



### ■ Features

- Universal AC input / Full range
- Built-in active PFC (Power Factor Correction)
- Protection: 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 year warranty**

### ■ Applications

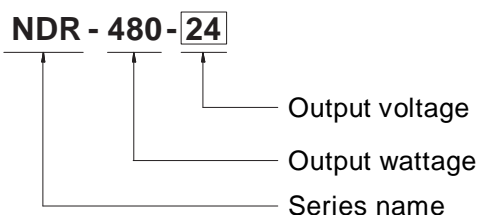
- Industrial control systems
- Semi-conductor fabrication equipment
- Factory automation and control
- Electro-mechanical systems
- Building automation

### ■ Description

NDR-480 is one economical slim 480W DIN rail power supply series, capable of being installed on TS-35/7.5 or TS-35/15 mounting rails. The body is designed 85.5mm in width, which allows space saving inside the control cabinet. The entire series allows for the full range of AC input from 90VAC to 264VAC and conforms to EN61000-3-2; the norm for European Union regulation of harmonic current.

The NDR-480 is designed with a metal housing that enhances the unit's power dissipation. With a working efficiency of up to 92.5%, the entire series can operate at the ambient temperatures between -20°C to 70°C using air convection cooling only. It is equipped with constant current over-load protection, ideal for many inductive and capacitive load applications. The series complete protection functions and relevant certificates for industrial control apparatus (UL508, TUV EN60950-1, etc.) make the NDR-480 a very competitive power supply solution for industrial applications. **May be used in place of the DRP-240-24 for higher current output!**

