

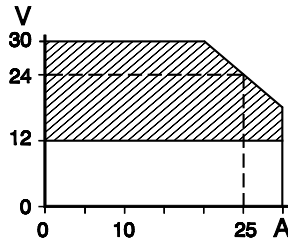


600 W SWITCHED MODE DC POWER SUPPLY

600 S 24 24 V 25 A

ADJUSTABLE 12 - 30 V

Max. current: 20 A at 30 V
25 A at 24 V
30 A at 12 - 15 V



Features:

- Very high reliability, MTBF 1 000 000 hrs
- Natural convection cooling
- Thermally over-rated for high ambient temperature without derating
- Built-in diode for redundant parallel operation
- Under-voltage alarm contact
- Low output ripple, 7 mV rms
- No RFI problems, RFI filters in input and output
- Meets EN 61000-3-2 and V DE 0160 class 2
- Low inrush current
- High efficiency 89%
- Short circuit protected
- Analog programmable

Specifications:

Input voltage : AC 198-264 V 48-62 Hz
3.8 Arms, fuse 6.3 A T
crest factor 2.0
AC 99-132 V 48-62 Hz
7.6 Arms, fuse 12.5 A T
DC contact factory

Insulation

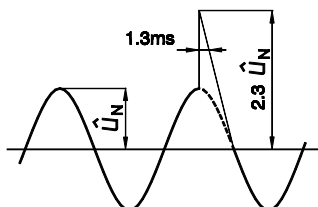
Input / output : 3750 V rms (1 min.)
Input / case : 2500 V rms (1 min.)
Output / case : 500 V DC

Inrush current : Limited by 47 Ohm (shorted after start up).

Power factor : 0.76 at 230 V AC input and full load.

EMC : EN 61204-3 Power Supply Standard
EN 61000-6-3 Emission (EN 55022B)
EN 61000-6-2 Immunity

VDE0160 impulse test: Input withstands non periodic impulse
2.3 \hat{U}_N 1.3 ms of VDE0160 class 2.



Line distortion : Harmonic current meets EN 61000-3-2.
Safety : EN 60950 EN 61010 SELV / PELV

Output voltage : Screwdriver adjustable with 10-turn potmeter at the rear side. Factory set at 24.0 V.
Also analog programmable by 2 - 5 V.

Efficiency : 89% at 230 V AC input and 600 W output (max. heat dissipation 74 W)

Temp. coeff. : $5 \cdot 10^{-5}$ per °C.

Stability : $3 \cdot 10^{-4}$ during 8 hrs under constant conditions, after 1 hr warm up.

Regulation
Load 0 - 100% : Better than 10 mV.
Line 198 - 264 V : Better than 5 mV.

Ripple + noise : Max. 7 mV rms, 20 mV p-p.

Output imp. : Less than 0.05 Ohm up to 100 kHz.

Recovery time : 0.3 milliseconds to recover to within 100 mV after a 50 to 100% load step
Max. deviation 300 mV.

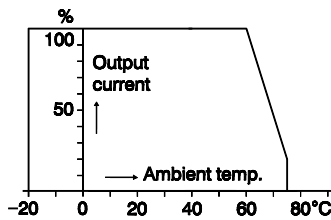
Hold-up time : 30 ms at 115 or 230 V AC input and full load. 60 ms at half load.

Series operation : Up to 500 V total voltage.

Parallel oper. : No restrictions.

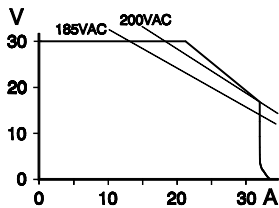
Redundant parallel operation : Use R+ connection via built-in Schottky diode to separate the outputs.
Do not use remote sensing.

- Under voltage alarm contact** : Changes over when output voltage drops to 10% below the set value. Gold contact, rating 100 mA/30 V.
- Remote control** : Is possible with a 10 kΩ potmeter.
- Remote progr.** : Output voltage is programmable with 2 - 5 V, corresponding with 12 - 30 V. Programming speed is 100 ms from 12 - 30 V at max. current. Programming input is not isolated (connected to - output).
- Remote sensing** : Max. 3 V per load lead. However the sum of voltage across load + leads cannot exceed 30 V. With parallel operation remote sensing is not recommended.
- Remote on/off** : By 5 V, optocoupler isolated.
- Ambient temperature**
 - Storage : - 40 to + 85 °C.
 - Operating : - 20 to + 60 °C.
 - Derate to 20% at 75 °C.

