RECTIFIER UNIT +24V/1350W
PHB 1350A-0024/01

Features:

- ✓ 3U standard module;
- ✓ 180Vac to 275Vac input;
- ✓ +24Vdc output;
- ✓ Output power limited to 1350W (56.25A @ 24Vdc);
- ✓ Hot swap;
- ✓ High power density;
- ✓ High efficiency and reliability;
- ✓ High Power Factor;
- ✓ Up to six paralleled modules per 23”shelf with current share (slope compensation);
- ✓ Forced Cooling;
- ✓ Over load and short circuit protection;
- ✓ Over voltage protection;
- ✓ Over temperature protection;
- ✓ Power limitation under fan fail;
- ✓ RS485 interface;
- ✓ Meet requirements of Brazilian Telecommunications Agency.

The PHB 1350A-0048/01 is specifically designed to operate as an integral part of a complete +24V rectifier power system, with or without battery backup. A high switching frequency and the forced cooling allow a compact size and high efficiency.

The output power is limited to 1350W up to 55ºC, above this temperature the power is derated with a -25W/ºC rate. A fully equipped 23”/3U power shelf is able to include up to six modules, with a total output power of 8.1kW or five modules in 19” power shelf (6.75kW).

All parameters can be adjusted by Control Unit model USCC/18 (keypad or PC – RS232). In this way, for example, it allows to set output voltage, define the float voltage temperature compensation, protective levels, etc...

The Rectifier Units latch the preview adjusted parameters and keep working, for operation without Control Unit.

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ELECTRICAL SPECIFICATIONS	
Input Voltage Range	180Vac to 275Vac (phase to phase or phase to neutral)
Input Frequency Range	47Hz to 63Hz
Power Factor	> 0.98 for loads from 50% to 100% of rated current
Maximum Input Current	8.9Arms @ 180Vac
Nominal Input Current	7.2Arms @ 220Vac
Inrush Current	< 15Apeak
Output Voltage	+24Vdc (could be adjusted from +23.0Vdc to +29.5Vdc)
Nominal Output Current	56.25A @ +24Vdc
Maximum Output Power	1350W per module
Efficiency	87% @ full load and 220Vac input voltage
Static Output Voltage Regulation	< ±1% (load and line)
Dynamic Output Voltage Regulation	< ±5% for 50% step load from 10% to 100% (less than 25ms for recovery time)
Output Noise	< 100mVpp (10Hz to 20MHz) < 24mVrms (10Hz to 10MHz) < 1mVpsophometric or –57.8dBm (voice band)
Withstand Voltage	1500Vdc (Ground to Input or Input to Output)
MTBF	> 180,000 hours @ 25°C and full load (RELEX 7.5)

MECHANICAL SPECIFICATIONS	
Connections	Male Connector DIN41612 - VG95324 – H type, 15 circuits
Dimensions	Height: 133mm; Width: 83mm; Depth: 288mm
Weight	3.1Kg

GENERAL FEATURES	
LED Indicators	ON (green) and Fail (red)
Fan	double ball bearing with speed control in function of temperature
Output Signals	Complete status information by RS485
Protection	Input fuses Output paralleling fuse Short circuit and overload Input under and over voltage Output over voltage (29.4Vdc) Over temperature (internal temperature ~ 75°C) Shutdown under fan fail

STANDARDS	
Emission (EMI)	CISPR 22 – Class A FCC (under request)
Immunity (EMC)	IEC 61000-4-2 (level 4) IEC 61000-4-3 (level 3) IEC 61000-4-4 (level 4) IEC 61000-4-5 (level 4) IEC 61000-4-6 (level 3) IEC 61000-4-11 IEC 61000-3-2
Safety	Designed to comply UL 60950 (certification under request)
Others	Any standard for any country requirements under request

ENVIRONMENT	
Temperature	-10°C to 55°C at 1350W (above 55ºC the power is reduced by –25W/ºC and at 75ºC the unit is shutdown)
Air Humidity	0 to 95% R.H. non-condensing

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