EPS - Datasheet

Series EPS/HC 5000-WC

The series »EPS/HC 5000-WC« from EPS Electronic Power Supplies is a range of adjustable, switched mode high current sources offering standard output voltages from 6V up to 60V, output currents up to 20000A and output power ratings up to 300 kW (different other output voltages (new with 1000V)/until 200A/power ratings upon request). Due to the modular design a multiple output in one cabinet is possible, e.g. 2x 2500A or 2x 5000A. The units are used in high-power environments such as electroplating and Plasma (surface treatment, hardening) and multiple industrial applications (powering of electric engine starters, DC motors, automatic end-of-line test systems for the testing of contactors, relays, switches, steel wire ropes/rails as well as cables).
Really new is the process of electrolysis (H2, Metallurgy, etc.), in which our plants are used. In this process, high current is passed through water, which eventually generates hydrogen.
All units are short-circuit proofed and overload protected. A shutdown, with a defined restart, occurs in the case of undervoltage or overvoltage.

If the waste heat from the power supply or the dimensions are a problem in your company, you should consider this water cooled system. The advantages are very large in this case. Of course, we offer you the necessary assistance in the integration. The robust technology with precise control allows you to achieve the best results. The proved power supply units themselves can be equipped with numerous functions. Via the internal CAN interface numerous fieldbus couplers can be docked.

The bulk power supplies can be controlled optionally via built-in analogue interface. As an option the operation and control are very simple with the backlight 3-line LCD display »EPS/HC280« and a tough touch panel. An isolated interface with an amplifier (0-10V, 4-20mA, 0-20mA) is optionally available, too. Optionally digital interfaces (modules) for TCP/IP, RS485, Profibus and USB (on analog) are available to control all the functions via a PC. Profinet is on request.

Remote sensing can be optionally done via a dedicated input which is directly connected to the test equipment, in order to compensate the voltage drops on the lines.
The system can be provided optionally with main switch, fuses and sub-distribution in a seperate cabinet.
With the reverse polarity option, the power supply can also be used as a bipolar device (output voltage up to 60V max).

Energy efficiency: Water cooling

Scope of delivery:
Cabinet system
Waterconnection <100kW=1/2"
>100kW=3/4"
Operation Manual

Series EPS/HC 5000-WC

EPS/HC 50015-8000-WC
DC Current Source

EPS/HC 5000-WC front

General data

Technology	Switching
Operation modes	CV. CC
Mains	3x400 VAC +/- 10%
Input frequency	50/60Hz
Power factor	>0.95
Input Current Limitation	Standard
Display	Option EPS/HC280-LCD
Voltage resolution	Opt. 0,01V
Voltage accuracy	<0,5%
Current Resolution	Opt. 0,1A
Current Accuracy	<1%
Output Current Limitation	Standard
Overheat protection	Standard
Protection class	IP54
Series operation	Standard
Parallel operation	Standard
Cooling	Water Cooling
Operation temperature	5-40°C
Humidity	85% n.c
Attitude	1000m NN
Design	Cabinet
Standards	EN55011(A,B) EN61000-6-4 EN61000-6-2 EN50178
Power fail	Standard
Alarmmanagement	Optional

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Interfaces

Analog Isolation	Opt. EPS/HC IF-DASI
USB Interface	Option EPS/IF-UTA(101994)
RS485 Interface	Option EPS/HC IF-RS485
Profibus	Option EPS/HC IF-PB2
Ethernet Interface	Option EPS/HC IF-LAN

Technical data

Output Voltage	0-15 VDC
Output Current	0-8000 A
Output Power	120000 W
Efficiency	>90 %
Ripple U	<1%
Remote Sensing	Option EPS/HC Sense
Dimensions in mm (WxHxD)	800 x 2200 x 600
Weight	~550 kg
Order code	201005

Options

Option 1	Reverse Polarity EPS/HC RP
Option 2	Profinet Interface on request EPS/HC IF-PN
Option 3	Circuit breaker EPS/HC CB

EPS/HC 5000-WC(high current)_rear

Series EPS/HC 5000-WC

EPS/HC 5000-WC(low current)_rear

EPS/HC 280-LCD

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