



User's Manual



■ Features

- Universal AC input / Full range
- 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
- BS EN/EN61000-6-2(BS EN/EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty

■ Description

NDR-120-12 is one economical slim 120W DIN rail power supply series, adapt to be installed on TS-35/7.5 or TS-35/15 mounting rails. The body is designed 40mm 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 BS EN/EN61000-3-2, the norm the European Union regulates for harmonic current.

NDR-120-12 is designed with metal housing that enhances the unit's power dissipation. With working efficiency up to 89%, 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 BS EN/EN62368-1, and etc.) make NDR-120-12 a very competitive power supply solution for industrial applications.

■ Model Encoding

NDR - 120 - 12

Output voltage

Output wattage

Series name

■ Applications

- Industrial control system
- Semiconductor fabrication equipment
- Factory automation
- Electro-mechanical apparatus

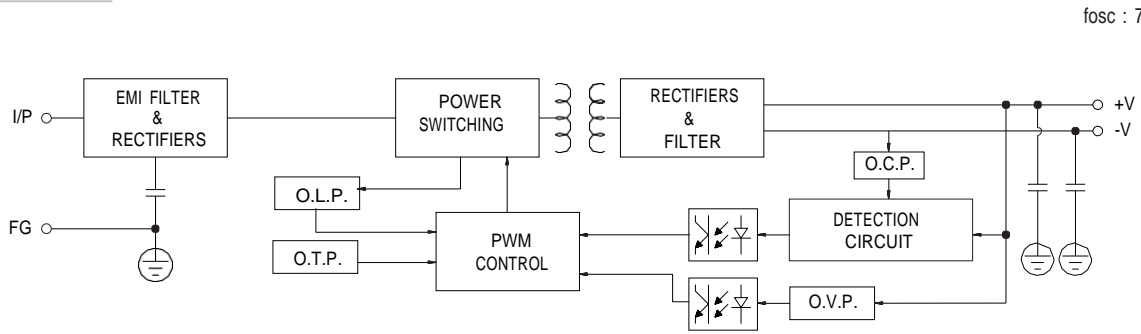
■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

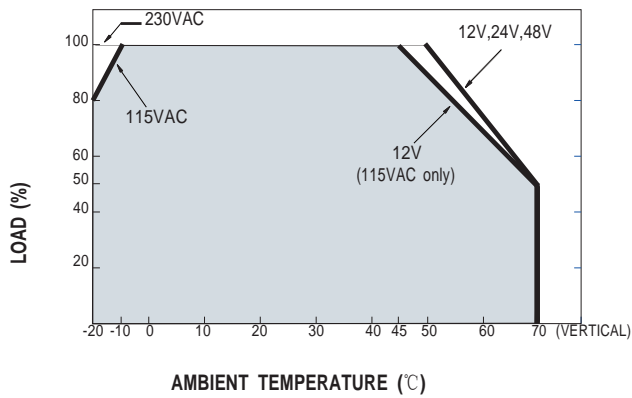
**SPECIFICATION**

MODEL		NDR-120-12	
OUTPUT	DC VOLTAGE	12V	
	RATED CURRENT	10A	
	CURRENT RANGE	0 ~ 10A	
	RATED POWER	120W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	
	VOLTAGE ADJ. RANGE	12 ~ 14V	
	VOLTAGE TOLERANCE Note.3	± 2.0%	
	LINE REGULATION	± 0.5%	
	LOAD REGULATION	± 1.0%	
	SETUP, RISE TIME	1200ms, 60ms/230VAC 2500ms, 60ms/115VAC at full load	
	HOLD UP TIME (Typ.)	16ms/230VAC 10ms/115VAC at full load	
INPUT	VOLTAGE RANGE Note.6	90 ~ 264VAC 127 ~ 370VDC	[DC input operation possible by connecting AC/L(+), AC/N(-)]
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	85.5%	
	AC CURRENT (Typ.)	2.25A/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	14 ~ 17V Protection type : Shut down o/p voltage, re-power on to recover	
	OVER TEMPERATURE	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 BS EN/EN62368-1, EAC TP TC 004 approved;(meet BS EN/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 BS EN/EN55032 (CISPR32), BS EN/EN61204-3 Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020	
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2), BS EN/EN61204-3, heavy industry level, EAC TP TC 020	
	MTBF	2636.8K hrs min. Telcordia SR-332 (Bellcore) ; 453.3K hrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	40*125.2*113.5mm (W*H*D)	
	PACKING	0.6Kg; 20pcs/13Kg/1.16CUFT	
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 0.1 μ F & 47 μ F 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.(as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf)</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. Derating may be needed under low input voltage. Please check the derating curve for more details.</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).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p>		

