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-W75 series is a 75W 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-W75 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

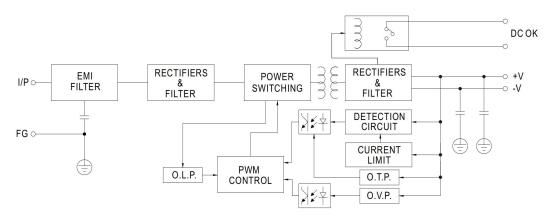
- Industrial automation machinery
- Semiconductor manufacturing equipment
- Industrial control system
- Electronic instruments and equipment

Electrical Specifications

Model number	DM-W75-5	DM-W75-12	DM-W75-24	DM-W75-48	
DC output	5V	12V	24V	48V	
Current	12 A	6.25A	3.2A	1.56A	
Current range	0-12 A	0-6.25A	0-3.2A	0-1.56A	
Rated power	60W	75W	75W	75W	
Ripple and Noise(Max)(20MHZ)	100mVp-p	120mVp-p	150mVp-p	200mVp-p	
Voltage adjustment range	5-6V	12-15V	24-29V	48-57V	
Voltage accuracy	±2%	±1.5%	±1%	±1%	
Linear adjustment rate	±0.5%	±0.5%	±0.5%	±0.5%	
Load adjustment rate	±1.5%	±0.5%	±0.5%	±0.5%	
Start/rise time	1000ms, 70ms, 20ms/4	1000ms, 70ms, 20ms/400Vac 2000ms, 70ms, 10ms/230Vac at full load			
Holding time(Typ.)	30ms/230VAC 12ms/11	30ms/230VAC 12ms/115VAC at full load			
Input voltage range	180 ~ 550Vac(254 ~ 7	180 ~ 550Vac(254 ~ 780Vdc)			
Frequency range	47-63Hz				
Efficiency	83.50%	86.50%	89.00%	90.50%	
Input current	0.4A/400Vac 0.7A/230V	0.4A/400Vac 0.7A/230Vac			
Surge current (cold start)	50A /400Vac 30A/230V	50A /400Vac 30A/230Vac			
Leakage current	<2mA / 530Vac	<2mA / 530Vac			
Overload protection	When the rated output	When the rated output power is between 105% and 135%, and the output voltage is less than			

	50%, it is in burp mode. It can automatically recover after the abnormal load conditions are removed		
	When the output voltage is between 50% and 100%, it is in constant current mode and can automatically recover after the abnormal load conditions are removed		
Overvoltage protection	6.2 ~ 7.2V		
	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 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)		
Overvoltage level	Compliance with EN61558, EN50178, EN60664-1, EN62477-1, EN60204-1, The altitude can be as		
	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:4.7KVAC I/P-FG:2.5KVAC 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	40*125.2*113.5mm (W*H*D)		
weight	650 g		
Heat dissipation mode	Natural convection		
MTBF	1900.1K hrs min. Telcordia SR-332 (Bellcore) ; 313.7K hrs min. MIL-HDBK-217F (25°C)		

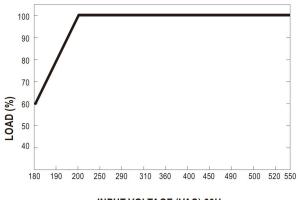
Block Diagram



Derating Curve

Others 100 80 12V 60 40 20 70 (VERTICAL) -25 30 50 10 AMBIENT TEMPERATURE (°C)

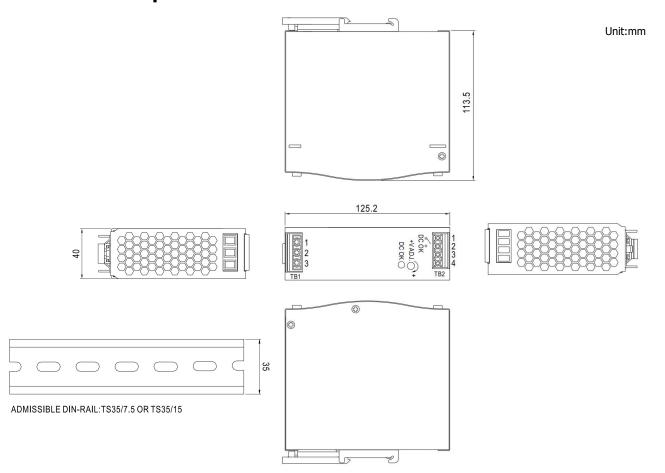
Output Derating VS Input Voltage



INPUT VOLTAGE (VAC) 60Hz



Mechanical Specification



Terminal Pin No. Assignment(TB1)

Terminal Pin No. Assignment(TB2)

Pin	Function
1	FG≟
2	AC/L2
3	AC/L1

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

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