

# MDR-40-48

40W/0.83A 48VDC Industrial Power Supply



## Features

- -20°C to 70°C operating temperature range
- Can be installed on DIN-Rail TS-35/7.5 o 15
- Short circuit/over load/over voltage protections
- No load power consumption < 0.75W
- NEC class 2/LPS compliant



## Hardware Specifications

### Power

#### Power Input

- Voltage Range: 85 to 264VAC; 120 to 370VDC
- Frequency Range: 47 to 63Hz
- Efficiency: 88%
- AC Current (Typ.): 1.1A / 115VAC; 0.7A / 230VAC
- Inrush Current (Typ.): Cold Start  
30A / 115VAC;  
60A / 230VAC

#### Power Output

- DC Voltage: 48V
- Rated Current: 0.83A
- Current Range: 0 to 0.83A
- Rated Power: 39.8W
- Ripple & Noise (max.): 200mVp-p
- Voltage Adj. Range: 48 to 56V
- Voltage Tolerance: + / - 1.0%
- Line Regulation: + / - 1.0%
- Load Regulation: + / - 1.0%
- Setup, Rise Time: 500ms, 30ms / 230VAC;  
500ms, 30ms / 115VAC at full load
- Hold up Time: 50ms / 230VAC; 20ms / 115VAC at full load

### Mechanical

#### Casing

- Aluminum case

#### Dimensions

- 40mm (W) x 100mm (D) x 90 mm(H)  
(1.6" (W) x 4.0" (D) x 3.6" (H))

#### Weight

- 0.3kg (0.66 lb)

#### Installation

- DIN-Rail

### Protection

#### Over Voltage Protection

- 57.6 to 64.8V
- Protection type : Shut down o/p voltage, re-power on to recover

#### Over Load Protection

- 105 to 150% rated output power
- Protection type : Constant current limiting, recovers automatically after temperature goes down

### Environment

#### Operating Temperature

- -20°C to 70°C (Refer to output load derating curve)

#### Storage Temperature

- -40°C to 85°C (-40°F to 158°F)

#### Working Humidity

- 20% to 90%RH non-condensing

#### Storage Humidity

- 10% to 95%RH

### Regulatory Approvals

#### Safety

- TUV EN60950-1
- UL60950-1
- NEC class 2 / LPS compliant
- UL508

#### EMC

- EN55011
- EN55022 (CISPR22) Class B
- EN61204-3 Class B
- EN61000-3-2, -3
- 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

