NDR-480

Guide rail power supply Series



DIMENSION：85.5*125.2*128.5mm

Features:

- Universal AC input/Full range
- Protections: Short circuit/Overload/Over voltage/Over temperature
- Cooling by free air convection
- Built-in EMI filter with minimal Bellows
- Power Protection Level : IP31
- 100% full load burn-in test
- Complay with EN55022:2010+AC：2010+AC：2011/EN61000-3-2 and EN61000-4-2,3,4,5,6,8,11/EN60950-1
- 3-year quality assurance (two replacement per year, free maintenance for two years)

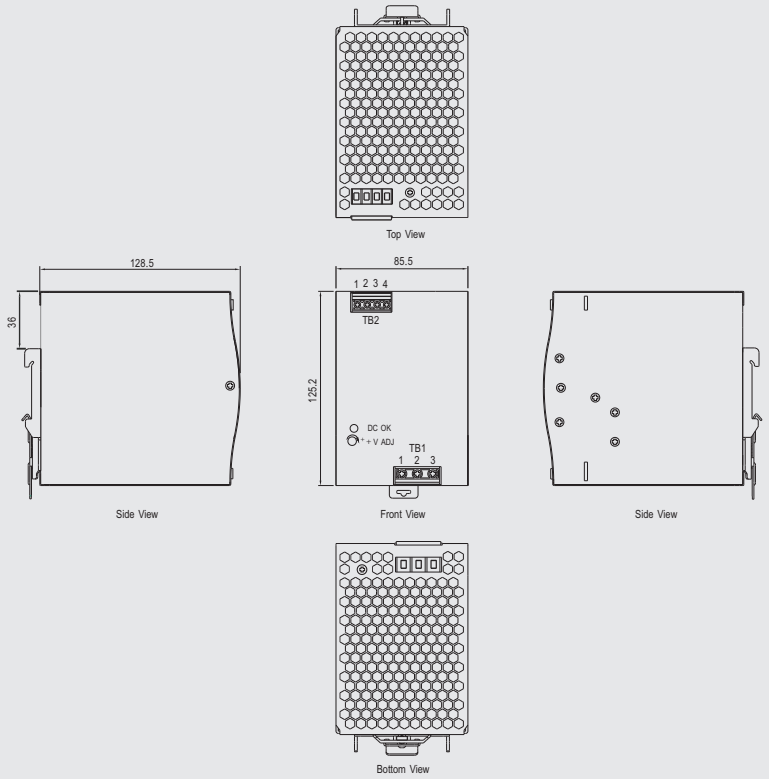
SPECIFICATION

CE RoHS

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 > 0.95/230VAC (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 shut down after 3 sec., re-power on to recover	
	OVER VOLTAGE	29~33V	56~65V
		Protection type : Shut down o/p voltage, re-power on to recover	
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down	
ENVIRONMENT	WORKINF TEMP.	-20℃~+70℃ (Refer to "Derating Curve")	
	WORKING HUMIDITY	20~95%RH non-condensing	
	STORAGE TEMP., HUNIDITY	-40~+85℃ , 10~95%RH	
	TEMP. COEFFICIENT	±0.03%/℃ (0~50℃)	
	VIBRATION	Component : 10~500Hz,2G 10min./1 cycle , 60min. each along X,Y,Z axes; Mounting: Compliance IEC60068-2-6	
SAFETY& EMC (Note.4)	SAFETY STANDARDS	UL508, TUV BS EN/EN62368-1,EAC TP TC 004, BSMI CNS14336-1 approved; (meet BS EN/EN60204-1)	
	WITHSTAND VOLTAGE	I/P-O/P : 2KVAC 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℃/70%RH	
	EMC EMISSION	Compliance to BS EN/EN55032(CISPR32),BS EN/EN61204-3 Class B,BS EN/EN61000-3-2,EAC TP TC 020, CNS13438 Class B	
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11,BS EN/EN55024, BS EN/EN61000-6-2(BS EN/EN50082-2), BS EN/EN61204-3, heavy industry level, criteria A , EAC TP TC 020	
OTHERS	MTBF	≥146.8K hrs. MIL-HDBK-217F(25℃)	
	DIMENSION	85.5*125.2*128.5mm(W*H*D)	
	PACKING	1.5Kg; 8pcs/13Kg/0.9CUFT	
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line ragulation and load regulation. 4. The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 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 soure, 15mm clearance is recommended. 6. Derating may be needed under low input voltage. Please check the derating curve for more details.		

Mechanical Specification

measurement unit : mm



Terminal Pin No. Assignment (TB1)

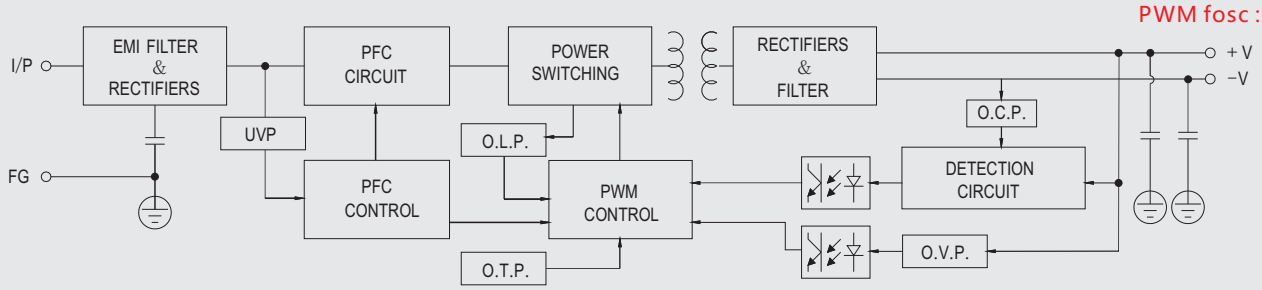
Pin No.	Assignment
1	FG ⏚
2	AC/N or DC −
3	AC/L or DC +

Terminal Pin No. Assignment (TB2)

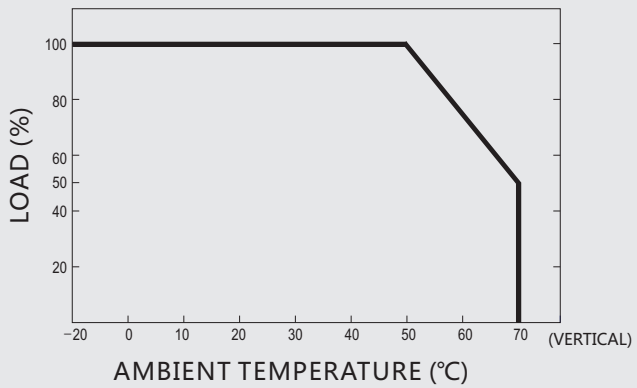
Pin No.	Assignment
1,2	DC OUTPUT −V
3,4	DC OUTPUT+ V

Block Diagram

PFC fosc : 85KHz
PWM fosc : 65KHz



Derating Curve



Output derating VS input voltage

