DM-W480-XX

Series

1700g/Typ

Product Feature

- 1. Single and two phase wide input range $180 \sim 550 \text{VAC}$
- 2. Protections:Short circuit/Overload/Over voltage/Over temperature
- 3. Cooling by free air convection
- 4. Ultra-thin width: 32mm
- 5. 4.7KVdc I/O high High isolation (Enhanced Isolation)
- 6. Can be installed on DIN rail TS-35/7.5 or 15
- 7. Ultra-wide operating range from -30 °C to +85°C (reduced for temperatures above +60 °C)
- 8. Adjustable DC output voltage (+20%)
- 9. Built-in DC OK relay contact

Describe

The DM-W480 series is a 240W DIN rail power supply with an ultra-wide AC input range. Suitable for installation on the tracks of TS-35/7.5 or TS-35/15. The main features are: it can accept an ultra-wide input voltage range of 180 to 550VAC for one or two phases; the DIN rail type is easy to install and adopts an ultra-thin design (width only 32mm); it has a wide operating temperature range of -30 to +85°C. With a 4.7KVAC high isolation voltage, it can operate at an altitude of 5000m. The output voltage is adjustable (up to +20%), featuring high efficiency, low ripple, low noise, and full protection.

The DM-W480 complies with the BSEN/EN-61000-6-2 industrial exemption standard environment and is applicable to various applications such as industrial automation, monitoring, and communication.

3 years

Warranty

Application areas

- Industrial automation machinery
- Semiconductor manufacturing equipment
- Industrial control system

BOHS CE

• Electronic instruments and equipment

Electrical Specifications

Model number	DM-W480-24	DM-W480-48	
DC output	24V	48V	
Current	20A	10A	
Current range	0-20A	0-10A	
Rated power	480W	480W	
Ripple and Noise(Max)(20MHZ)	100mVp-p	150mVp-p	
Voltage adjustment range	24-28V	48-55V	
Voltage accuracy	±1%	±1%	
Linear adjustment rate	±0.5%	±0.5%	
Load adjustment rate	±1%	±1%	
Start/rise time	800ms, 150ms, 18ms/400VAC	800ms, 150ms, 18ms/400VAC	
Holding time(Typ.)	2000ms, 150ms, 16ms/230VAC at full load	2000ms, 150ms, 16ms/230VAC at full load	
Input voltage range	180 ~ 550Vac(254 ~ 780Vdc)	180 ~ 550Vac(254 ~ 780Vdc)	
Frequency range	47-63Hz		
Efficiency	92.00%	93.00%	
Input current	1.6A/400VAC 4A/230VAC		
Surge current (cold start)	50A		
Leakage current	<3.5mA / 530VAC	<3.5mA / 530VAC	
Overload protection	105-130% of rated output power		
	Protected mode: hiccup mode. The converter should re-work after fault disappear		

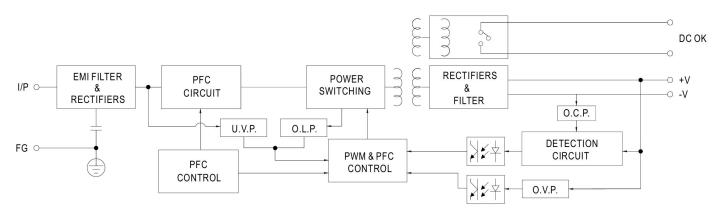
AMCHARD Ultra-wide input industrial rail power supply

DM-W480-XX

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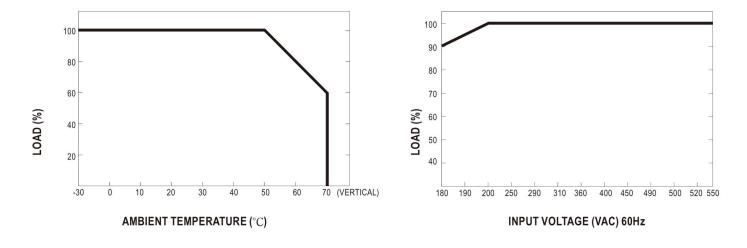
Quanultage protection	29 ~ 33V	56 ~ 65V		
Overvoltage protection	Protected mode:hiccup mode.the converter should	Protected mode:hiccup mode.the converter should re-work after fault disappear		
Short circuit protection	Output terminal short circuit			
	Protected mode:hiccup mode.The converter should	Protected mode: hiccup mode. The converter should re-work after fault disappear		
Operating temperature/humidity	-30°C-+70°C/20-90%RH,No condensation (see "De	-30°C-+70°C/20-90%RH,No condensation (see "Derating curve")		
Storage temperature/humidity	-40°C-+85°C/5-95%RH,No condensation	-40°C-+85°C/5-95%RH,No condensation		
Temperature coefficient	±0.03%/°C (0-60°C)	±0.03%/°C (0-60°C)		
Overvoltage level	II;Compliance with EN61558, EN50178,EN60664-1	II;Compliance with EN61558, EN50178,EN60664-1, EN62477-1,EN60204-1,The altitude can be as		
	high as 2,000 meters	high as 2,000 meters		
Safety specification	UI61010, BS EN/EN61558-2-16, the AS/NZS 62368. 1, EAC TP TC 004 certification through, design			
	reference GL and BS EN/EN60204-1 (AS required)			
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/F	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC		
Insulation impedance	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500Vdc / 25°C/ 70% RH			
Electromagnetic compatibility	BS EN/EN55035 , BS EN/EN61000-6-2(BS EN/EN50082-2)			
dimension	85.5*125.2*128.5mm (W*H*D)	85.5*125.2*128.5mm (W*H*D)		
weight	1700g	1700g		
Heat dissipation mode	Natural convection	Natural convection		
MTBF	825.4K hrs min. Telcordia SR-332 (Bellcore) ; 112.8K hrs min. MIL-HDBK-217F (25°C)			

Block Diagram



Derating Curve

Output Derating VS Input Voltage

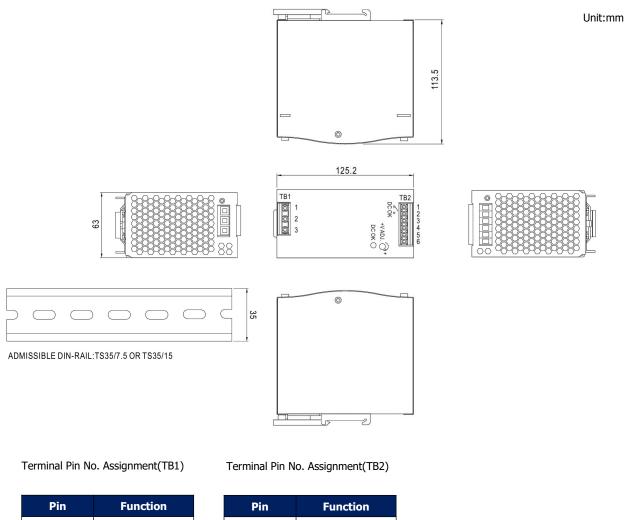


Mechanical Specification

AMCHARD Ultra-wide input industrial rail power supply

DM-W480-XX

Series



 2
 AC/L2
 3,4

 3
 AC/L1
 5,6

FG≟

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Pin	Function
1,2	Relay contact
3,4	DC output -V
5,6	DC output +V

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