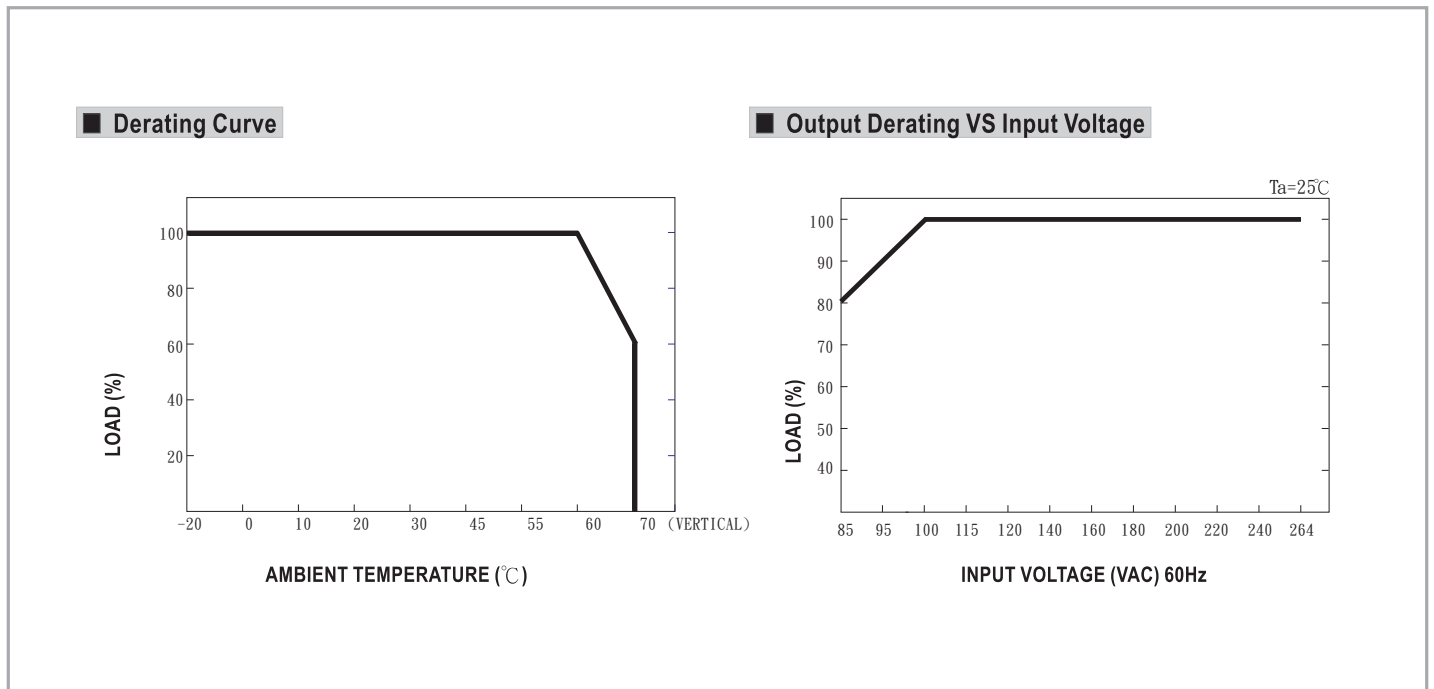
#### EMS

- EN61000-4-2,3,4,5,6,8,11
- ENV50204
- EN55024
- EN61000-6-2
- EN61204-3
- Heavy industry level, criteria A

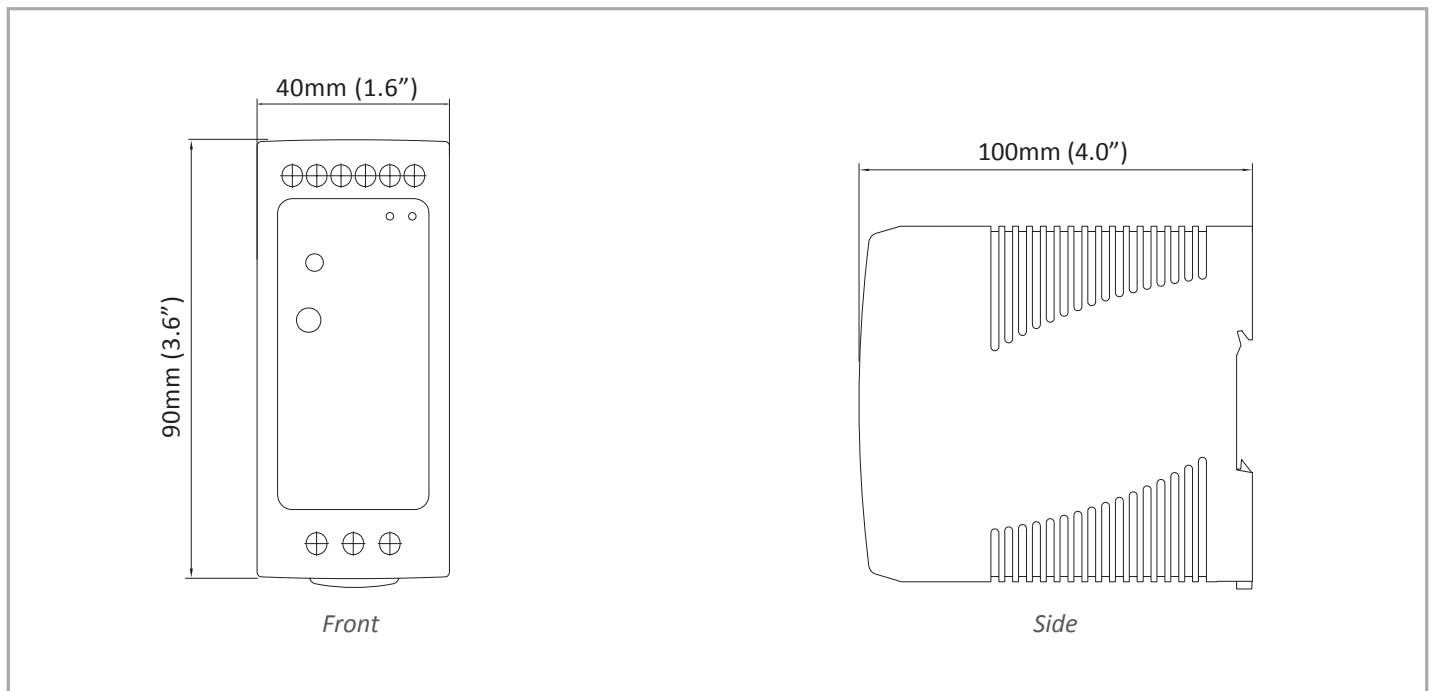
#### Environmental Test Compliance

- IEC60068-2-6
  - Component: 10 to 500Hz, 2G 10min. / 1 cycle, period for 60 min. each along X, Y, Z axes

## Derating Curves



## Dimensions



## Ordering Information

### Model

<b>MDR-40-48</b>	40W/0.83A DIN-Rail 48VDC Industrial Power Supply
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