



20W Single Output Industrial DIN Rail Power Supply

MDR-20 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
- 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

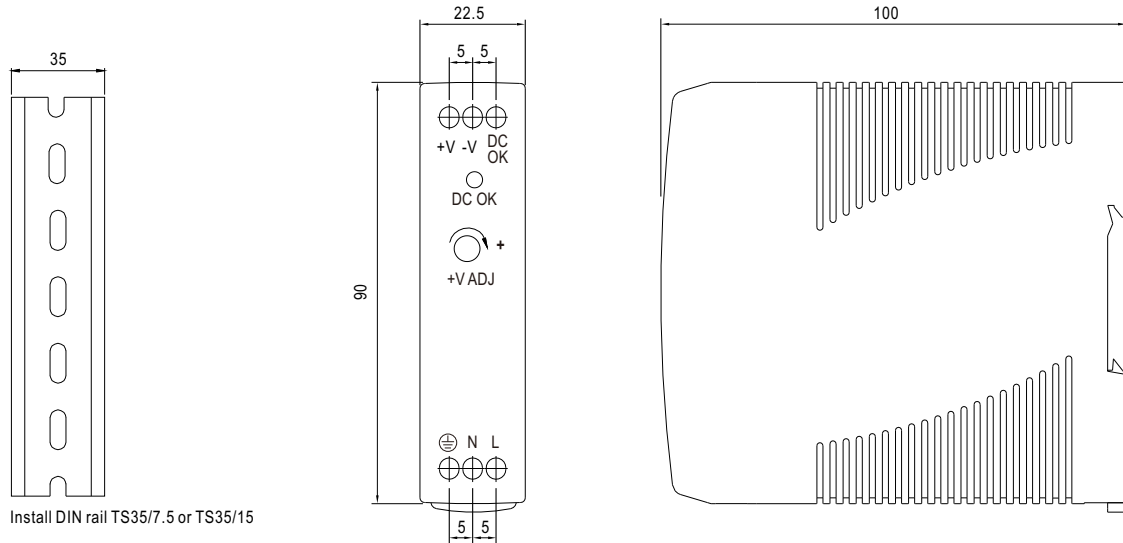


SPECIFICATION

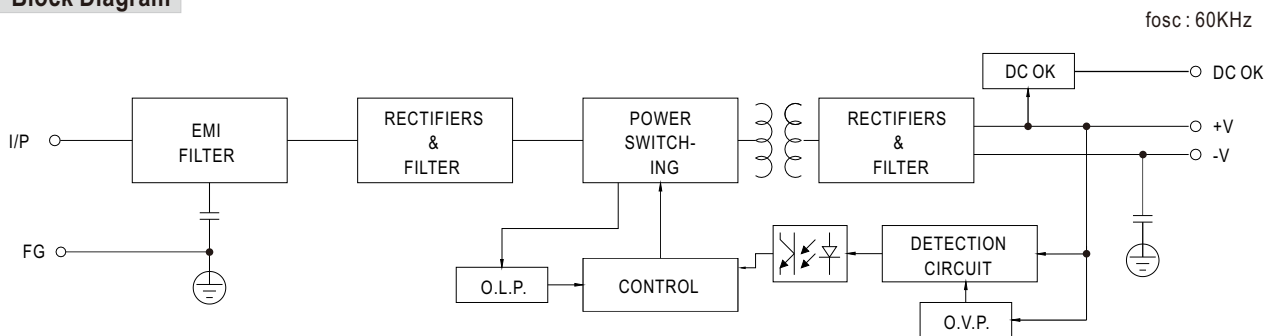
MODEL		MDR-20-5		MDR-20-12		MDR-20-15		MDR-20-24	
OUTPUT	DC VOLTAGE	5V		12V		15V		24V	
	RATED CURRENT	3A		1.67A		1.34A		1A	
	CURRENT RANGE	0 ~ 3A		0 ~ 1.67A		0 ~ 1.34A		0 ~ 1A	
	RATED POWER	15W		20W		20W		24W	
	RIPPLE & NOISE (max.) Note.2	80mVp-p		120mVp-p		120mVp-p		150mVp-p	
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V		10.8 ~ 13.2V		13.5 ~ 16.5V		21.6 ~ 26.4V	
	VOLTAGE TOLERANCE Note.3	± 2.0%		± 1.0%		± 1.0%		± 1.0%	
	LINE REGULATION	± 1.0%		± 1.0%		± 1.0%		± 1.0%	
	LOAD REGULATION	± 1.0%		± 1.0%		± 1.0%		± 1.0%	
	SETUP, RISE TIME Note.5	500ms, 30ms/230VAC		1000ms, 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.)	76%		80%		81%		84%	
	AC CURRENT (Typ.)	0.55A/115VAC		0.35A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC		40A/230VAC					
	LEAKAGE CURRENT	<1mA / 240VAC							
PROTECTION	OVERLOAD	105 ~ 160% rated output power Protection type : Constant current limiting, 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 "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 (Note 4)	SAFETY STANDARDS	UL508, TUV BS EN/EN62368-1, EAC TP TC 004, BSMI CNS14336-1, AS/NZS 62368.1 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℃/ 70% RH							
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32), BS EN/EN61204-3 Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS13438 Class B							
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2, 3, 4, 5, 6, 8, 11, BS EN/EN55024,BS EN/EN61000-6-1,BS EN/EN61204-3, light industry level, criteria A, EAC TP TC 020							
OTHERS	MTBF	236.9K hrs min. MIL-HDBK-217F (25℃)							
	DIMENSION	22.5*90*100mm (W*H*D)							
	PACKING	0.17Kg; 72pcs/13.2Kg/1.04CUFT							
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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 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. 6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx								

