



■ Features

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508 (industrial control equipment) approved
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty

■ Applications

- Industrial control system
- Semi-conductor fabrication equipment
- Factory automation
- Electro-mechanical

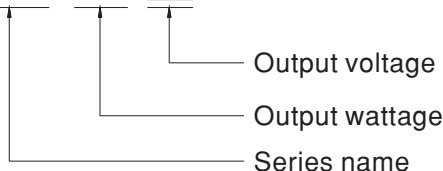
■ Description

NDR-240 is one economical slim 240W Din rail power supply series, adapt to be installed on TS-35/7.5 or TS-35/15 mounting rails. The body is designed 63mm in width, which allows space saving inside the cabinets. The entire series adopts the full range AC input from 90VAC to 264VAC and conforms to EN61000-3-2, the norm the European Union regulates for harmonic current.

NDR-240 is designed with metal housing that enhances the unit's power dissipation. With working efficiency up to 90%, the entire series can operate at the ambient temperature between -20°C and 70°C under air convection. It is equipped with constant current mode for over-load protection, fitting various inductive or capacitive applications. The complete protection functions and relevant certificates for industrial control apparatus (UL508, TUV EN62368-1, and etc.) make NDR-240 a very competitive power supply solution for industrial applications.

■ Model Encoding

NDR - 240 - 48

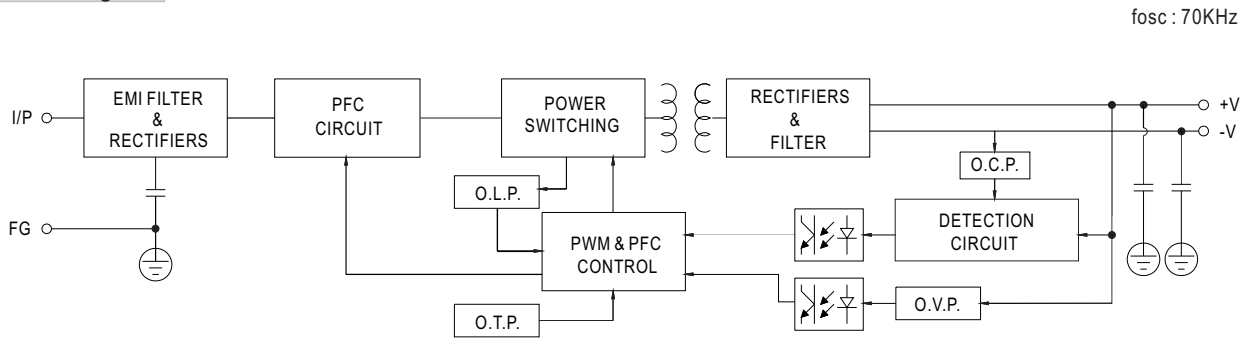




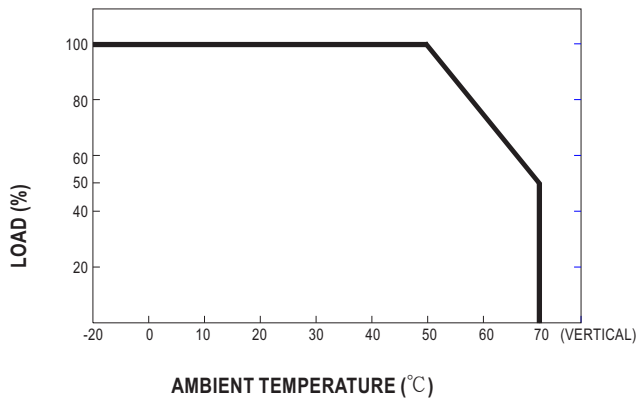
SPECIFICATION

| MODEL | | NDR-240-24 | NDR-240-48 |
|--------------------------------------|--|---|------------|
| OUTPUT | DC VOLTAGE | 24V | 48V |
| | RATED CURRENT | 10A | 5A |
| | CURRENT RANGE | 0 ~ 10A | 0 ~ 5A |
| | RATED POWER | 240W | 240W |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 150mVp-p | 150mVp-p |
| | VOLTAGE ADJ. RANGE | 24 ~ 28V | 48 ~ 55V |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ± 1.0% | ± 1.0% |
| | LINE REGULATION | ± 0.5% | ± 0.5% |
| | LOAD REGULATION | ± 1.0% | ± 1.0% |
| | SETUP, RISE TIME | 1500ms, 100ms/230VAC 3000ms, 100ms/115VAC at full load | |
