



10W Single Output Industrial DIN Rail Power Supply

MDR-10 series



■ Features :

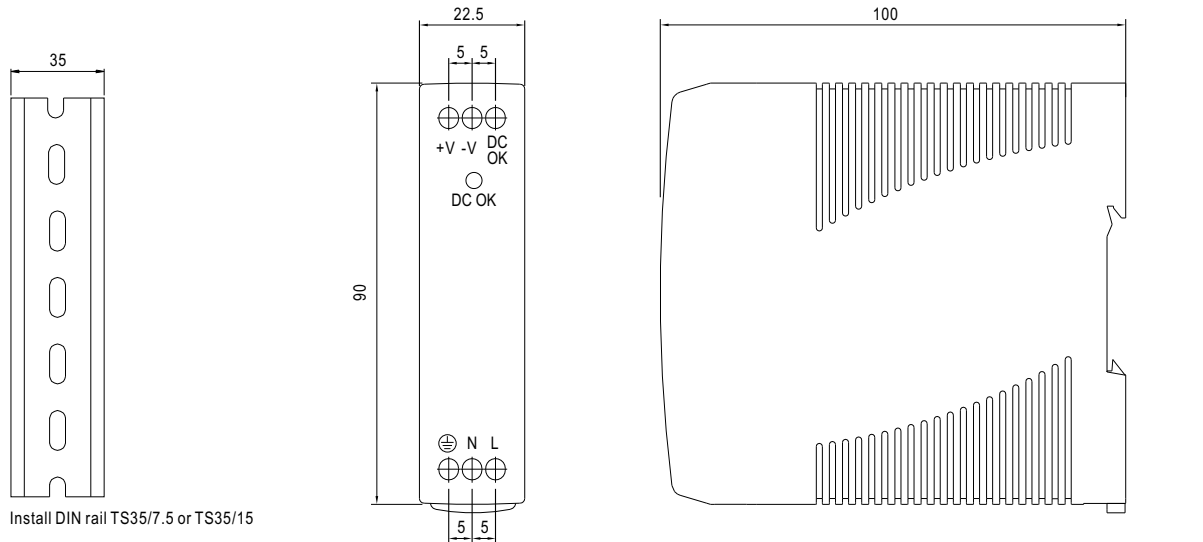
- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- NEC class 2 / LPS compliant
- Built in DC OK active signal
- LED indicator for power on
- No load power consumption<0.75W
- 100% full load burn-in test
- 3 years warranty



