



1200 S - Series 1200 W SWITCHED MODE DC POWER SUPPLY

Models	Voltage range	Current range
1200 S 24	12 -15 V	60 A
	24 V	50 A
	30 V	40 A

Models	Voltage range	Current range
1200 S 48	24 -30 V	30 A
	48 V	25 A
	60 V	20 A

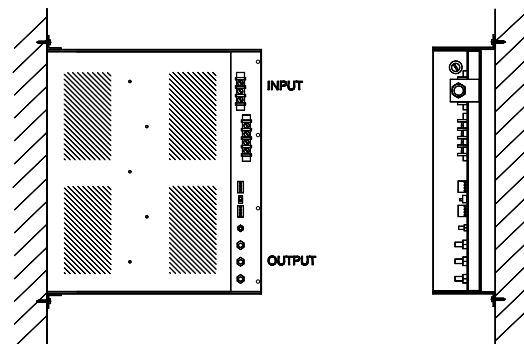
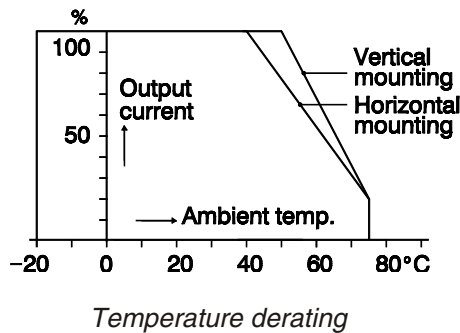
Features :

- Very high reliability, MTBF 500.000 hrs
- Natural convection cooling
- High efficiency 89%
- Under-voltage alarm contact
- Low output ripple, 7 mV rms
- No RFI problems, RFI filters in output and input
- Build-in diode for redundant parallel operating
- Analog programmable
- Short circuit protected
- Low inrush current

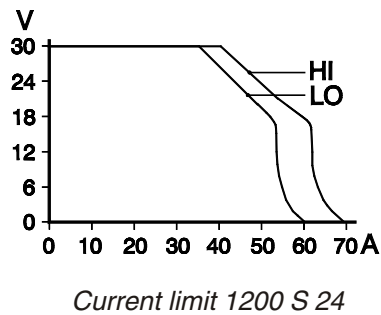
Specifications :

• Input voltage	: AC 198-264 V 48-62 Hz 8.2 Arms fuse 15 A T, crest factory 2.2 : AC 99-132 V 48-62 Hz 16.4 Arms fuse 25 A T : DC contact factory	• Output voltage	: Screwdriver adjustable with 10 turn potmeter at the rear side. Also programmable by 2-5 V
• Insulation		• Efficiency	: 89% at 230 V AC input.
Input / output	: 3750 V rms (1min)	• Temp. coeff.	: $5 \cdot 10^{-5}$ per C
Input / case	: 2500 V rms (1min)	• Stability	: $3 \cdot 10^{-4}$ during 8 hrs under constant conditions, after 1 hr warm up.
Output / case	: 500 V DC	• Regulation	
• Inrush current	: Limited by 39 Ohm (shorted after startup)	Load 0 - 100%	: Better than 10 mV
• Line disortion	: Kept low by large low frequency choke input	Line 198 -264 V	: Better than 5 mV
• Power factor	: 0.72 at 230 V AC input and full load.	• Ripple + noise	: Max. 7 mV rms, 20 mV pp.
• Safety	: EN 60950 / EN 61010 SELV / PELV (for 1200 S 24 only)	• Output imp.	: Less than 0.05 Ohm up to 100kHz
• EMC	: EN 61204-3 Power Supply Standard : EN 61000-6-3 Emission (EN 55022B) : EN 61000-6-2 Immunity	• Recovery time	: 0.3 milliseconds to recover within 100 mV after 50 to 100% load step. Max deviation 300 mV.
• VDE0160 impulse test	: Input with stands non periodic impulse 2.3 \hat{U}_n 0.3 ms of VDE0160 class 1	• Hold-up time	: 15 ms at 115 or 230 V AC input and full load. 30 ms at half load.
• Parallel operation	: For safe parallel operation put current limit switch at 'LO' (max.1100 W)	• Series operation	: Up to 500 V total Voltage.
		• Redundant parallel operation	: Use R+ connection via build-in Schottky diode to separate the outputs. put current limit at 'LO' Do not use remote sensing.

