#### **Product Feature**

- 1. Single and two phase wide input range 180 ~ 550VAC
- 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-W240 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-W240 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.

#### **Application areas**

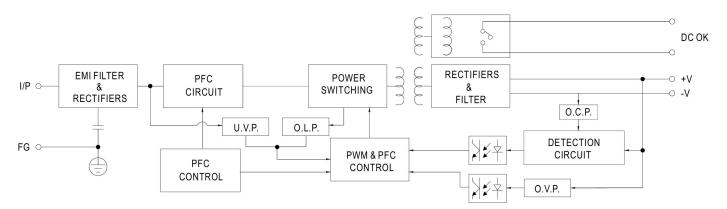
- Industrial automation machinery
- Semiconductor manufacturing equipment
- Industrial control system
- Electronic instruments and equipment

#### **Electrical Specifications**

Model number	DM-W240-24	DM-W240-48
DC output	24V	48V
Current	10A	5A
Current range	0-10A	0-5A
Rated power	240W	240W
Ripple and Noise(Max)(20MHZ)	150mVp-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/400VAC 1500ms, 150ms/230VAC at full load	
Holding time(Typ.)	18ms / 400VAC 18ms / 230VAC(at full load)	
Input voltage range	180 ~ 550Vac(254 ~ 780Vdc)	
Frequency range	47-63Hz	
Efficiency	91.00%	91.00%
Input current	1A/400VAC 2A/230VAC	
Surge current (cold start)	50A	
Leakage current	<3.5mA / 530VAC	
Overload protection	105-130% of rated output power	

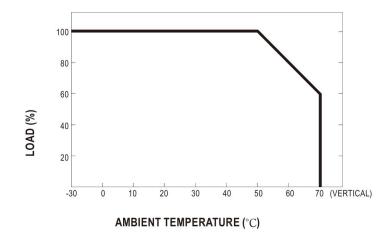
	Protected mode:hiccup mode. The converter should re-work after fault disappear		
Overveltage protection	29 ~ 33V	56 ~ 65V	
Overvoltage protection	Protected mode:hiccup mode.the converter should re-work after fault disappear		
Short circuit protection	Output terminal short circuit		
Short circuit protection	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 "Derating curve")		
Storage temperature/humidity	-40°C-+85°C/5-95%RH,No condensation		
Temperature coefficient	±0.03%/°C (0-60°C)		
Overveltage level	II;Compliance with EN61558, EN50178,EN60664-1, EN62477-1,EN60204-1,The altitude can be as high		
Overvoltage level	as 2,000 meters		
Cafety enecification	UI61010, BS EN/EN61558-2-16, the AS/NZS 62368. 1, EAC TP TC 004 certification through, design		
Safety specification	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/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	63*125.2*113.5mm (W*H*D)		
weight	1060g		
Heat dissipation mode	Natural convection		
МТВБ	1062.8K hrs min. Telcordia SR-332 (Bellcore); 141.1	1K hrs min. MIL-HDBK-217F (25°C)	

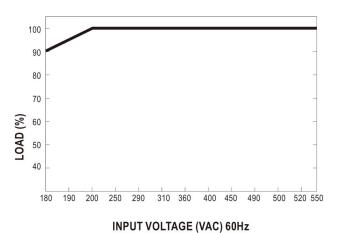
## **Block Diagram**



### **Derating Curve**

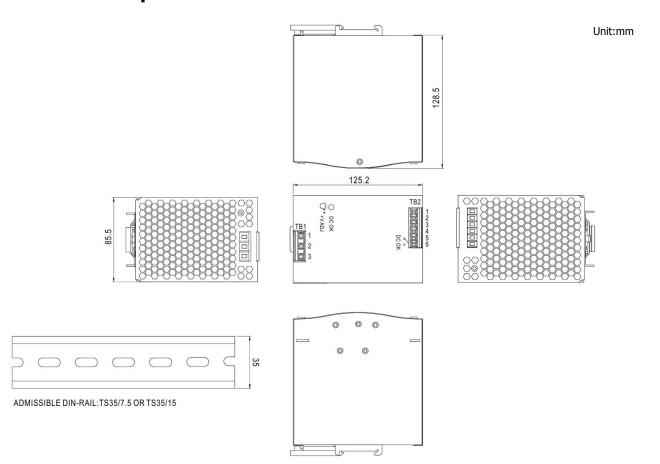
# **Output Derating VS Input Voltage**







## **Mechanical Specification**



Terminal Pin No. Assignment(TB1)

Pin **Function** FG≟ 1 2 AC/L2

AC/L1

3

Terminal Pin No. Assignment(TB2)

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

## **DONGGUAN AMCHARD-POWER TECHNOLOGY CO., LTD.**

www.amchard-power.com

Mail:info@amchard-power.com