

ORing

NDR-120 Series

120Watts single output industrial DIN-Rail power supply



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
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty

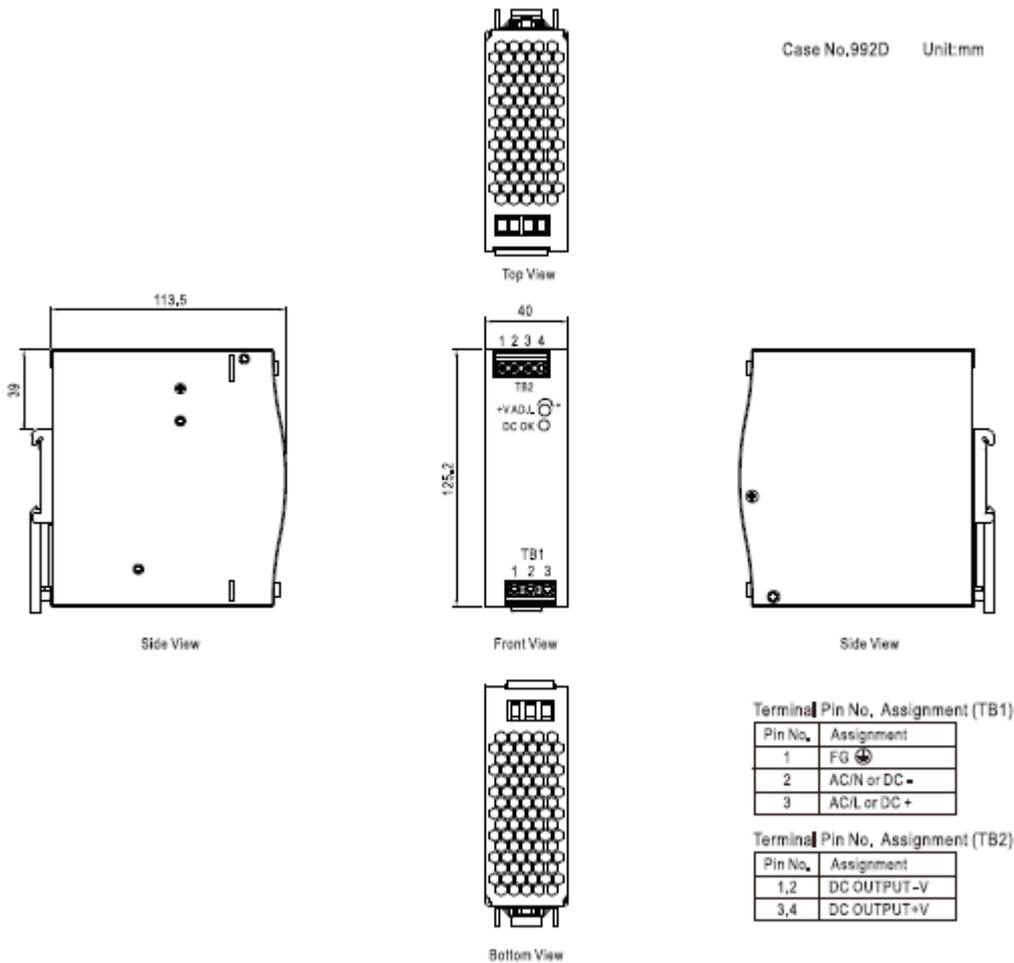


SPECIFICATION

Model		NDR-120-12	NDR-120-24	NDR-120-48
Output	DC Voltage	12V	24V	48V
	Rated Current	10A	5A	2.5A
	Current Range	0 ~ 10A	0 ~ 5A	0 ~ 2.5A
	Rated Power	120 watts	120 Watts	120 Watts
	Ripple & Noise (max.) *Note.2*	100mVp-p	120mVp-p	150mVp-p
	Voltage ADJ. Range	12 ~ 14V	24 ~ 28V	48 ~ 55V
	Voltage Tolerance *Note.3*	±2.0%	±1.0%	±1.0%
	Line Regulation	±0.5%	±0.5%	±0.5%
	Load Regulation	±1.0%	±1.0%	±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	90 ~ 264VAC 127 ~ 370VDC [DC input operation possible by connecting AC/L(+), AC/N(-)]		
	Frequency Range	47 ~ 63Hz		
	Efficiency (Typ.)	85.5%	88%	89%
	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	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./1 cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		
Safety & EMC *Note4*	Safety Standards	UL508, TUV EN62368-1, EAC TP TC 004 approved;(meet EN 60204-1)		
	Withstand Voltage	I/P-O/P : 3KVAC	I/P-FG : 2KVAC	O/P-FG : 0.5KVAC
	Isolation Resistance	I/P-O/P, IP-FG, O/P-FG : 100M Ohms/500VDC/25°C/70% RH		
	EMC EMISSION	Compliance to EN55032 (CISPR22), EN61204-3 Class B, EN61000-3-2, EN61000-3-3, EAC TP TC 020		

