

# MDR-60-48

60W Single Output Industrial DIN RAIL Power Supply



## Features

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- Class I, Div 2 Hazardous Locations T4
- LED indicator for power on
- No load power consumption < 0.75W
- 100% full load burn-in test
- 3 years warranty



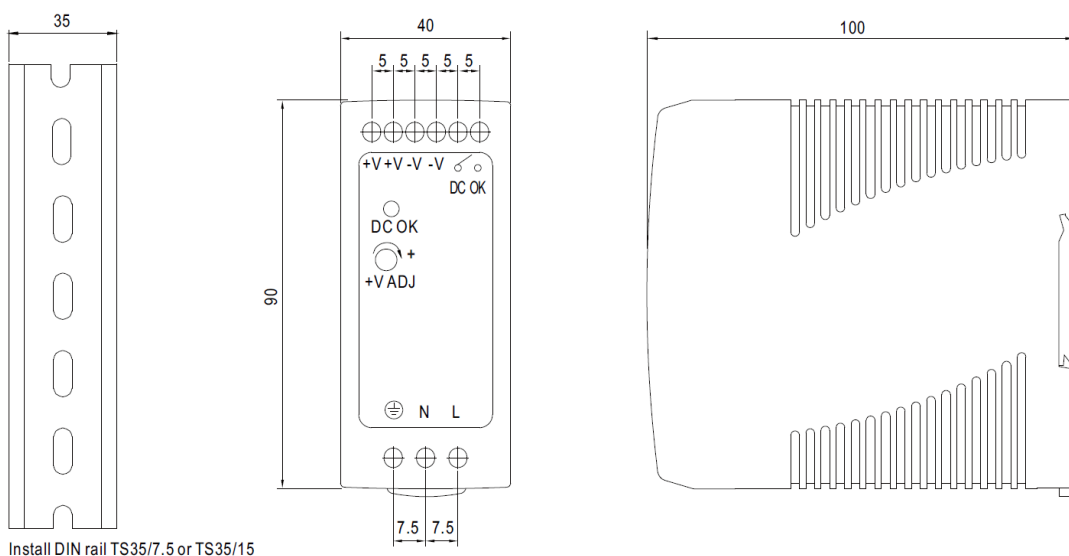
## Specification

MODEL	MDR-60-48	
OUTPUT	DC VOLTAGE	48V
	RATED CURRENT	1.25A
	CURRENT RANGE	0 ~ 1.25A
	RATED POWER	60W
	RIPPLE & NOISE (max.)	Note.2 200mVp-p
	VOLTAGE ADJ. RANGE	48 ~ 56V
	VOLTAGE TOLERANCE	Note.3 ±1.0%
	LINE REGULATION	±1.0%
	LOAD REGULATION	±1.0%
	SETUP, RISE TIME	Note.5 500ms, 30ms/230VAC    500ms, 30ms/115VAC at full load
HOLD UP TIME (Typ.)	50ms/230VAC    20ms/115VAC at full load	
INPUT	VOLTAGE RANGE	85 ~ 264VAC    120 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz
	EFFICIENCY (Typ.)	87%
	AC CURRENT (Typ.)	1.8A/115VAC    1A/230VAC
	INRUSH CURRENT (Typ.)	COLD START 30A/115VAC    60A/230VAC
	LEAKAGE CURRENT	<1mA / 240VAC
PROTECTION	OVERLOAD	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed
	OVER VOLTAGE	57.6 ~ 64.8V Protection type : Shut down o/p voltage, re-power on to recover
FUNCTION	DC OK SIGNAL	Relay contact rating(max.): 30V/1A resistive
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°C (Refer to "Derating Curve")
	WORKING HUMIDITY	20 ~ 90% RH non-condensing
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)
SAFETY & EMC (Note 4)	VIBRATION	Component : 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes ; Mounting : Compliance to IEC60068-2-6
	SAFETY STANDARDS	UL508, UL60950-1, TUV EN60950-1, Class I, Div. 2 Group A, B, C, D Hazardous Locations T4 approved
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C / 70% RH
	EMC EMISSION	Compliance to EN55011, EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3
EMC IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A	

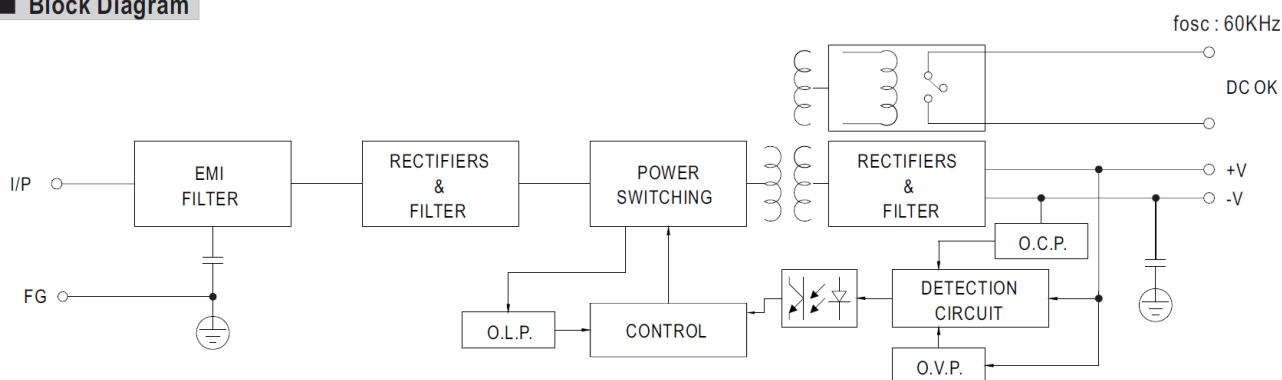
<b>MODEL</b>	<b>MDR-60-48</b>	
<b>OTHERS</b>	<b>MTBF</b>	299.2K hrs min. MIL-HDBK-217F (25°C)
	<b>DIMENSION</b>	40*90*100mm (W*H*D)
	<b>PACKING</b>	0.33Kg; 42pcs/14.8Kg/0.82CUFT
<b>NOTE</b>	<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> <li>Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.</li> </ol>	

## Mechanical Specification

Case No.962A Unit:mm



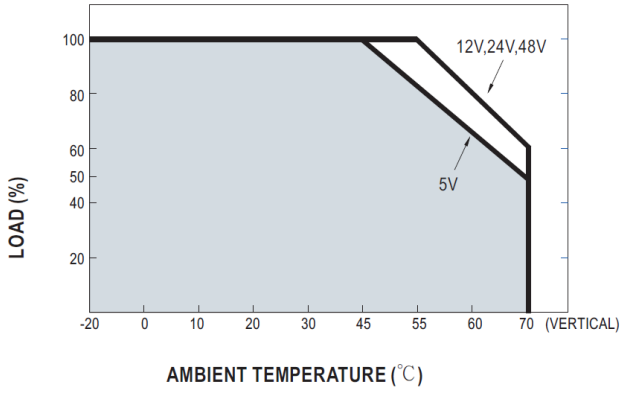
## Block Diagram



## DC OK Relay Contact

Contact Close	PSU turns on / DC OK.
Contact Open	PSU turns off / DC Fail.
Contact Ratings (max.)	30V/1A resistive load.

■ Derating Curve



■ Output Derating VS Input Voltage

