

YSDT960 SERIES 960W











YSDT series are designed with metal housing and for three phase system with wide range from 340V Ac to 550V Ac.

The series offer built-in constant current limiting circuit, active PFC function, current sharing up to 3840w (3+1) and operating over a wide temperature range.

They are suitable for industrial-related applications such as industrial control, semiconductor fabrication equipment, factory automation and electro-mechanical apparatus etc.



Features

-  3-phase 340~550VAc wide Range Input (2-phase operation possible)
-  Built-in Active pFc Function
-  protection:short circuit/overload /over Voltage/over Temperature
-  Dc oK Relay contact
-  Built-in constant current Limiting circuit
-  Higher Efficiency and Low power Dissipation
-  current sharing up to 3840w (3+1)
-  Three years warranty

Model Information

Part number	DC VOLTAGE	RATED CURRENT	RATED POWER	VOLTAGE ADJ. RANGE
YSDT960-24	24V	40A	960W	24 ~ 28V
YSDT960-48	48V	20A	960W	48 ~ 55V

Input

VOLTAGE RANGE	Three-Phase 380 ~ 480VAC (Dual phase operation possible) 480 ~ 780VDC
INPUT VOLTAGE RANGE	340 ~ 550VAC / 480 ~ 780VDC
FREQUENCY RANGE	47~63Hz
POWER FACTOR (TYP.)	PF \geq 0.88/400VAC at full load PF \geq 0.86/500VAC at full load
EFFICIENCY (TYP.)	94% YSDT960-24 94.5% YSDT960-48
AC CURRENT (TYP.)	2.0A/400VAC 1.4A/500VAC
INRUSH CURRENT (TYP.)	COLD START 60A
LEAKAGE CURRENT	<3.5mA / 530VAC

Output

RIPPLE & NOISE (max.)	180mVp-p YSDT960-24 250mVp-p YSDT960-48
VOLTAGE TOLERANCE	\pm 2.0%
LINE REGULATION	\pm 0.5%
LOAD REGULATION	\pm 1.0%
SETUP, RISE TIME	1200ms / 60ms / 400VAC at full load 800ms / 60ms / 500VAC at full load
HOLD UPTIME (TYP.)	20ms / 400VAC at full load 20ms / 500VAC at full load

Protection

OVER LOAD	105 ~ 130% rated output power Protection type: Constant current limiting, unit will shutdown after 3 sec, re-power on to recover.
OVERVOLTAGE	29~33V YSDT960-24 56~65V YSDT960-48 Protection type: Shutdown o/p voltage, re-power on to recover.
OVERTEMPERATURE	Shutdown o/p voltage, recovers automatically after temperature goes down.

Environment

WORKING TEMP.	-30 ~ +70 °C (Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGE TEMP., HUMIDITY	-40 ~ +85 °C 10 ~ 95% RH non-condensing
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
MTBF	550.04K hrs min. Telcordia SR-332 (Bellcore)

SAFETY & EMC

SAFETY STANDARDS	UL61010-1 UL61010-2-2011 BS EN/EN62368-1
WITHSTAND VOLTAGE	I/P-O/P: 3KVAC I/P-FG: 2KVAC O/P-FG: 0.5KVAC O/P-DC OK: 0.5KVAC
ISOLATION RESISTANCE	I/P-O/PI I/P-FGIO/P-FG: >100M Ohms / 500VDC / 25°C / 70% RH
EMC EMISSION	BS EN/EN55032 (CISPR32)
EMC IMMUNITY	BS EN/EN61000-4-2 3I 4I 5I 6I 8I11