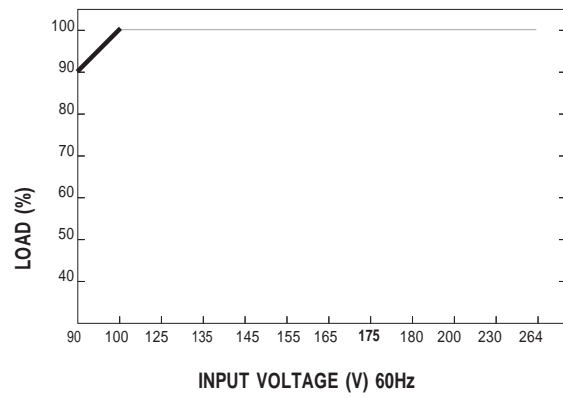
Block Diagram



Derating Curve

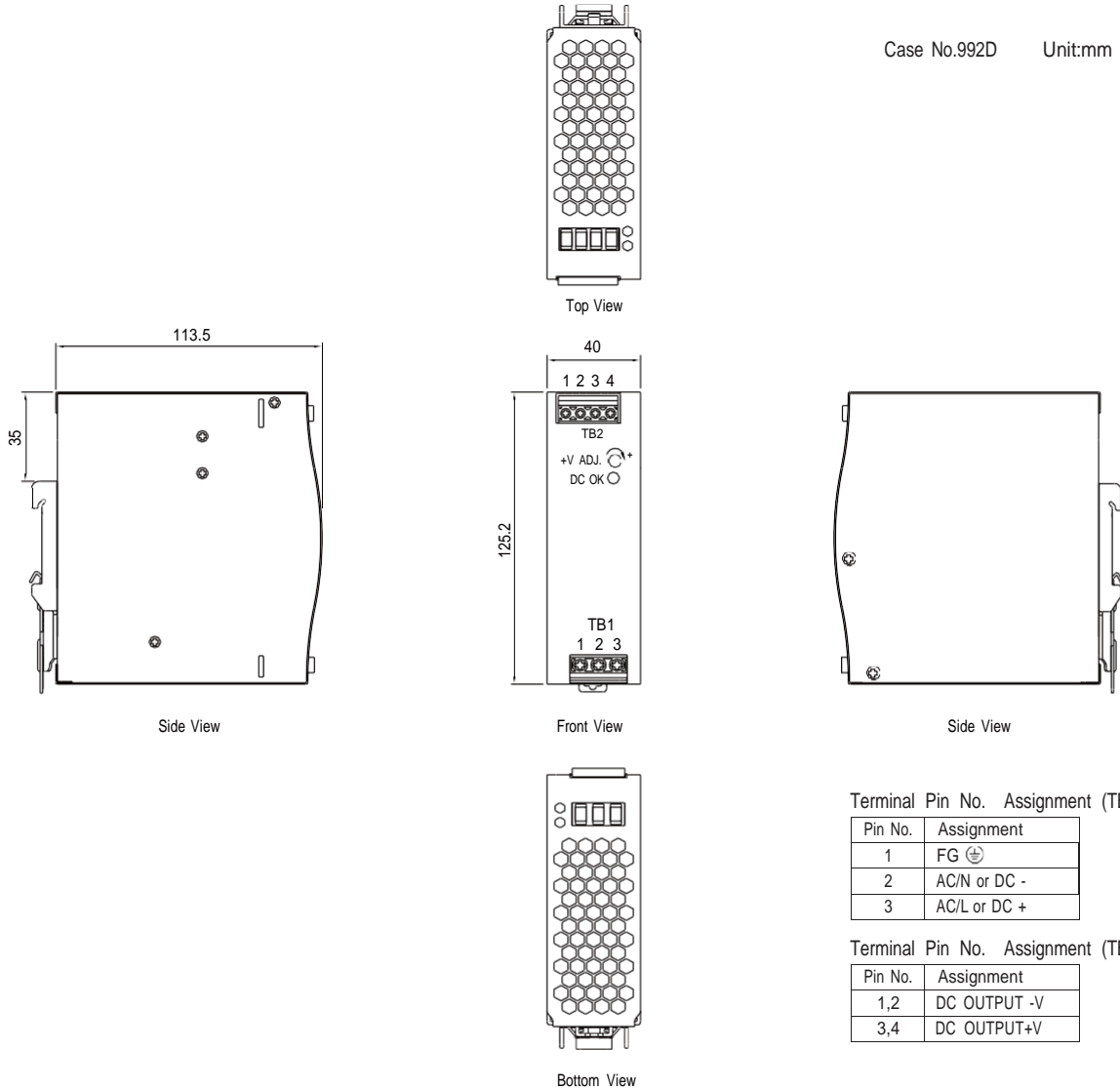


Static Characteristics

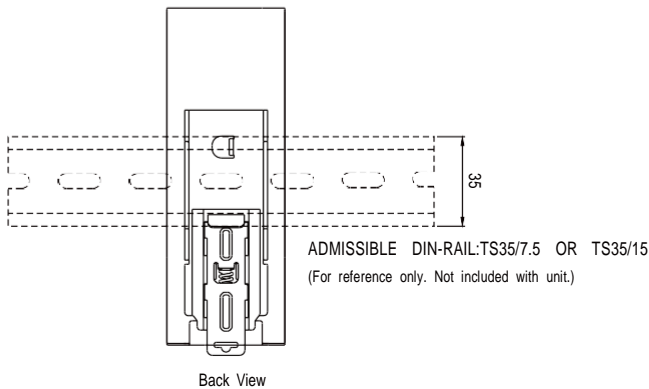


Mechanical Specification

Case No.992D Unit:mm



Installation Instruction



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

Installation Manual

Get more info to : <https://www.led-card.com/manufacturer/meanwell/>