Warning - Energy Hazard -

- Output power greater than 240VA -

When installing the rectifier it is important to observe these installation instructions, in particular the requirements of the specification IEC950 / EN60950 must be met and also any local Wiring Codes or Regulations.

- **Mounting** It is important that the correct length of fixing screw is used, with a maximum penetration of 6mm.
- CAUTION: Double Pole / Neutral Fusing.

The CE Mark

This power supply is CE marked to the European Low Voltage Directive (LVD) 73/23/EEC amended by 93/68/EEC, relating to the Safety of Electrical Equipment. This power supply is designed for incorporation within apparatus. For user safety, the enclosing apparatus must protect the user against accidental contact with any electrical hazard, cooling fans etc, associated with the power supply.

Rectifier Input / Output Mating Connectors

Function	Manufacturer and Part Number			
	Positronic Industries			
Power Input	Right angle PC board mount: # PLB3W3F4BN0A2			
	Straight PC board mount: # PLB3W3F300A2			
Bower Output	Positronic Industries			
	Panel mount: # PLA04F1060 (contact pins: # FC116N2)			
	Tyco Electronics / Amp			
Signals	Right angle PC board mount: # 174253-1			
	Straight PC board mount: # 536446-5			
	APC # 1MKC1401			
	Includes:			
APC Connector Kit	Positronic Industries # PLB3W3F300A2			
	# PLA04F1060 with contact pins: # FC116N2			
	Tyco Electronics / Amp # 536446-5			

Installation and Operating Instruction for MRF / MWF1700 and DCPM1700 Series Rectifiers

MRF is a restricted input voltage unit. MWF & DCPM are wide input voltage range units.

Model	Mod Level	Input Ratings	Maximum Output Ratings *			Max Ambient
DCPM17HW48***	3	85-264 V 10A 45-65 Hz	58 Vdc max output current is power limited above 55 Vdc	30A @ 207V 25A @ 176V 14.5A @ 85V	1630W 1360W 790W	45°C 65°C 65°C
1MRF17H54#**	3	230 V 10A 45-65 Hz	58 Vdc max output current is power limited above 55 Vdc	30A @ 207V	1630W	45°C
DCPM17HW48002	3	176-264 V 10A 45-65 Hz	58 Vdc max output current is power limited above 55 Vdc	30A @ 176V 25A @ 176V	1630W 1360W	55°C 65°C
1MWF17H54#**	3	85-264 V 10A 45-65 Hz	58 Vdc max output current is power limited above 55 Vdc	30A @ 207V 25A @ 176V 14.5A @ 85V	1630W 1360W 790W	45°C 65°C 65°C

* <u>Maximum Output Ratings</u>: Output current available is controlled by actual value of input voltage present on input terminals. The allowable current value is determined by the ambient temperature. Temperature must be controlled at the value shown in order to maintain internal temperature rise within the approved limits.

These units are designed for rack mounting. Forced air, front to back ventilation is provided by a fan internal to the rectifier. Restriction of the airflow will reduce service life.

The final three characters of the part number are used to describe individual nominal output ratings (subject to the maximum output power), or to indicate variants in the signals functions available on the output connector and front panel. (# - signals package, ** - custom set-up).

American Power Conversion

132 Fairgrounds Road, West Kingston, RI 02892 USA990-9068CRev 3Feb 2004



Signals Connections

DIN 41612		Alarm Option	n	Cinerala Norra
connector	Α	В	D	Signals Name
a1				N/C
a2		✓	1	Fan Fail opto
a3	1	✓ ✓	1	Post mate enable *
a4		1	1	Standby opto ("E" unit : breaker open)
a5		1	1	Programme down
a6	1	✓	1	+12V regulated floating auxiliary **
а7				N/C
a8		1	1	Overtemperature trip opto
a9		1	1	Thermal control opto
a10	1	✓	1	Relay normally closed contact
a11	1	1	1	Relay common
a12	1	1	1	Relay normally open contact
a13	1	1	✓ ✓ Current Share	
a14		✓ ✓ Remote on/off (-ve) (floati ✓ ✓ Remote on/off (+ve) (floati ✓ ✓ ✓ ✓ ✓ Voltage change link (Marg		Remote on/off (-ve) (floating input)
a15				Remote on/off (+ve) (floating input)
a16	1			Voltage change link (Margin down)
b1				N/C
b2			1	Remote Boost (input)
b3	<u> </u>		1	Boost (Equalise) Active Opto
b4				N/C
b5				N/C
b6				N/C
b7		1	1	Output current healthy opto
b8	1	1	1	Negative sense
b9	1	1	1	Voltage trim
b10		✓	1	Overvoltage opto
b11		1	1	Current limit opto
b12		1	1	Output healthy opto
b13		1	1	Input healthy opto
b14	1	1	1	Opto common emitter (floating auxiliary 0V)
b15	✓	✓	✓	Analogue current signal
b16	1	1	1	Positive sense

* Pins a3 and b8 must be connected together for unit operation. ** On model DCPM17HW48002 pin a6 carries +15V unregulated

Rectifier Operating Mode Switches

Mode setting switches are accessed through the side face of the rectifier.

Switch No	Switch Off	Switch On	Default *
1	(+) sense remote	On	
2	(-) sense remote	(-) sense local	On
3	Output set 54.5V	Output reduced by 4.2V	Off
4	Voltage droop off	Voltage droop on (passive current share)	Off
5	Constant current limit	Foldback current limit	On

* Defaults and voltage quoted refer to standard rectifiers. Specific variant options may be different.

Connections

