

PBDRD30 Series

DC – DC DIN RAIL MOUNTABLE POWER SUPPLY

FEATURES

- 4:1 Wide Input Range
- Short Circuit Protection
- Internal Input Filter
- Low Profile



SPECIFICATIONS

INPUT		
Input rated voltage	24VDC	
Input voltage range	9 to 36VDC	
OUTPUT		
Output Voltage	see selection table	
Output voltage accuracy	±1%	
Minimum load	Vi nom	
Line regulation	±1%	
Load regulation	±1%	
Startup time	50ms	
Transient recovery time	1ms	
Ripple & noise	100mV	
DC ON	Indicator threshold at start up (Green LED)	
DC LOW	Indicator threshold after start up (Red LED)	
Input fuse	T3A/63VDC internal	
Over voltage protection	PBDRD30-05	5.75 to 6.5VDC
	PBDRD30-09	10.35 to 11.7VDC
	PBDRD30-12	14.4 to 16.2VDC
	PBDRD30-15	17.25 to 19.5VDC
	PBDRD30-24	28.8 to 32.4VDC
Rated over load protection	110 to 165 %	
Internal surge voltage protection	IEC 61000-4-5, Varistor	
Output short circuit	Current limited (Auto-recovery)	
Degree of protection	IP20	

STANDARDS & APPROVALS	
UL/cUL	EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-6, EN 61000-4-8, EN 61204-3
cTUVus	EN 60950-1 Meet IEC 60068-2-6 (Mounting by rail : 10- 500 Hz, 2G, along X, Y, Z each Axis, 60 min for each Axis)
TUV	EN 60950-1
CE	EN 61000-6-3, EN 55022 Class B EN 61000-6-2, EN 55024, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4 EN61000-4-5, EN 61000-4-6, EN 61000-4-8, ENV 50204, EN 61204-3
Vibration resistance	Meet IEC 60068-2-6 (Mounting on rail:10-500 Hz, 2G, along X, Y, Z each Axis, 60 min for each Axis)
Shock resistance	Meet IEC 60068-2-27 (15G, 11ms, 3Axis, 6 Faces. 3 times for each face)
MECHANICAL	
Case size	91x35x56.5mm (3.58x1.38x2.22 inches)
Case material	Plastic
Weight	120g
Packing	0.16kg: 88pcs/14kg/1.82CUFT
GENERAL CHARACTERISTICS	
Switching frequency	Vi nom, lo nom
Isolation voltage	Input-output
Isolation resistance	Input-Output, @500VDC
Ambient temperature	Operating at Vi nom
Derating (see derating curve)	Vi nom, from +51 °C to +71 °C
Storage temperature	Non operational
Relative humidity	Vi nom, lo min
Temperature coefficient	Vi nom, lo min
MTBF	Bellcore Issue 6 @ 40°C, GB
Altitude during operation	IEC 60068-2-13
Cooling	Free air convection
Installation position	Vertical (other direction may derating using)
Pollution degree	2

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SELECTION TABLE

MODEL NO.	INPUT VOLTAGE	INPUT CURRENT (TYP.) (MAX.)	OUTPUT WATTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	EFF. (min.)	EFF. (typ.)
PBDRD30-05	9-36VDC	1.13A 3.1A	22.5W	5VDC	4.5A	79%	81%
PBDRD30-09	9-36VDC	1.25A 3.4A	25W	9VDC	2.8A	80%	82%
PBDRD30-12	9-36VDC	1.48A 4A	30W	12VDC	2.5A	81%	83%
PBDRD30-15	9-36VDC	1.48A 4A	30W	15VDC	2A	82%	84%
PBDRD30-24	9-36VDC	1.48A 4A	30W	24VDC	1.25A	83%	85%

TECHNICAL ILLUSTRATIONS

mm [inch]

