

**EPS - Datasheet** 

# Series EPS/HC 5000

The series »EPS/HC 5000« from EPS Electronic Power Supplies is a range of adjustable, high DC current switched mode sources offering standard output voltages from 6V until 30V, output currents up to 5000A and output power ratings up to 80kW. The units are used in high-power environments such as electroplating as well Plasma (surface treatment, hardening), 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 as well as cables) and electrolysis as well as heavy duty components in general. All units are short-circuit proofed and overload protected. A switch-off, with a defined restart. takes place at undervoltage or overvoltage.

We deliver the power unit without a built-in display, but with the possibility to control the device exactly via the internal bus with many standardized fieldbus systems. Optionally digital interfaces (modules) for RS485, Profibus and USB-Adapter (on analog) are available to control all the functions via a PC. An analog interface, isolated with an amplifier (0-10V, 4-20mA, 0-20mA), is available as an option, too. Of course you can choose optionally an illuminated LCD control panel with keypad »EPS/HC280«, too. Profinet and Ethernet are 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.

Main switch, fuses and circuit breaker are already integrated in the system. The integrated shunt is mounted on the device plug and provides a shunt signal of 0-60mV for 0... Inenn.

If you need other power, voltages and currents, we can also fulfill this requirement by the modular power design, too.

With the reverse polarity option, the power supply can also be used as a bipolar device (output voltage up to 60V max).

Energy Efficiency: High efficiency

Scope of delivery: Cabinet system Female plug Operation Manual



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## EPS/HC 50070-1000 DC Current Source



EPS/HC 5000

### General data

Technology	Switching
Operation modes	CV. CC
Mains	400VAC-3 +/-10%
Input frequency	50/60Hz
Power factor	>0.95
Input Current Limitation	Standard
Display	Optional EPS/HC280
Voltage accuracy	<0,5%
Current Accuracy	<1%
Overheat protection	Standard
Protection class	IP20
Parallel operation	Standard
Cooling	Fan
Operation temperature	0-35°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

#### **Interfaces**

Analog Isolation	Ana	alog	Isola	ation
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Opt. EPS/HC IF-DASI



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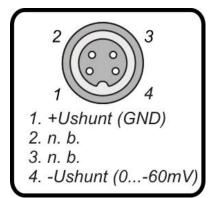
USB Interface	Option EPS/IF-UTA(101994)
RS485 Interface	Option EPS/HC IF-RS485
Profibus	Option EPS/HC IF-PB2
Ethernet Interface	Option EPS/HC IF-LAN

### **Technical data**

Output Voltage	0-70 VDC
Output Current	0-1000 A
Output Power	70000 W
Input Current	115A
Efficiency	>85 %
Ripple U	<1%
Remote Sensing	Option EPS/HC Sense
Dimensions in mm (WxHxD)	400 x 2200 x 600
Weight	~400 kg
Order code	200714

#### **Options**

Option 1	External LCD user panel EPS/HC 280
Option 3	Profinet Interface on request EPS/HC IF-PN



**EPS/HC** Shunt



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### **EPS/HC** Pinning Analog

Image: 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1   Image: 16 15 14 13 12 11 10 10 10 10 10 10 10 10 10 10 10 10	Service-Stecker X5
	1 Strom-Istwert (list) 0 10V output (0100% Inenn)
	2 Spannungs-Istwert (Uist) 0 10V output (0100% Unenn. >10V Ua)
	3 Ref. GND (Referenz-Masse)
	4 Strom-Sollwert (Isoll) 0 10V intput (0100% Inenn)
	5 Uref. ( Referenzspannung) +10.00V (bezogen auf Ref. GND)
	6 Spannungs-Sollwert (Usoll) 0 10V intput (0100% Unenn)
	7 - Ushunt (- 0 60 mV output / 0100% Inenn))
	- 8 + Ushunt (GND)
	9 + 5V Hilfsspannung, max. 200 mA
	-(10 COM / GND (Masse)
	-(11 + 24V Hilfsspannung, max. 150 mA
	12 Fernkontakt "EXTERN EIN"
	14 Betriebsmelderelais NO (EIN / ok)
	15 Betriebsmelderelais COM
	16 Betriebsmelderelais NC (AUS / Fehler)

Subject to modification without notice, errors and omissions excepted

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