



## 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

## EPS/HC 50120-0650 DC Current Source

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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 | Opt. EPS/HC IF-DASI |
|------------------|---------------------|

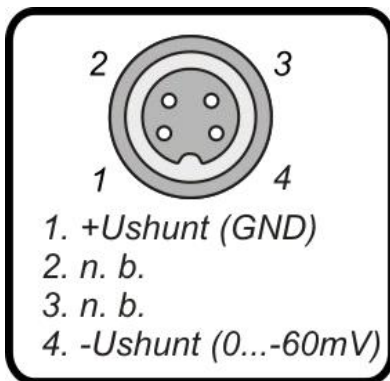
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| USB Interface      | Option EPS/IF-UTA(101994) |
| RS485 Interface    | Option EPS/HC IF-RS485    |
| Profibus           | Option EPS/HC IF-PB2      |
| Ethernet Interface | Option EPS/HC IF-LAN      |

**Technical data**

|                          |                     |
|--------------------------|---------------------|
| Output Voltage           | 0-120 VDC           |
| Output Current           | 0-650 A             |
| Output Power             | 78000 W             |
| Input Current            | 128 A               |
| Efficiency               | >85 %               |
| Ripple U                 | <1%                 |
| Remote Sensing           | Option EPS/HC Sense |
| Dimensions in mm (WxHxD) | 600 x 2200 x 600    |
| Weight                   | 350 kg              |
| Order code               | 200716              |

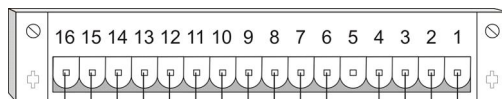
**Options**

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



EPS/HC Shunt

EPS/HC Pinning Analog



Service-Stecker X5

- |    |  |                          |
|----|--|--------------------------|
| 1  | Strom-Istwert (Iist) 0 ... 10V output            | (0...100% Inenn)         |
| 2  | Spannungs-Istwert (Uist) 0 ... 10V output        | (0..100% Unenn. >10V Ua) |
| 3  | Ref. GND (Referenz-Masse)                        |                          |
| 4  | Strom-Sollwert (Isoll) 0 ... 10V input           | (0..100% Inenn)          |
| 5  | Uref. ( Referenzspannung) +10.00V                | (bezogen auf Ref. GND)   |
| 6  | Spannungs-Sollwert (Usoll) 0 ... 10V input       | (0..100% Unenn)          |
| 7  | - Ushunt (- 0 ... 60 mV output / 0..100% Inenn)) |                          |
| 8  | + Ushunt (GND)                                   |                          |
| 9  | + 5V Hilfsspannung, max. 200 mA                  |                          |
| 10 | COM / GND (Masse)                                |                          |
| 11 | + 24V Hilfsspannung, max. 150 mA                 |                          |
| 12 | Fernkontakt "EXTERN EIN"                         |                          |
| 13 | Fernkontakt "BLOCKING"                           |                          |
| 14 | Betriebsmelderelais NO (EIN / ok)                |                          |
| 15 | Betriebsmelderelais COM                          |                          |
| 16 | Betriebsmelderelais NC (AUS / Fehler)            |                          |

Subject to modification without notice, errors and omissions excepted

EPS Stromversorgung GmbH  
 Electronic Power Supplies  
 Alter Postweg 101, 86159 Augsburg/Germany  
 Tel.: +49 (0) 821 570451-0  
 E-mail: [sales@eps-germany.de](mailto:sales@eps-germany.de)  
[www.eps-germany.de](http://www.eps-germany.de)