

INDUSTRIAL POWER SUPPLIES



PDR120 Series 120 Watts Intelligent DIN Rail Power Supplies

www.powersolve.co.uk

FEATURES:

- Universal AC Input
- Convection Cooled
- Short Circuit Protection with Auto Recovery
- Optional Redundant Function & Power Ready Signal
- Optional Intelligent Memory displaying Voltage, Current, Temperature & Running Time on Front Panel Display
- Active Power Factor Correction



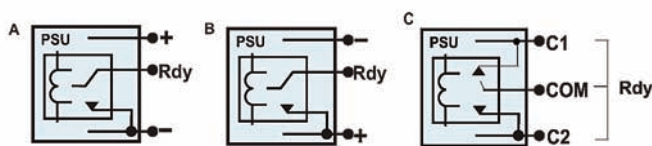
Electrical Specification

Input:	90-264VAC, 127-380VDC
Input Frequency:	47-63Hz
Output Voltage & Current:	See table
Output Adjustment:	+/-10%
Ripple & Noise:	See table
Load Regulation:	±1% 20-100% rated load
Line Regulation:	±1% low line to high line at rated load
Hold Up Time:	16mS
Output Protection:	Over current and over voltage protection with auto recovery
Operating Temperature:	-15°C to +70°C Ambient (derate linearly above 50°C to 50% load at 70°C)
Operating Humidity:	5-95% Relative Humidity (Non Condensing)
Vibration:	2G, 10-500Hz, 3 axes
Safety Approvals:	UL/cUL1950, CE Marking
EMI/EMC:	EN55022'B', EN61000-3-2, EN61000-3-3, EN61000-4-2,-4-3,-4-4,-4-5,-4-6,-4-8,-4-11 EN55024
Mechanical:	Enclosure measures (mm) 90W x 110D x 100H
Connectors:	PCB Barrier Block (T) or Mini Disconnectable Terminal Block (E)
Options:	Redundant Function & Power Ready Signal

Output Voltage & Current Ratings

Model	Output Voltage	Output Current	Ripple & Noise (pk-pk)	Efficiency (min)
PDR120-12	12V DC	10.00A	100mV	73%
PDR120-24	24V DC	5.00A	150mV	75%
PDR120-48	48V DC	2.50A	250mV	76%

Ready Connection:



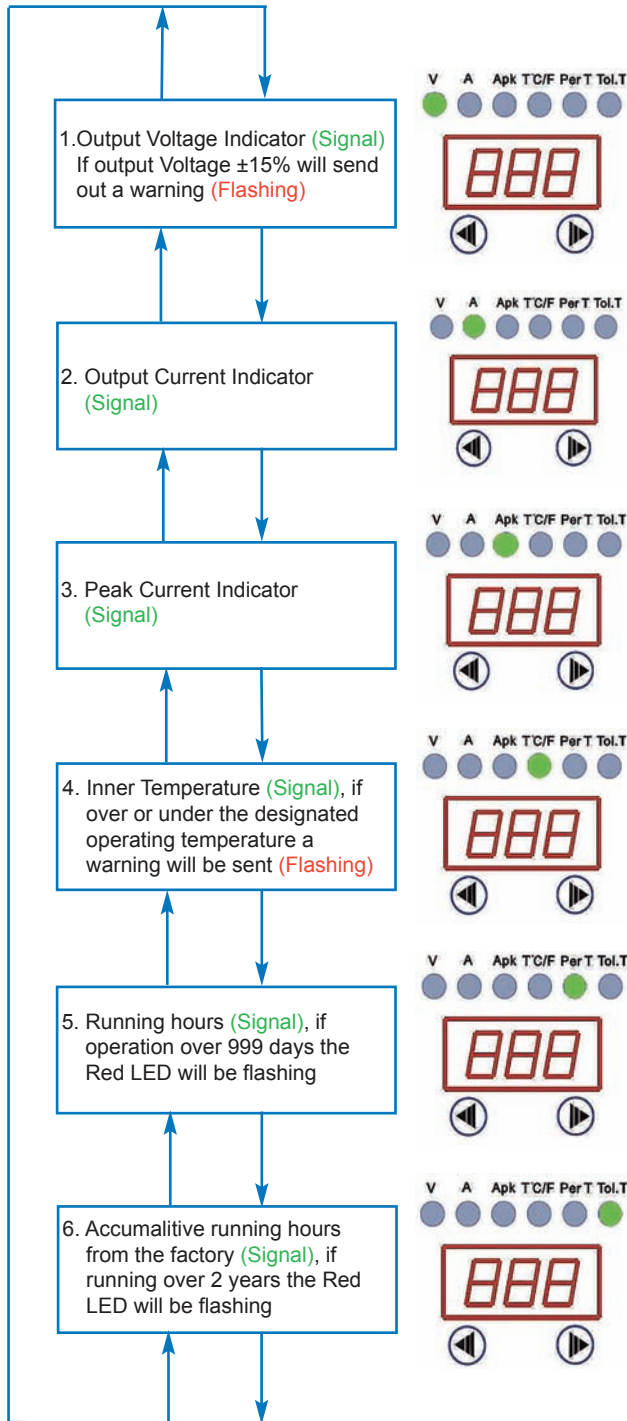
A: Non-display PSU, Rdy Internal Connection of T Type Terminal Block
 B: Non-display PSU, Rdy Internal Connection of E Type Terminal Block
 C: Display PSU, Rdy Internal Connection

Options:

Add following suffix after part numbers for options

- T = Barrier Terminal Block
- E = Mini Disconnectable Terminal Block
- R = Redundant Function & Power Ready
- D = Intelligent Memory with Digital Display

Instructions for optional Intelligent Function



1. Dual LED, when **Green LED** is on it shows the output voltage. If the **Red LED** is flashing it means the voltage is more than $\pm 15\%$ of V out. It will show the output voltage and send a warning signal via Ready Relay which will change from COM to C2 (output OK) to COM to C1 (fault)
2. Single LED, **Green LED** on shows the output current. When LED flashing means the output current is over the rating and will signal a warning (Rdy Signal) as in 1. above
3. Single LED, **Green LED** on shows the peak current which is approximately over 50mSec. To reset the peak output current press the two arrows simultaneously and hold for more than one second to reset to zero. After release it will measure again over 50mSec period and do this continuously.
4. Dual LED, **Green LED** on indicates degrees C and press **Red LED** on to indicate degrees F, this shows internal temperature. When **Red LED** is flashing this indicates that the temperature is under $-20^{\circ}\text{C}/-4^{\circ}\text{F}$ or over $+70^{\circ}\text{C}/+158^{\circ}\text{F}$ and this will signal a warning (Rdy Signal) as in 1. above
5. Dual LED, **Green LED** on indicates the accumulated running time from switch on in days or press **Red LED** on to show the running time in years. If this is over 999 days or 2.73 years **Red LED** will flash and indicate a signal warning (Rdy Signal). Pressing **Left** and **Right** simultaneously for 3 seconds or powering off will reset the timer.
6. Dual LED, **Green LED** on indicates the accumulated running time since leaving the factory measured in days, or press **Red LED** on to indicate time in hours. This period is recorded regardless of powering on and off. Once the total accumulated running time is over 730 days or 2 years the **Red LED** will flash and indicate a signal warning (Rdy Signal). This can be reset by pressing **Left** and **Right** simultaneously for 3 seconds or powering off will reset the timer