

## Korenix Industrial Product Selection Guide - Industrial Power Supply



- 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
- NEC class 2, limited power source (for 24V, 48V only)
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty

### SPECIFICATION

| MODEL                 | MDR-100-24   | MDR-100-48  |                                  |
|-----------------------|--|---|----------------------------------|
| OUTPUT                | DC VOLTAGE   | 24V   | 48V                              |
|                       | RATED CURRENT  | 4A  | 2A                               |
|                       | CURRENT RANGE  | 0 ~ 4A  | 0 ~ 2A                           |
|                       | RATED POWER  | 96W   | 96W                              |
|                       | RIPPLE & NOISE (max.) Note.2   | 150mVp-p  | 200mVp-p                         |
|                       | VOLTAGE ADJ. RANGE   | 24 ~ 30V  | 48 ~ 56V                         |
|                       | VOLTAGE TOLERANCE Note.3   | ±1.0%   | ±1.0%                            |
|                       | LINE REGULATION  | ±1.0%   | ±1.0%                            |
|                       | LOAD REGULATION  | ±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 ≥ 0.95/230VAC  | PF ≥ 0.98/115VAC at full load    |
|                       | EFFICIENCY (Typ.)  | 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<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed |                                  |
|                       | OVER VOLTAGE   | 31.2 ~ 36V  | 57.6 ~ 64.8V                     |
|                       | OVER TEMPERATURE   | 90°C ±10°C (RTH2) detect on heatsink of power transistor<br>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°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, design refer to NEC CLASS 2 (for 24V, 48V only)  |                                  |
|                       | 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°C)  |                                  |
|                       | DIMENSION  | 55*90*100mm (W*H*D)   |                                  |
|                       | PACKING  | 0.42Kg; 30pcs/13.6Kg/0.82CUFT   |                                  |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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.</p> <p>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.</p> <p>6. Deating maybe needed under low input voltages, please check the derating curve for more detail.</p> |   |                                  |

Industrial PoE Switch  
IP67/68 Ethernet Switch  
Rackmount Managed Switch  
Gigabit Switch  
Redundant Switch  
Entry-Level Switch  
Networking Computer  
Communication Computer  
Ethernet I/O Server  
Serial Device Server  
Media Converter  
Multiport Serial Card  
SFP Module  
Din Rail Power Supply