| HOLD UP TIME (Typ.) | 28ms/230VAC 22ms/115VAC at full load | | |
| INPUT | VOLTAGE RANGE <small>Note.4</small> | 90 ~ 264VAC 127 ~ 370VDC | |
| | FREQUENCY RANGE | 47 ~ 63Hz | |
| | POWER FACTOR (Typ.) | PF>0.98/115VAC, PF>0.95/230VAC at full load | |
| | EFFICIENCY (Typ.) | 88.5% | 90% |
| | AC CURRENT (Typ.) | 2.5A/115VAC 1.3A/230VAC | |
| | INRUSH CURRENT (Typ.) | 20A/115VAC 35A/230VAC | |
| | LEAKAGE CURRENT | <1mA / 240VAC | |
| PROTECTION | OVERLOAD | 105 ~ 130% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed | |
| | OVER VOLTAGE | 29 ~ 33V | 56 ~ 65V |
| | OVER TEMPERATURE | Shut down o/p voltage, recovers automatically after temperature goes down | |
| ENVIRONMENT | WORKING TEMP. | -20 ~ +70°C (Refer to "Derating Curve") | |
| | WORKING HUMIDITY | 20 ~ 95% 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, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6 | |
| SAFETY & EMC <small>(Note 4)</small> | SAFETY STANDARDS | UL508, TUV EN62368-1, EAC TP TC 004, BSMI CNS14336-1 approved;(meet EN60204-1) | |
| | 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°C / 70% RH | |
| | EMC EMISSION | Compliance to EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3, EAC TP TC 020, CNS13438 | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A, EAC TP TC 020 | |
| OTHERS | MTBF | 230.2K hrs min. MIL-HDBK-217F (25°C) | |
| | DIMENSION | 63*125.2*113.5mm (W*H*D) | |
| | PACKING | 1Kg; 12pcs/13Kg/1.22CUFT | |
| 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 & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltage. Please check the derating curve for more details.</p> <p>5. Installation clearances : 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.</p> <p>6. 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."</p> <p>7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). (as available on http://www.meanwell.com)</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p> | | |

