

YSDN480 SERIES 480W



This metal case power family is designed with slim housing and for full range AC input from 90V AC to 264V AC. The series are single phase PSU, providing an adjustable DC output voltage. They have high efficiency and operate over a wide temperature range. The series can widely be used for industrial automation & control systems, and various equipment etc.



Features



DC O/P Voltage Adjustable



Universal AC Input 90-264V



Protection: Short Circuit/Overload /Over Voltage/Over Temperature



Free Air Convection Design



Installation: DIN Rail TS-35/7.5 & 15



With Built-in Active PFC Function



Three Years Warranty

Model Information

Part number	DC VOLTAGE	RATED CURRENT (Max.)	RATED POWER	VOLTAGE ADJ. RANGE
YSDN480-24020000	24V	20A	480W	24-28V
YSDN480-48010000	48V	10A	480W	48-55V

Input

RATED INPUT (Certified Voltage)	100 ~ 240VAC
NOMINAL INPUT VOLTAGE RANGE	90~ 264VAC or 127-370VDC [DC input by connecting AC/L(+),AC/N(-)]
FREQUENCY RANGE	47~63Hz
POWER FACTOR (Typ.)	>0.98/115VAC at full load > 0.94/230VAC at full load
EFFICIENCY (Typ.)	92%
AC CURRENT (Typ.)	4.8A/115VAC 2.4A/230VAC
INRUSH CURRENT (Typ.)	20A/115VAC 35A/230VAC
LEAKAGE CURRENT	<2mA / 240VAC

Output

RIPPLE & NOISE (max.)	150mVp-p
VOLTAGE TOLERANCE	± 2.0%
LINE REGULATION	± 0.5%
LOAD REGULATION	± 1.0%
SETUP, RISE TIME	1500ms, 100ms/230VAC at full load 3000ms, 100ms/115VAC at full load
HOLD UP TIME (Typ.)	16ms/230VAC at full load 16ms/115VAC at full load

Protection

OVER LOAD	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 YSDN480-24020000 56 ~ 65V YSDN480-48010000 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

WORKING TEMP.	-20 ~ +70 °C (Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGE TEMP.	-40 ~ +85 °C
STORAGE HUMIDITY	10 ~ 95% RH
MTBF	150K hrs min. MIL-HDBK-217F (25 °C)

SAFETY & EMC

SAFETY STANDARDS	UL508, BS/EN62368-1
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 , BS EN/EN61000-3-2,-3
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)

Note

- 1.All parameters NOT specially mentioned at 230VAC input, rated load and 25 °C of ambient temperature.
- 2.Ripple&noise are measured from peak to peak with band width limit of 20MHz(0.1uF and 47uF/50V parallel capacitor under DC output full load,AC nominal input 25 °C ambient temperature).
- 3.Installation clearances: top with 40mm, bottom with 20mm, left and right with 5mm. Increase the space to 10-15mm when the adjacent device is heat source.
- 4.Derating may be needed under low input voltage. Please check the derating curve for more details.
- 5.Efficiency test after 30 minutes of burn-in.
- 6.The ambient temperature derating of 3.5 °C /1000m for operating altitude higher than 2000m(6500ft).

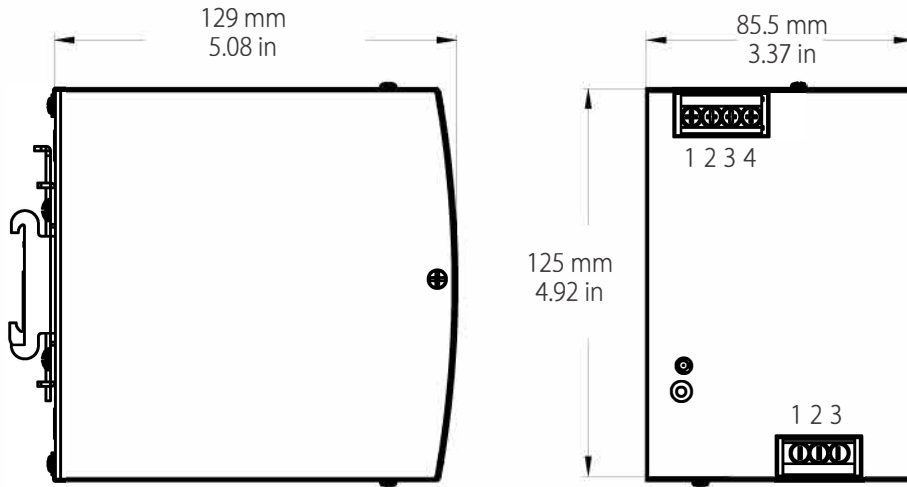
Dimensions & Weight

Width:	85.5mm / 3.37in
Height:	125mm / 4.92in
Depth:	129mm / 5.08in
Weight:	1.5kg

Packing

Carton Size:	49 x 34.5 x 16.5 CM 19.29 x 13.58 x 6.5 in
Master Carton Quantities:	8pcs / Carton

Mechanical Specification



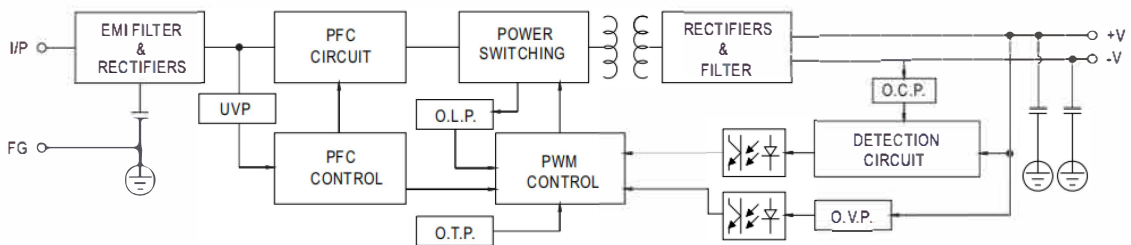
Input

Pin No.	Description
1	FG ⊕
2	AC/N or DC -
3	AC/L or DC +

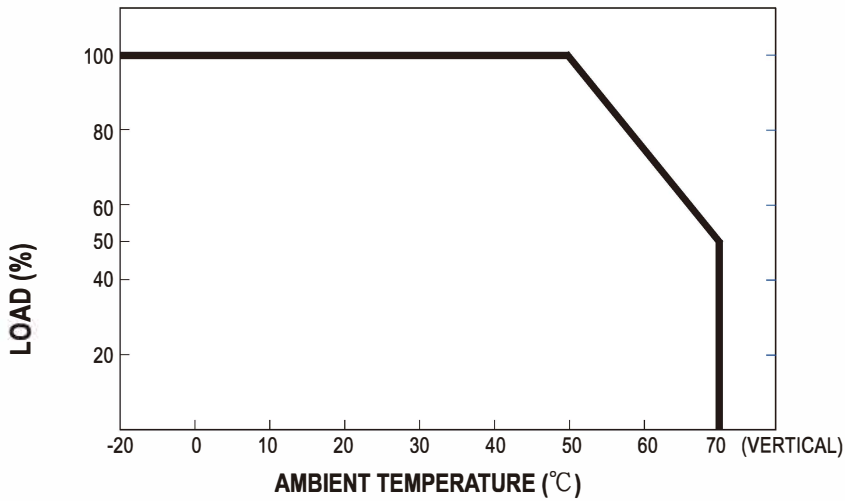
Output

Pin No.	Description
1,2	DC OUTPUT -V
3,4	DC OUTPUT +V

Block Diagram



Deduction Curve and Temperature



Minus Output and Input Voltage Curves

