MDR-100 Series

96W Single Output Industrial DIN Rail Power Supply

Case No: 8017HT
55 x 90 x 100mm

Features

- Universal AC input / Full range
- Protections: Short Circuit / Overload / Over voltage / Over Temperature
- ZCS/ZVS technology to reduce power dissipation
- Can be installed on DIN rail TS-35/7.5 or 15
- Cooling by free air convection
- LED indicator for power on
- DC OK relay contact
- No load power consumption <1W
- 100% full load burn-in test
- 3 years warranty

Specification

INPUT	Voltage	85~264VAC 120~370VDC		
	Frequency	47 ~ 63 Hz		
	Power Factor	PF≥ 0.95/230VAC PF≥ 0.98/115VAC at full load		
	Efficiency	83%	86%	87%
	AC Current (Typ.)	1.3A/115VAC 0.8A/230VAC		
	Inrush Current (Typ.)	Cold start 30A/115VAC 60A/230VAC		
	Leakage Current	<1mA/240VAC		
OUTPUT	MODEL No.	MDR-100-12	MDR-100-24	MDR-100-48
	Voltage	12V	24V	48V
	Rated Current	7.5A	4A	2A
	Current Range	0~7.5A	0~4A	0~2A
	Rated Power	90W	96W	96W
	Ripple Noise MAX.	120mVp-p	150mVp-p	200mVp-p
	Voltage Adjustment Range	12~15V	24~30V	48~56V
	Voltage Tolerance	± 1.0%	± 1.0%	± 1.0%
	Line Regulation	± 1.0%	± 1.0%	± 1.0%
	Load Regulation	± 1.0%	± 1.0%	± 1.0%
	Setup Rise Time	3000ms, 50ms/230VAC	3000ms, 50ms/115VAC at full load	
	Holdup Time (Typ.)	50ms/230VAC 20ms/115VAC at full load		
PROTECTION	Over Load	105~150% rated output power		
		Protection Type: Constant current limiting, recovers automatically after fault condition is removed		
	Over Voltage	15.6~18V	31.2~36V	57.6~64.8V
		Protection Type: Shut down o/p voltage, re-power on to recover		
	Over Temperature	Shut down o/p voltage, auto-recovery or re-power on to recover		
FUNCTION	DC OK Signal	Relay contact rating (max): 30V/1A resistive		
ENVIRONMENT	Working Temperature	-20~+60°C (Refer to "Derating Curve")		
	Working Humidity	20~90% RH non-condensing		
	Storage Temp., Humidity	-40~ +85°C, 10~95%RH		
	Temp. Co-efficient	±0.03% / °C (0~50°C)		
	Vibration	10~500Hz, 2G 10min./1cycle, 60 min. each along X, Y, Z axes; Mounting: compliance to IEC60068-2-6		
SAFETY & EMC	Safety Standards	UL508, TUV EN60950-1 approved		
	Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC		
	Isolation Resistance	I/P-OP, I/P-FG, O/P-FG:>100M Ohms/500Vdc/25°C/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	M.T.B.F.	346K hrs min. MIL-HDBK-217F (25°C)		
	Packaging	0.42Kg; 30pcs/13.6Kg/0.82CUFT		

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and 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 as a component which will be installed with final equipment. The final equipment must 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."
5. Length of setup time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the setup time.
6. Derating maybe needed under low input voltages, please check the derating curve for more detail.

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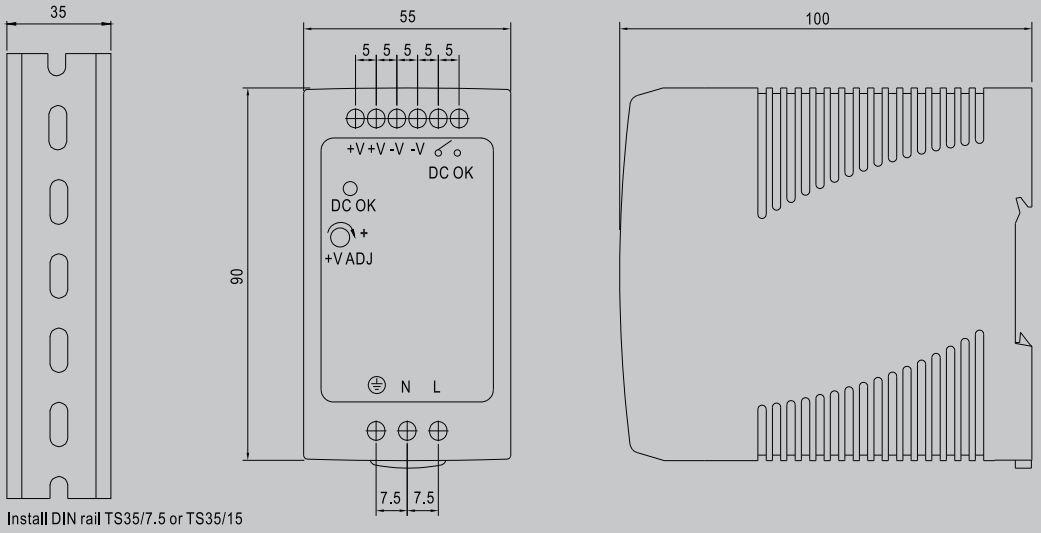
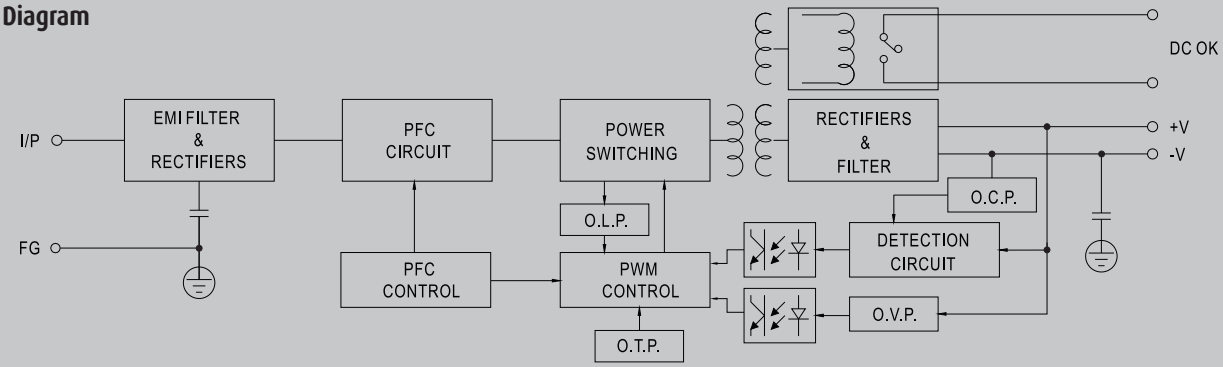
Mechanical Specification



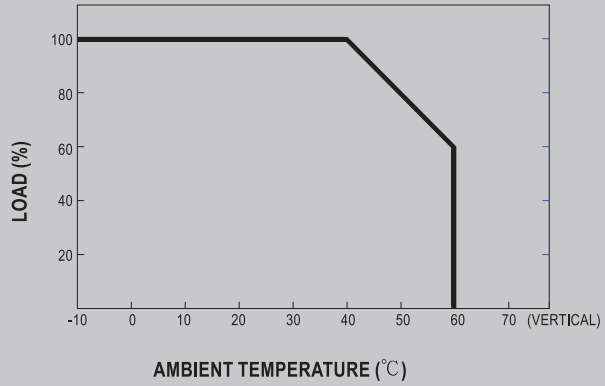
Block Diagram



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



Derating Curve