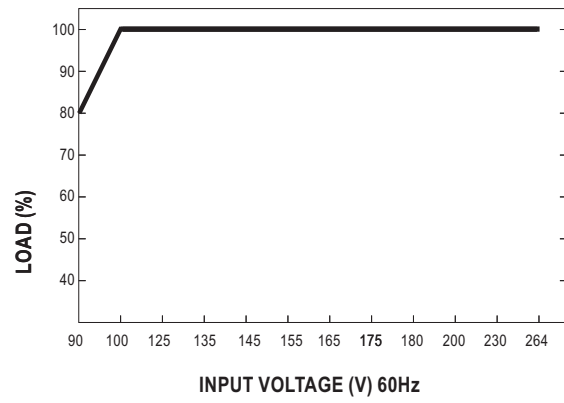
Block Diagram



Derating Curve

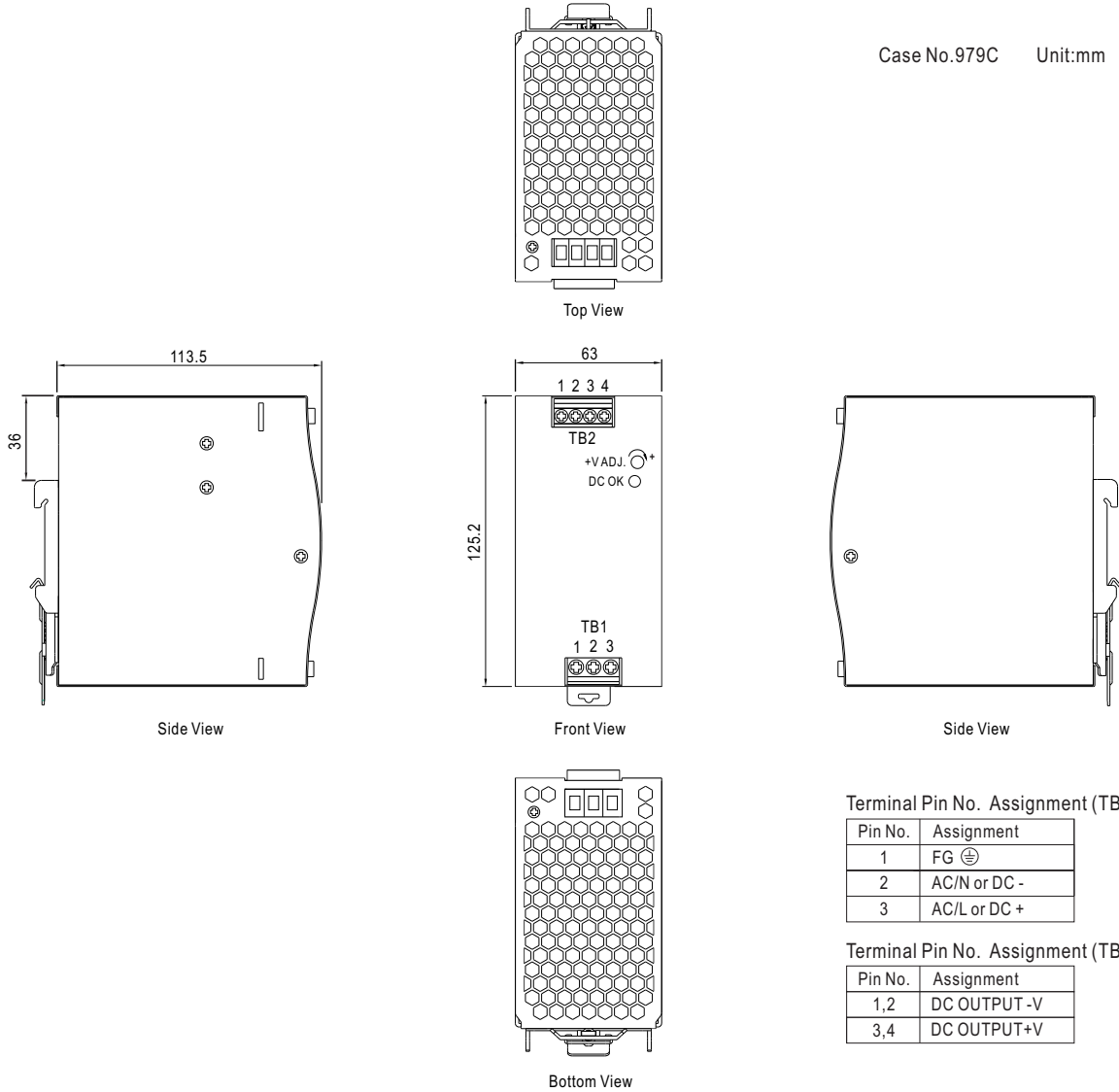


Output derating VS input voltage



■ **Mechanical Specification**

Case No.979C Unit:mm



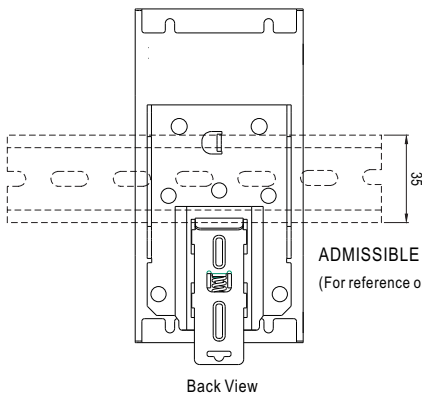
Terminal Pin No. Assignment (TB1)

| Pin No. | Assignment |
|---------|--------------|
| 1 | FG ⊕ |
| 2 | AC/N or DC - |
| 3 | AC/L or DC + |

Terminal Pin No. Assignment (TB2)

| Pin No. | Assignment |
|---------|--------------|
| 1,2 | DC OUTPUT -V |
| 3,4 | DC OUTPUT+V |

■ **Installation Instruction**



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15
(For reference only. Not included with unit.)

This series fits DIN rail TS35/7.5 or TS35/15.
For installation details, please refer to the Instruction manual.

■ **Installation Manual**

Please refer to : <http://www.meanwell.com/manual.html>