### ■ Model Encoding



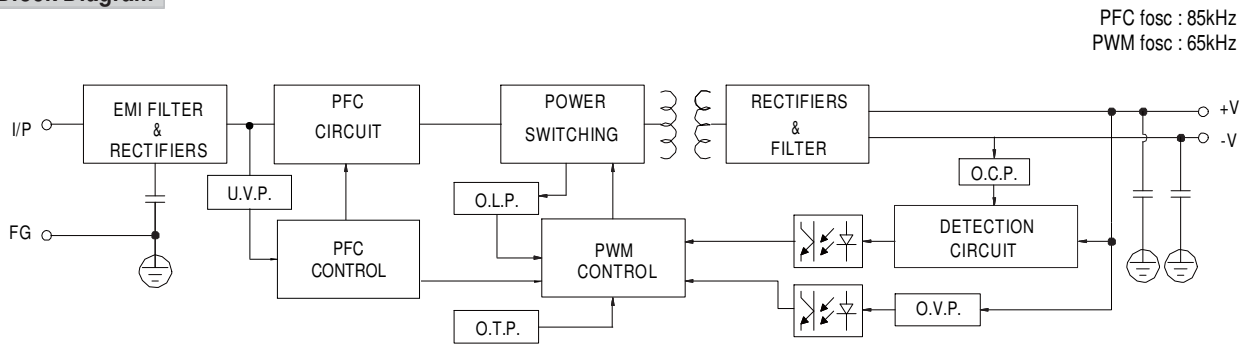


**SPECIFICATIONS**

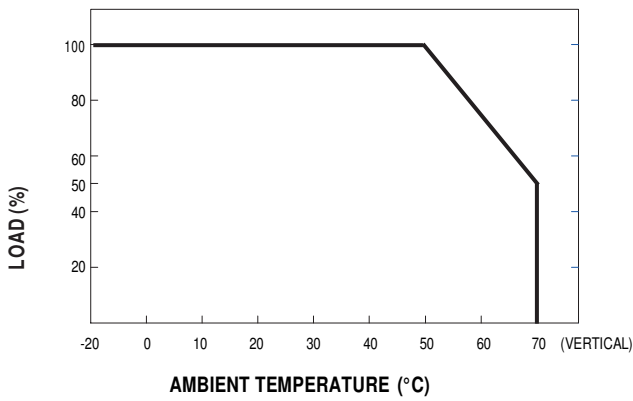
MODEL		NDR-480-24	NDR-480-48
OUTPUT	DC VOLTAGE	24V	48V
	RATED CURRENT	20A	10A
	CURRENT RANGE	0 ~ 20A	0 ~ 10A
	RATED POWER	480W	480W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%
	SETUP, RISE TIME	1500ms, 100ms/230VAC      3000ms, 100ms/115VAC at full load	
HOLD UP TIME (Typ.)	16ms/230VAC      16ms/115VAC at full load		
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC      127 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR (Typ.)	PF>0.98/115VAC, PF>0.94/230VAC at full load	
	EFFICIENCY (Typ.)	92.5%	92.5%
	AC CURRENT (Typ.)	4.8A/115VAC      2.4A/230VAC	
	INRUSH CURRENT (Typ.)	20A/115VAC      35A/230VAC	
	LEAKAGE CURRENT	<2mA / 240VAC	
PROTECTION	OVERLOAD	105 ~ 130% rated output power Protection type: Constant current limiting, unit will shutdown after 3 sec., re-power on to recover	
	OVER VOLTAGE	29 ~ 33V	56 ~ 65V
	OVER TEMPERATURE	Protection type: Shut down o/p voltage, re-power on to recover	
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 (Note 4)	SAFETY STANDARDS	UL508, TUV EN60950-1, EAC TP TC 004, BSMI CNS14336-1 approved; (meets 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 class B	
OTHERS	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	
	MTBF	146.8K hrs min.    MIL-HDBK-217F (25°C)	
	DIMENSIONS (WxHxD)	85.5x125.2x128.5mm	
	WEIGHT & PACKING	1.5kg	
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. 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 O.E.M. 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 for operating altitude higher than 2000m(6500ft).</p> <p>*available at <a href="http://www.meanwell.com">www.meanwell.com</a></p>		



