













### 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

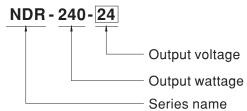
- Industrial control system
- Semi-conductor fabrication equipment
- Factory automation
- Electro-mechanical

#### 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 90 VAC to 264 VAC 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℃ and 70℃ 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-240 a very competitive power supply solution for industrial applications.

# Model Encoding



File Name: NDR-240-SPEC 2017-06-22



#### **SPECIFICATION**

DC VOLTAGE RATED CURRENT CURRENT RANGE RATED POWER RIPPLE & NOISE (max.) VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE LINE REGULATION	24 ~ 28V Note.3 ±1.0%	48V 5A 0 ~ 5A 240W 150mVp-p	
CURRENT RANGE RATED POWER RIPPLE & NOISE (max.) OUTPUT VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE	0~10A 240W Note.2 150mVp-p 24~28V Note.3 ±1.0%	0 ~ 5A 240W 150mVp-p	
RATED POWER RIPPLE & NOISE (max.) OUTPUT VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE	240W Note.2 150mVp-p 24 ~ 28V Note.3 ±1.0%	240W 150mVp-p	
OUTPUT VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE	Note.2 150mVp-p 24 ~ 28V Note.3 ±1.0%	150mVp-p	
OUTPUT VOLTAGE ADJ. RANGE VOLTAGE TOLERANCE	24 ~ 28V Note.3 ±1.0%		
VOLTAGE TOLERANCE	Note.3 ±1.0%		
		48 ~ 55V	
LINE REGULATION		±1.0%	
	$\pm 0.5\%$	±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		
VOLTAGE RANGE	Note.4 90 ~ 264VAC 127 ~ 370VDC		
FREQUENCY RANGE	47 ~ 63Hz		
POWER FACTOR (Typ.	PF>0.98/115VAC, PF>0.95/230VAC at full load		
INPUT EFFICIENCY (Typ.)	88.5%	90%	
AC CURRENT (Typ.)	2.5A/115VAC 1.3A/230VAC		
INRUSH CURRENT (Ty	.) 20A/115VAC 35A/230VAC		
LEAKAGE CURRENT	<1mA / 240VAC		
OVERLOAD	105 ~ 130% rated output power	105 ~ 130% rated output power	
		vers automatically after fault condition is removed	
PROTECTION OVER VOLTAGE	29 ~ 33V	56 ~ 65V	
	Protection type: Shut down o/p voltage, re-power	Protection type: Shut down o/p voltage, re-power on to recover	
OVER TEMPERATURE	Shut down o/p voltage, recovers automatically a	Shut down o/p voltage, recovers automatically after temperature goes down	
WORKING TEMP.	-20 ~ +70°C (Refer to "Derating Curve")	-20 ~ +70°C (Refer to "Derating Curve")	
WORKING HUMIDITY	20 ~ 95% RH non-condensing / -40 ~ +85°C, 10 ~ 95% RH		
ENVIRONMENT STORAGE TEMP., HUM			
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 STANDARDS	UI508, TUV EN60950-1 approved ;(meet EN60204-1)		
SAFETY & WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5	<b>KVAC</b>	
EMC ISOLATION RESISTAN	E I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C/70% RH	
(Note 4) EMC EMISSION	Compliance to EN55022 (CISPR22), EN61204-3 Class B, EN61000-3-2,-3		
EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN5	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A	
MTBF	230.2K hrs min. MIL-HDBK-217F ( $25^{\circ}$ C)		
OTHERS DIMENSION	63*125.2*113.5mm (W*H*D)		
PACKING	1Kg; 12pcs/13Kg/1.1CUFT		
Ripple & noise are r     Tolerance: includes     Derating may be ne     Installation clearance     In case the adjacent     The power supply is     EMC directives. For	set up tolerance, line regulation and load regulation. ded under low input voltage. Please check the deratin s: 40mm on top, 20mm on the bottom, 5mm on the le device is a heat source, 15mm clearance is recomme	d pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  g curve for more details.  eft and right side are recommended when loaded permanently with full power.  nded.  final equipment. The final equipment must be re-confirmed that it still meets	



