/Z)	245.3 V DC ± 1 % (2.23 V/Z)
Setting range	90 – 148.5 V DC ± 2 %	180 – 297 V DC ± 2 %
Output current	20 A DC ± 2 %	10 A DC ± 2 %
Setting range	1 - 20 A DC	0.5 - 10 A DC
Voltage ripple	≤ 250 mV pp	≤ 500 mV pp
Efficiency	90 %	
Power factor	0,99	
Dynamic response	≤ 5 % for sudden changes in load between 10 % - 90 % - 10 %; Rated output current (Compensation time t < 1ms)	
Short circuit response	Short-circuit proof	
Parallel operation	max. 31 units, load distribution approx. 10 % if connected to CAN-BUS	
Characteristic line	IU Characteristic to DIN 41772 / DIN 41773	
MONITORING AND INDICATION		
Mains-side Monitoring	Under-voltage with switch-off, self-acknowledging	
Operate values/Adjustment range	ON/OFF 188.5/195 V AC / AUS ≤ 188.5 V to ≤ 225 V AC	
Operate values/Adjustment range	Over-voltage with switch-off, self-acknowledging ON/OFF 270/265 V AC / OFF ≤ 241.4 V to ≤ 270 V AC	
Output-side Monitoring Systems	Heat sink temperature with de-rating and switch-off	
DC under-voltage (software-controlled)	OFF/ON 110/115 V DC	OFF/ON 220/230 V DC
Adjustment range	90 to 126 V DC	180 to 252 V DC
DC over-voltage (software-controlled)	OFF/ON 130/125 V DC	OFF/ON 260/250 V DC
Adjustment range	115 to 155 V DC	230 to 310 V DC
DC over-voltage (hardware- controlled)	160 V DC	320 V DC
Alerts and Indicators	UA and IA via LCD-Display 2 x 8 characters, lit; Loading: LED green; Fault: LED red; Fault message via floating relay contact, Message delay 10 seconds; ON/OFF via external floating contact; Display of the error memory	
MECHANICAL		
Design	1/3-19" 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	Color RAL 7035 (front panel)	
Dimensions W x H x D (mm)	142 x 262 x 405 (1 /3-19" x 6 HE)	
Weight	approx. 12.5 kg	
Mains Connection	Angle plug type GDM 2011 supplied with unit	
DC Output	Power-CombiCon type PC 6/2-STF-10,16 2-pole with screw-flange	
Conductor	Threaded bolt M4	
Signals Interface	alert: Plug type MSTB 2.5/3-STF-5.08 3-pole	
ENVIRONMENTAL		
Type of Cooling	Natural Air Cooling	
Operating Temperature	Range 0 °C to 45 °C, when installed in cabinet	
Storage Temperature	Range -20 °C to 70 °C	
Environment Conditions	EN 60721 part 3-3 class 3K3 / 3Z1 / 3B1 / 3C2 / 3S2 / 3M2	
Installation height	Max. 1,000 m above sea level, at nominal load	
STANDARDS		
Interference Emission	To EN 61000-6-4	
Interference Resistance	To EN 61000-6-2	
Low voltage function with safe disconnection	To EN 50178 EN 60950-1	
Approvals	CE, KTA 3503 - Seismic (optional)	
Certification	ISO 9001	

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AEG Power Solutions GmbH

Emil-Siepmann-Str. 32
D-59581 Warstein-Belecke
Germany

Phone: +49 2902 763 143
Fax: +49 2902 763 1203

smr@aegps.com
www.aegps.com

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POWER SOLUTIONS