

PBDRD Series

DIN RAIL DC/DC CONVERTER

FEATURES

- 15W - 30W DC/DC Converter
- DIN Rail Mounting
- 9-36V 4:1 Input Range
- Short Circuit Protection
- Internal input filter
- Low Profile.



SPECIFICATIONS

INPUT	
Input voltages	12Vdc, 24Vdc
Input voltage range	9 to 36Vdc
OUTPUT	
Output Power	15W - 30W
Output Voltage	see selection table
Voltage Trim Range	+/-10% Vnom
Output voltage accuracy	±1%
Line & Load regulation	±1%
Switching frequency	100 to 200Khz
Startup time	50ms
Transient recovery time	1ms
Ripple & noise	100mV
Efficiency	>81% Typical
STANDARDS & APPROVALS	
UL/cUL	UL508
cTUVus	UL60950-1
TUV	EN60950-1
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, EN61000-4-8, EN50204, 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)

PROTECTION	
Input fuse	T3A/63VDC internal
Over voltage protection	Yes Auto Recovery
Rated over load protection	110 to 165 %
Internal surge protection	IEC 61000-4-5, Varistor
Output short circuit	Current limited (Auto-recovery)
Isolation voltage	Input-Output 1500Vdc
Isolation resistance	Input-Output 100M ohm @500Vdc
Degree of protection	IP20
MTBF	>689,000hrs
INDICATORS	
DC ON	Indicator threshold at start up (Green LED)
DC LOW	Indicator threshold after start up (Red LED)
Remote ON/OFF	Yes
ENVIRONMENTAL	
Operating temperature	-40 to +71C
Cooling	Free Air Convection
Derating	Derate from +51 °C to +71°C at 2.5%/C
MECHANICAL	
Dimensions/Weight	15W: 91 x 18 x 56.5mm / 65g 30W: 91 x 35 x 56.5mm / 120g
Case material	Plastic
Weight	120g

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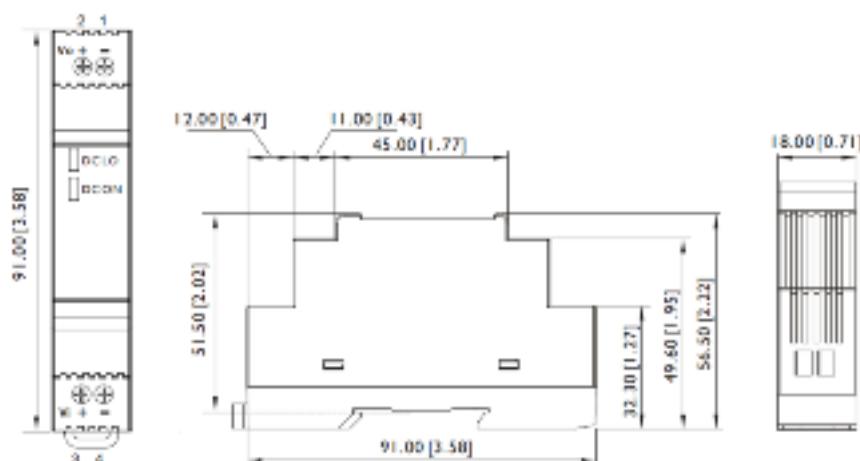
SELECTION TABLE

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	POWER
PBDRD15-03	9-36Vdc	3.3V	3.5A	11.5W
PBDRD15-05	9-36Vdc	5V	2.7A	13.5W
PBDRD30-05	10-36Vdc	5V	4.5A	22.5W
PBDRD15-09	9-36Vdc	9V	1.5A	13.5W
PBDRD30-09	10-36Vdc	9V	2.8A	25W
PBDRD15-12	9-36Vdc	12V	1.25A	15W
PBDRD30-12	10-36Vdc	12V	2.5A	30W
PBDRD15-15	9-36Vdc	15V	1A	15W
PBDRD30-15	10-36Vdc	15V	2A	30W
PBDRD15-24	9-36Vdc	24V	0.63A	15W
PBDRD30-24	10-36Vdc	24V	1.25A	30W

TECHNICAL ILLUSTRATIONS

mm [inch]

PBDRD-15



CONSTRUCTION

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15). unit sits safely and firmly on the rail; no tools required even to remove

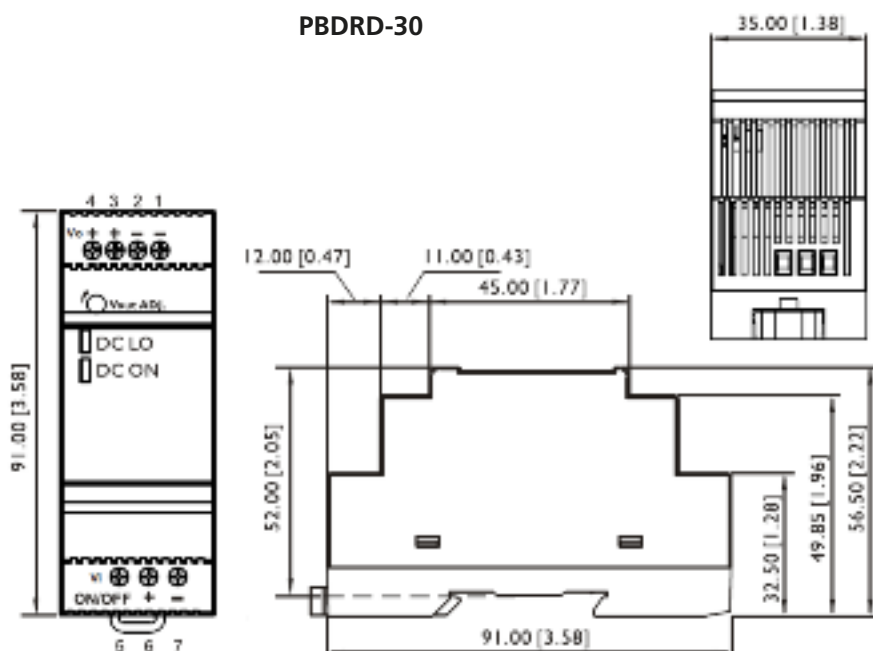
INSTALLATION

Ventilation / Cooling
Normal convection
All sides 25mm free space
For cooling recommended
Connector size range
AWG26-12 (0.2~2.5mm²) flexible / solid cable
-Connector can withstand torque at maximum 5 pound-inches.
4~5mm stripping at cable end recommends.
Use copper conductors only, 60/75 °C

GENERAL TOLERANCE

0.00[0.00] - 30.00[1.18]	±0.30[0.01]
30.00[1.18] - 120.00[4.72]	±0.50[0.02]

PBDRD-30



CONSTRUCTION

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15). unit sits safely and firmly on the rail; no tools required even to remove

INSTALLATION

Ventilation / Cooling
Normal convection
All sides 25mm free space
For cooling recommended
Connector size range
AWG24-12 (0.2~2.5mm²) flexible / solid cable
-Connector can withstand torque at maximum 6 pound-inches.
7 mm stripping at cable end recommends.
Use copper conductors only, 60/75 °C

GENERAL TOLERANCE

0.00[0.00] - 30.00[1.18]	±0.30[0.01]
30.00[1.18] - 120.00[4.72]	±0.50[0.02]