



MDR-60

60W Single Output Industrial DIN Rail Power Supply



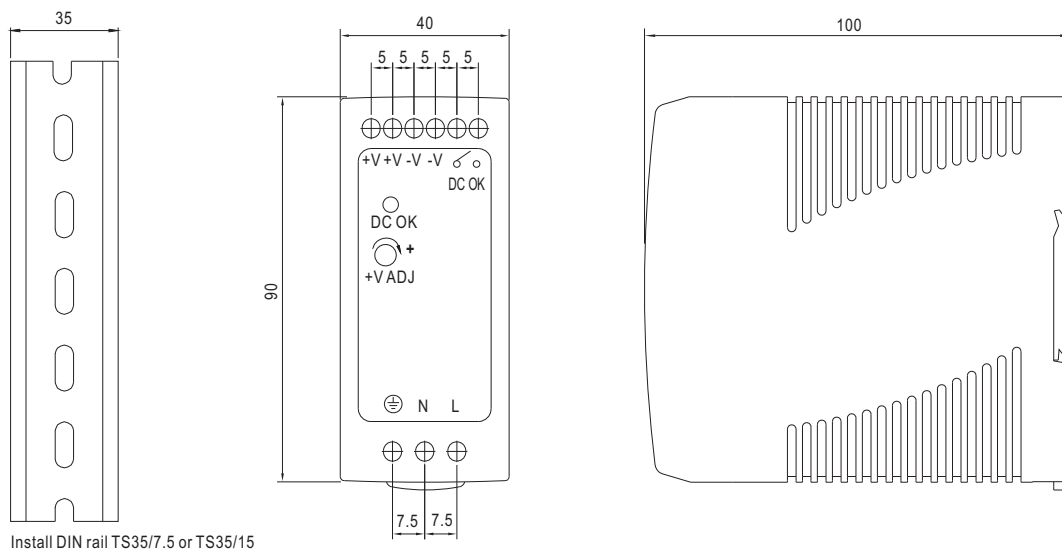
■ Features :

- 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
- LED indicator for power on
- DC OK relay contact
- No load power consumption<0.75W
- 100% full load burn-in test
- 2 years warranty

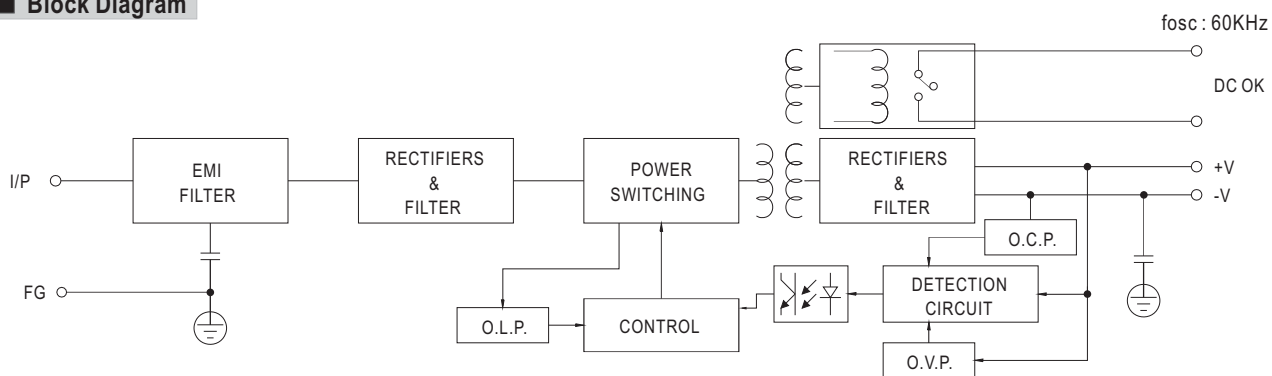
SPECIFICATION

MODEL		MDR-60-5		MDR-60-12		MDR-60-24		MDR-60-48	
OUTPUT	DC VOLTAGE	5V		12V		24V		48V	
	RATED CURRENT	10A		5A		2.5A		1.25A	
	CURRENT RANGE	0 ~ 10A		0 ~ 5A		0 ~ 2.5A		0 ~ 1.25A	
	RATED POWER	50W		60W		60W		60W	
	RIPPLE & NOISE (max.) <small>Note.2</small>	80mVp-p		120mVp-p		150mVp-p		200mVp-p	
	VOLTAGE ADJ. RANGE	5 ~ 6V		12 ~ 15V		24 ~ 30V		48 ~ 56V	
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%		±1.0%		±1.0%		±1.0%	
	LINE REGULATION	±1.0%		±1.0%		±1.0%		±1.0%	
	LOAD REGULATION	±1.5%		±1.0%		±1.0%		±1.0%	
	SETUP, RISE TIME <small>Note.5</small>	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.)	78%		86%		88%		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	6.25 ~ 7.25V		15.6 ~ 18V		31.2 ~ 36V		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℃ (Refer to "Derating Curve")							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)							
	VIBRATION	Component : 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes ; Mounting : Compliance to IEC60068-2-6							
SAFETY & EMC <small>(Note 4)</small>	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℃ / 70% RH							
	EMC EMISSION	Compliance to EN55011, EN55022 (CISPR22), 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							
OTHERS	MTBF	299.2K hrs min. MIL-HDBK-217F (25℃)							
	DIMENSION	40*90*100mm (W*H*D)							
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. 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. 5. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.								

Mechanical Specification



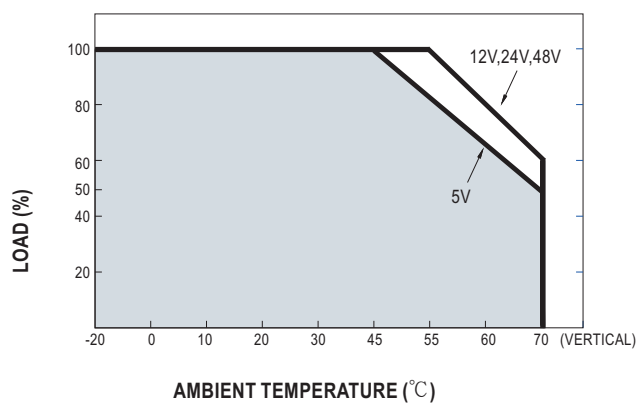
Block Diagram



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

