

NDR-120 series







### 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

## Applications

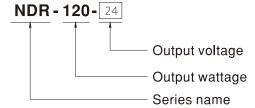
- · Industrial control system
- Semiconductor fabrication equipment
- Factory automation
- Electro-mechanical apparatus

## Description

NDR-120 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 EN61000-3-2, the norm the European Union regulates for harmonic current.

NDR-120 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 $^{\circ}$ C and 70 $^{\circ}$ 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 EN60950-1, and etc.) make NDR-120 a very competitive power supply solution for industrial applications.

# ■ Model Encoding



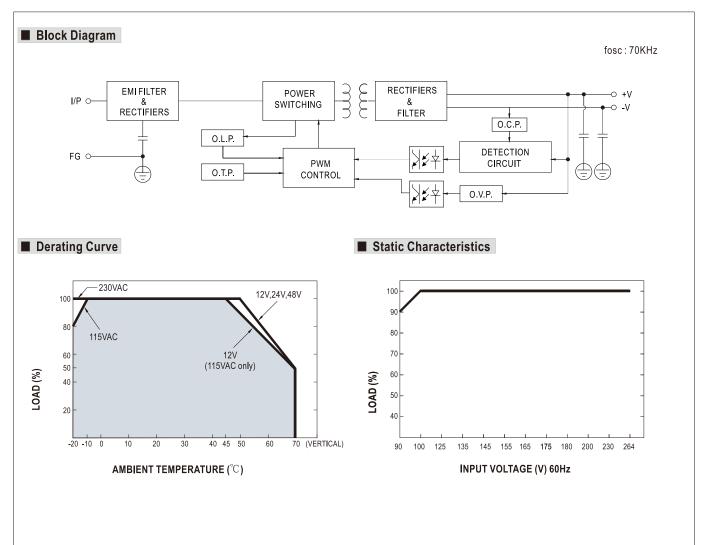
File Name:NDR-120-SPEC 2018-01-12



### **SPECIFICATION**

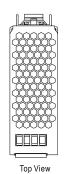
MODEL		NDR-120-24
	DC VOLTAGE	24V
OUTPUT	RATED CURRENT	5A
	CURRENT RANGE	0~5A
	RATED POWER	120W
	RIPPLE & NOISE (max.) Note.2	
	VOLTAGE ADJ. RANGE	24 ~ 28V
	VOLTAGE TOLERANCE Note.3	±1.0%
	LINE REGULATION	±0.5%
	LOAD REGULATION	±1.0%
	SETUP, RISE TIME	1200ms, 60ms/230VAC 2500ms, 60ms/115VAC at full load
	HOLD UP TIME (Typ.)	16ms/230VAC 10ms/115VAC at full load
		90 ~ 264VAC 127 ~ 370VDC [DC input operation possible by connecting AC/L(+), AC/N(-)]
	FREQUENCY RANGE	47 ~ 63Hz
	EFFICIENCY (Typ.)	88%
INPUT	AC CURRENT (Typ.)	2.25A/115VAC 1.3A/230VAC
	INRUSH CURRENT (Typ.)	20A/115VAC 35A/230VAC
	LEAKAGE CURRENT	<1mA / 240VAC
	OVERLOAD	105 ~ 130% rated output power
		Protection type: Constant current limiting, recovers automatically after fault condition is removed
PROTECTION	OVER VOLTAGE	29 ~ 33V
		Protection type : Shut down o/p voltage, re-power on to recover
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover
	WORKING TEMP.	-20 ~ +70 $^{\circ}$ C (Refer to "Derating Curve")
	WORKING HUMIDITY	20 ~ 95% RH non-condensing
ENVIRONMENT	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 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
	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	456.3K hrs min. MIL-HDBK-217F (25°C)
	DIMENSION	40*125.2*113.5mm (W*H*D)
	PACKING	0.6Kg; 20pcs/13Kg/1.16CUFT
NOTE	2. Ripple & noise are measure	ly mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  ed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
	The power supply is consid EMC directives.	tolerance, line regulation and load regulation.  ered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets  nm 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 6. Derating may be needed ur	riff on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. It is a heat source, 15mm clearance is recommended.  Index low input voltage. Please check the derating curve for more details.  Index low input voltage. Please check the derating curve for more details.  Index low input voltage is recommended.  Index low input voltage is recommended.





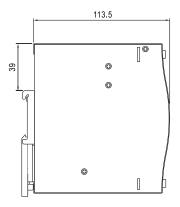


## **■** Mechanical Specification



40

Case No.992D Unit:mm



Side View

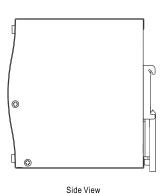
1 2 3 4

TB2

+VADJ. O+
DC OK O

TB1

1 2 3



**Bottom View** 

Front View

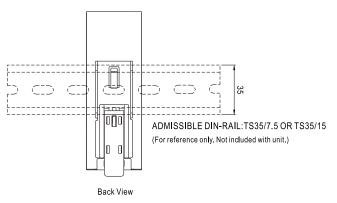
Terminal Pin No. Assignment (TB1)

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



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

Distributed by TELE Haase Steuergeräte GesmbH https://www.tele-online.com/

## **■** Installation Manual

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

TELE Teile Nr.:#491601