



## Features:

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

## **SPECIFICATION**









MODEL		MDR-100-12	MDR-100-24	MDR-100-48	
OUTPUT	DC 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.) Note.2	120mVp-p	150mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	12 ~ 15V	24 ~ 30V	48 ~ 56V	
	VOLTAGE TOLERANCE Note.3	±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 Note.5	3000ms, 50ms/230VAC 3000ms, 50ms/115VAC at full load			
	HOLD UP TIME (Typ.)	50ms/230VAC 20ms/115VAC at full load			
INPUT	VOLTAGE RANGE Note.6	85 ~ 264VAC 120 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR (Typ.)	$PF \ge 0.95/230VAC$ $PF \ge 0.98/115VAC$	at full load		
	EFFICIENCY (Typ.)	85%	86%	88%	
	AC CURRENT (Typ.)	1.3A/115VAC 0.8A/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 i	s 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	90°C ±10°C (RTH2) detect on heatsink of power transistor			
	OVER TEMPERATURE	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.	-10 ~ +60 $^{\circ}$ C (Refer to output load 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)			
	VIBRATION	Component: 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL508, TUV EN60950-1 approved			
	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 / 25°C / 70% RH			
	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, EN61000-6-2, EN61204-3, heavy industry level, criteria A			
OTHERS	MTBF	346K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	55*90*100mm (W*H*D)			
	PACKING	0.42Kg; 30pcs/13.6Kg/0.82CUFT			
NOTE	Ripple & noise are measure     Tolerance : includes set up     The power supply is consid     EMC directives.     Length of set up time is me	ally mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  red at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  p tolerance, line regulation and load regulation.  idered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets  reasured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.  nder low input voltages, please check the derating curve for more detail.			