Case No. 956 Unit:mm

Mechanical Specification

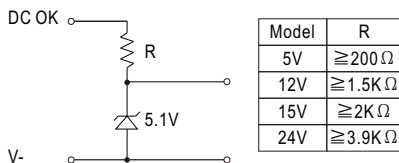


Block Diagram

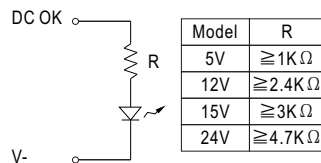


Application of DC OK Active Signal

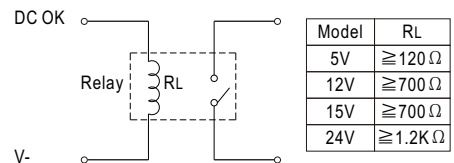
(a) 5V signal



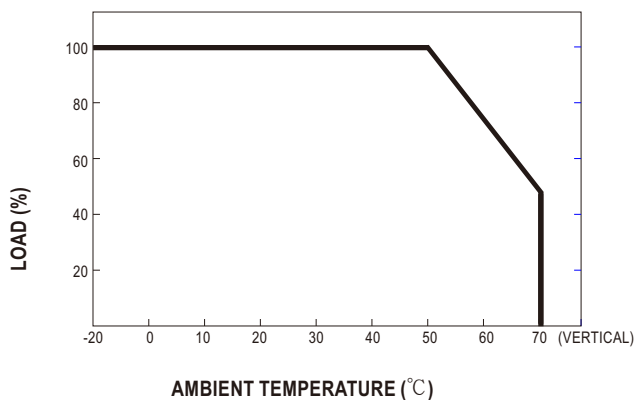
(b) LED



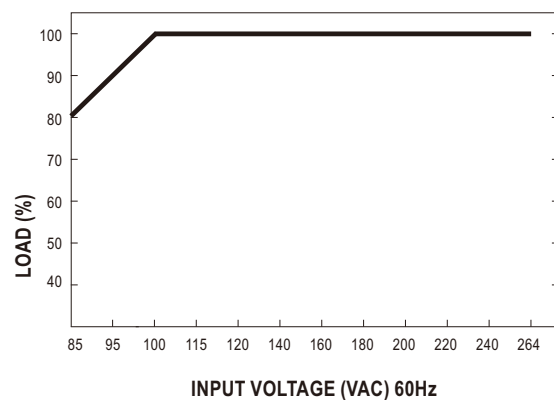
(c) Relay



Derating Curve



Output Derating VS Input Voltage



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

MEAN WELL:

[MDR-20-5](#) [MDR-20-15](#) [MDR-20-24](#) [MDR-20-12](#)