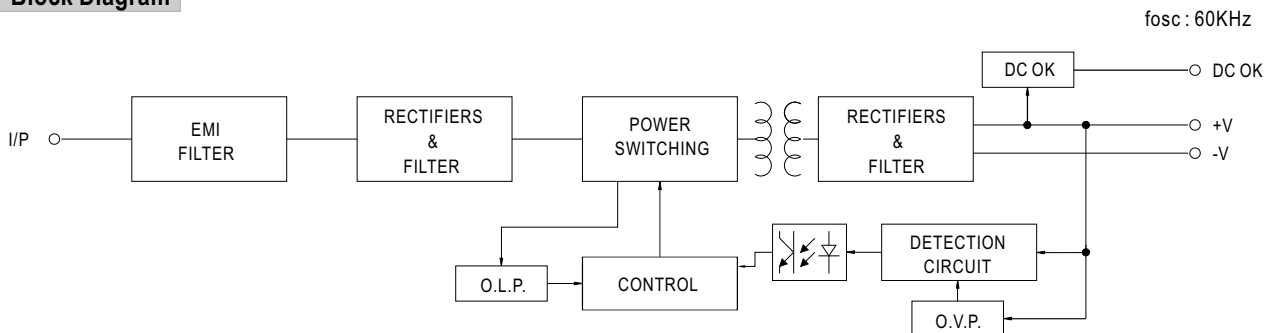
SPECIFICATION

MODEL	MDR-10-5		MDR-10-12		MDR-10-15		MDR-10-24		
OUTPUT	DC VOLTAGE	5V		12V		15V		24V	
	RATED CURRENT	2A		0.84A		0.67A		0.42A	
	CURRENT RANGE	0 ~ 2A		0 ~ 0.84A		0 ~ 0.67A		0 ~ 0.42A	
	RATED POWER	10W		10W		10W		10W	
	RIPPLE & NOISE (max.) <small>Note.2</small>	80mVp-p		120mVp-p		120mVp-p		150mVp-p	
	VOLTAGE TOLERANCE <small>Note.3</small>	±5.0%		±3.0%		±3.0%		±2.0%	
	LINE REGULATION	±1.0%		±1.0%		±1.0%		±1.0%	
	LOAD REGULATION	±5.0%		±3.0%		±3.0%		±2.0%	
	SETUP, RISE TIME <small>Note.5</small>	500ms, 30ms/230VAC		1000ms, 30ms/115VAC at full load					
HOLD UP TIME (Typ.)	120ms/230VAC		25ms/115VAC at full load						
INPUT	VOLTAGE RANGE	85 ~ 264VAC		120 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.)	77%		81%		81%		84%	
	AC CURRENT (Typ.)	0.33A/115VAC		0.21A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 35A/115VAC		70A/230VAC					
	LEAKAGE CURRENT	<1mA / 240VAC							
PROTECTION	OVERLOAD	Above 105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	5.75 ~ 6.75V		13.8 ~ 16.2V		17.25 ~ 20.25V		27.6 ~ 32.4V	
		Protection type : Shut down o/p voltage, re-power on to recover							
FUNCTION	DC OK ACTIVE SIGNAL (max.)	3.75 ~ 6V / 50mA		9 ~ 13.5V / 40mA		11.5 ~ 16.5V / 40mA		18 ~ 27V / 20mA	
ENVIRONMENT	WORKING TEMP.	-20 ~ +70℃ (Refer to output load 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, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6							
SAFETY & EMC <small>(Note 4)</small>	SAFETY STANDARDS	UL508, TUV EN60950-1 approved, NEC class 2 / LPS compliant							
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC							
	EMI CONDUCTION & RADIATION	Compliance to EN55011, EN55022 (CISPR22), EN61204-3 Class B							
	HARMONIC CURRENT	Compliance to EN61000-3-2, -3							
	EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-1, EN61204-3, light industry level, criteria A							
OTHERS	MTBF	584K hrs min. MIL-HDBK-217F (25℃)							
	DIMENSION	22.5*90*100mm (W*H*D)							
	PACKING	0.17Kg; 72pcs/13.2Kg/0.91CUFT							
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 cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.								

Mechanical Specification

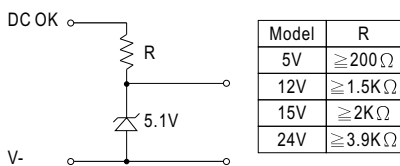


Block Diagram

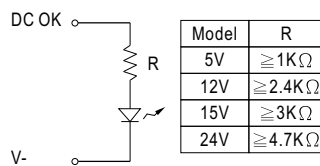


Application of DC OK Active Signal

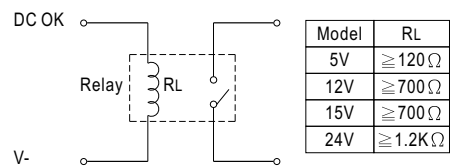
(a) 5V signal



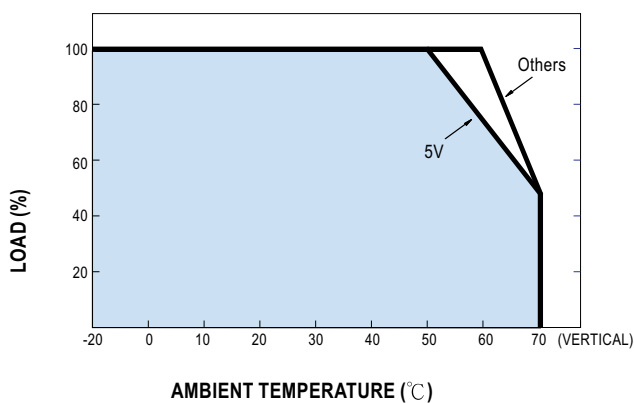
(b) LED



(c) Relay



Derating Curve



Output Derating VS Input Voltage