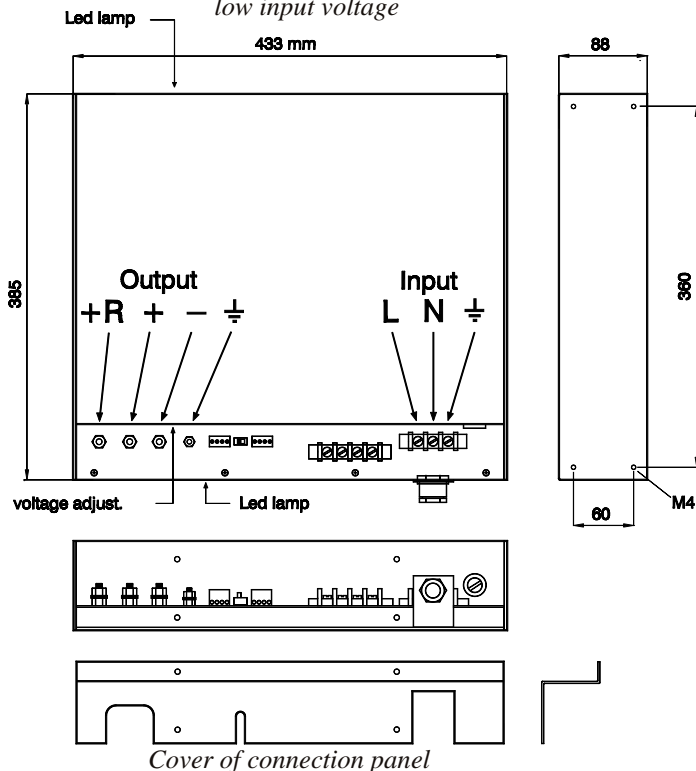


Temperature derating

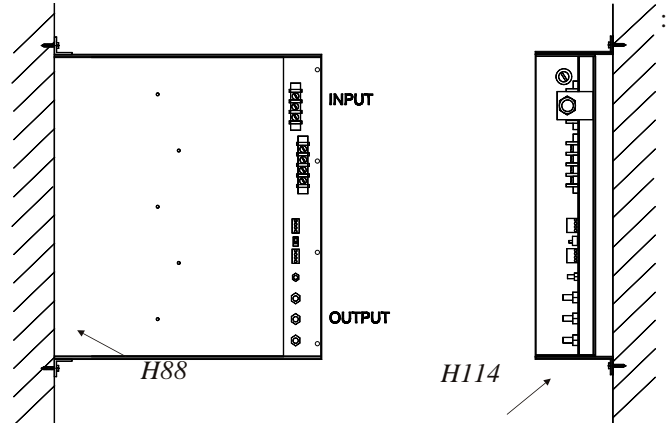
- Current limit** : From 30 to 18 V the current limit follows more or less a constant power curve. Below 18 V it resembles a constant current curve.



Normal current limit and derating at low input voltage

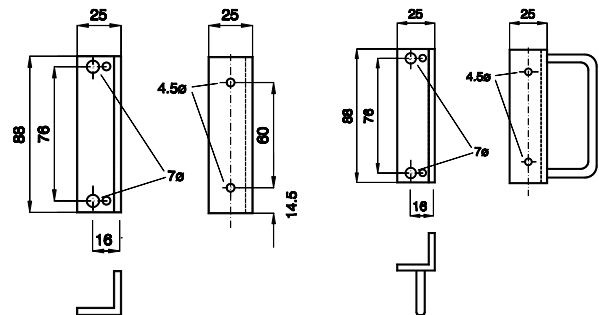


- Overload protection** : Continuous overload and short circuit does not harm the unit. At short circuit the power supply produces an audible bleep.
- Voltage limit** : For safety an extra regulation circuit limits the output voltage to about 31 V in case of malfunction of the normal regulation. This limit is internally adjustable 20 - 31 V (R111).
- Overtemp. protection** : With insufficient cooling the output shuts down.
- Led lamps** : Green LEDs on front and rear panel indicate output voltage.
- Wall mounting** : Any position, as long as the air can flow freely along the unit for cooling.



Two ways of vertical wall mounting

- 19 inch rack mounting** : With two brackets H88 with handle the unit can be 19 inch rack mounted (2U height).
- MTBF** : 1 000 000 hrs.
- Dim. and weight** : 88 x 433 x 385 mm (h x w x d), 10.5 kg.



Bracket H88 for vertical wall mounting (2 pcs required)

Bracket H88 with handle for 19" rack mounting (2 pcs required)

Bracket H114 for vertical wall mounting (4 pcs required)