Under voltage alarm contact	: changes over when output voltage drops to 10% below the set value. Contact rating 100 mA / 30 V.	Overload Protection	: Continuous overload and short circuit does not harm the unit. At short circuit the power supply produces an audible beep.
Remote control	: Is possible with a 10 K Ω potmeter.	Voltage limit	: For safety an extra regulation circuit limits the output voltage to about 31 V (62 V) in in case of malfunction of the normal regulation. This limit is internally adjustable 20-31 V (40-62 V) (R111).
Remote programming	: Output voltage is programmable with 2-5 V, corresponding with 12-30 V (24-60 V). Programming speed is 100 ms from 12-30 V (24-60 V) at max. current. Programming input is not isolated (connected to - output)	Led lamps	: Green leds on the front and rear panel indicate output voltage.
Remote sensing	: max. 3 V per load lead. however the sum of voltage across load + leads cannot exceed 30 V (60 V) With parallel operation remote sensing is not recommended.	Wall mounting	: The natural convection cooling functions best when the unit is mounted vertically as drawn (input at upper side) The covers are used as heat sinks, so some space between cover and wall is necessary.
Remote on/off	: By 5 V, optocoupler isolated.		
Ambient temperature			
Storage	: - 40 to + 85 C		
Operating	: - 20 to + 50 C mounted vertically		

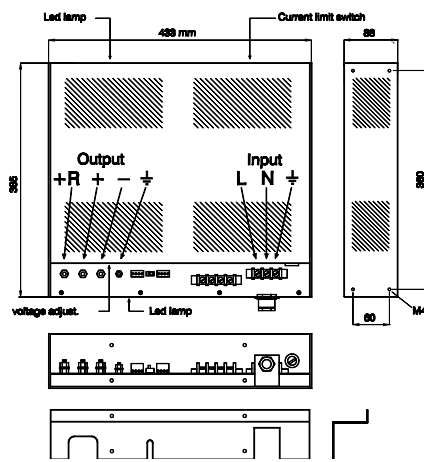


Current limit : Can be put on HI or LO with a switch on the front panel.
From 30 V to 18 V (60 to 36 V) the current limit follows more or less a constant power curve. below 18 V (36 V) it resembles a constant current curve.

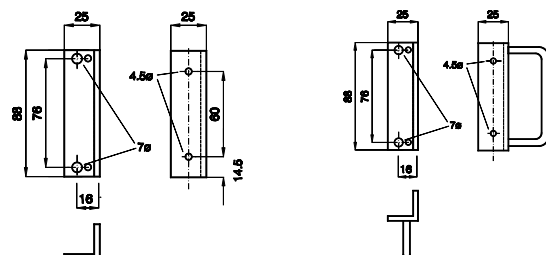


19 " rack adapter : Although vertical mounting is preferred for optimal cooling, the unit can also be mounted horizontally in a 19" rack (2 U)
The current limit switch has to be put on 'LO' (max. 1100W). when forced air cooling is used, the full 1200 W can be taken continuously (limit on 'HI').

MTBF : 500.000 hrs
Dim and weight : Height : 88 mm
: Width : 433 mm
: Depth : 385 mm
: Weight : 11 kg

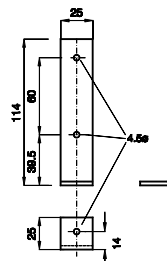


Cover of connection panel



Bracket H88 for vertical wall mounting (2 pcs required)

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



Bracket H88 for vertical wall mounting