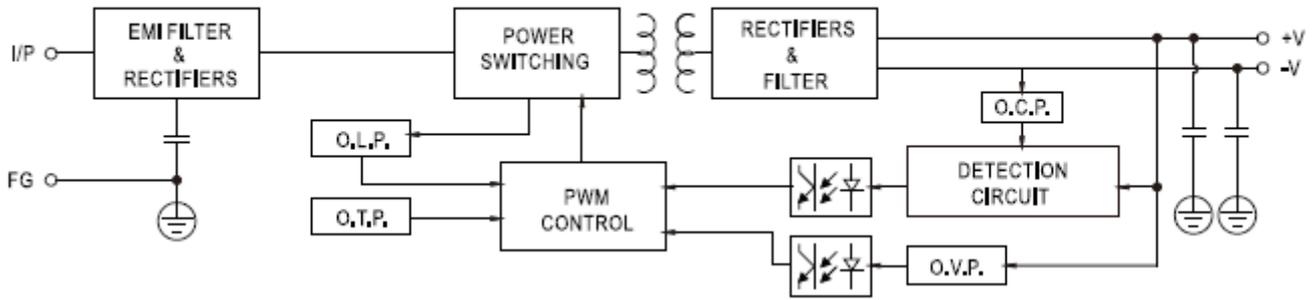
	EMS Immunity	Compliance to EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A, EAC TP TC 020
Others	MTBF	456.3K hrs min. MIL-HDBK-217F (25°C)
	Dimension	40 x 125.2 x 113.5mm (W x H x D)
	Packing	0.6Kg; 20pcs/13Kg/1.16CUFT
Note	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance: includes set up tolerance, line regulation and load regulation. 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. 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. Derating may be needed under low input voltage. Please check the derating curve for more detail. 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) 	

DIMENSIONS

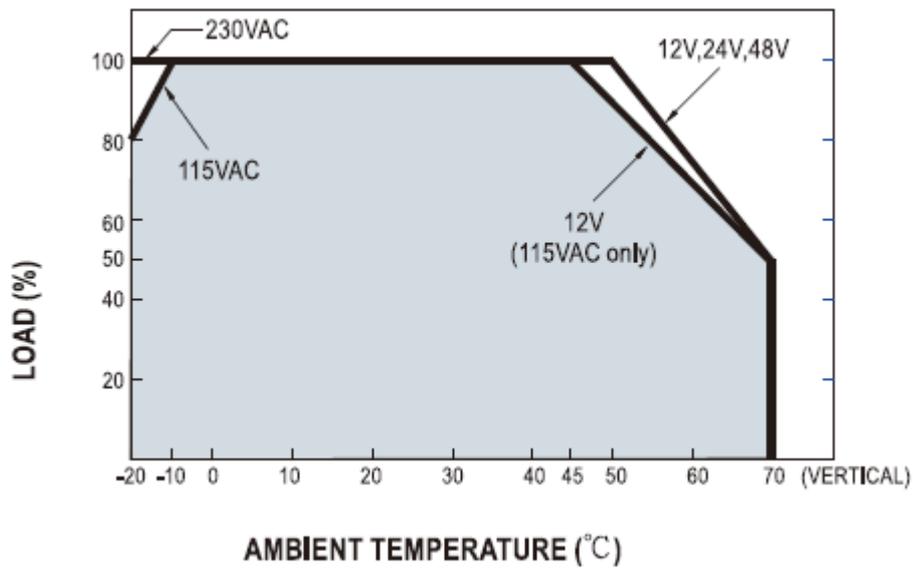


BLOCK DIAGRAM

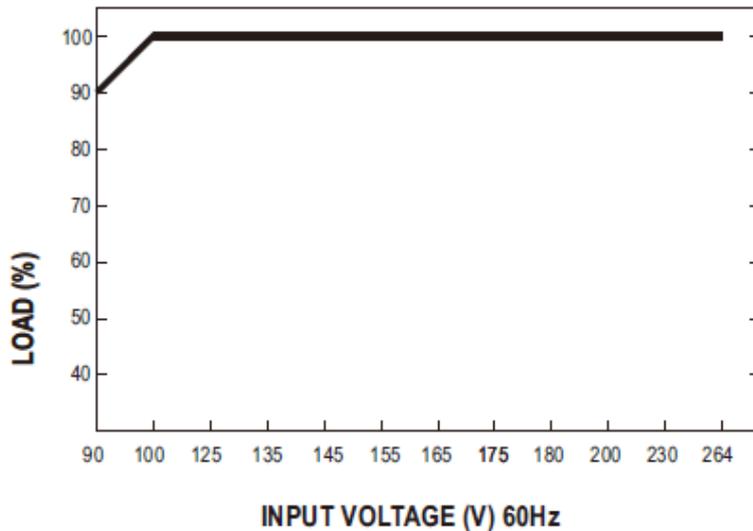
fosc : 70KHz



OUTPUT DERATING



OUTPUT DERATING v.s. INPUT VOLTAGE



ORDERING INFORMATION

	Model Name	Description
Available Model	NDR-120-12	120W DIN-Rail 12VDC/10A (voltage adjustable 12~14VDC) Power Supply with universal 100 to 240VAC input, -20~70° C
	NDR-120-24	120W DIN-Rail 24VDC/5A (voltage adjustable 24~28VDC) Power Supply with universal 100 to 240VAC input, -20~70° C
	NDR-120-48	120W DIN-Rail 48VDC/2.5A (voltage adjustable 48~55VDC) Power Supply with universal 100 to 240VAC input, -20~70° C