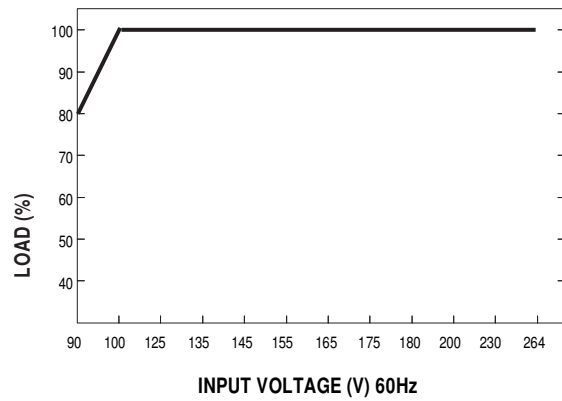
■ **Block Diagram**



■ **Derating Curve**



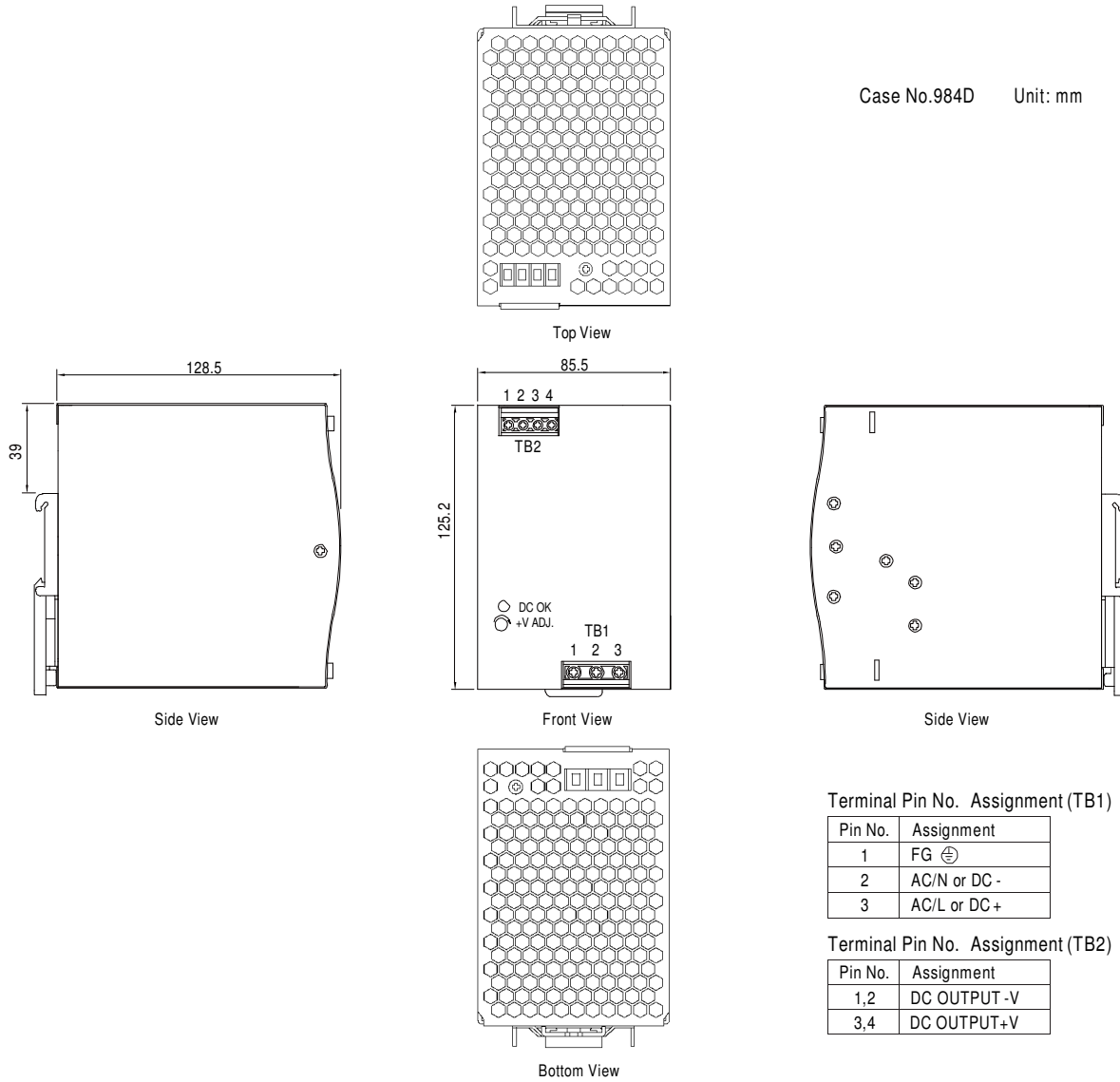
■ **Output derating VS input voltage**



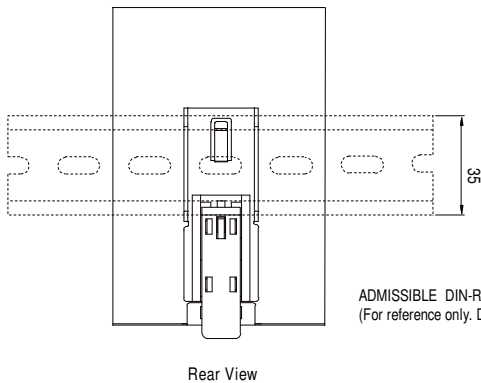


■ Mechanical Specification

Case No.984D Unit: mm



■ Installation Instructions



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

This series fits DIN-RAIL TS35/7.5 or TS35/15.  
For installation details, please refer to the USER MANUAL  
[www.procontechtechnology.com.au/files/mwmanual.pdf](http://www.procontechtechnology.com.au/files/mwmanual.pdf)  
[www.meanwell.com/Upload/PDF/NDR-480/NDR%20DIN%20rail.pdf](http://www.meanwell.com/Upload/PDF/NDR-480/NDR%20DIN%20rail.pdf)