Note

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- 1.All parameters NOT specially mentioned are measured at 400VAC input/ ratedload and 25°C of ambient temperature.
 - 2.Ripple&noise are measured from peak to peak with bandwidth limit of 20MHz(0.1uF and 47uF/50V parallel capacitor under DC output fullload/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.The ambient temperature derating of 3.5 °C/1000m for operating altitude higher than 2000m(6500ft).
 - 5.Dual phase operation is allowed under certain derating to output load. Please refer to derating curves for details.
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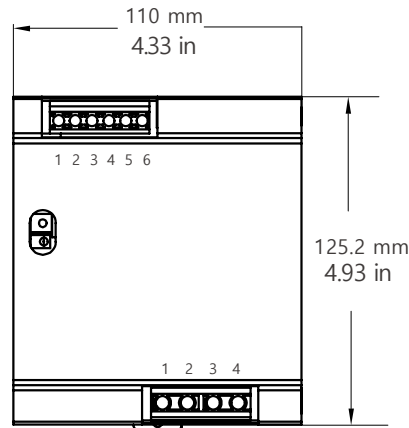
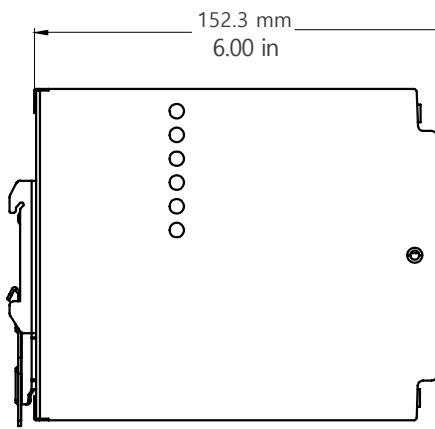
Dimensions & weight

Width:	110mm / 4.33in
Height:	125.2mm / 4.93in
Depth:	152.3mm / 6.00in
Weight:	2.47kg

packing

Carton size:	49 X 34.5 X 16.5 CM 19.3 X 13.6 X 6.5 in
Master carton quantities:	6pcs / Carton

Mechanical Specification

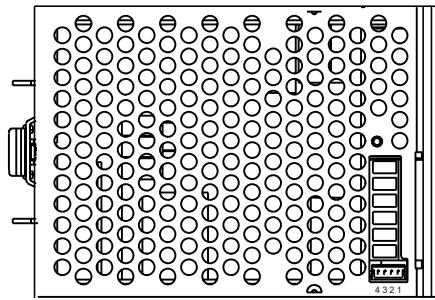


Output

No.	Description
1,2,3	DC OUTPUT +V
4,5,6	DC OUTPUT -V

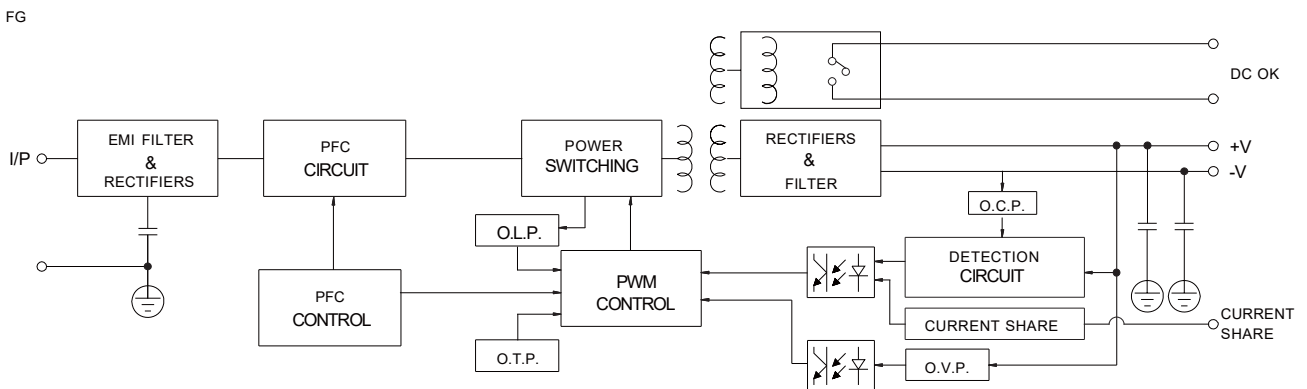
Input

No.	Description
1	FG ⊖
2	AC/L3
3	AC/L2
4	AC/L1

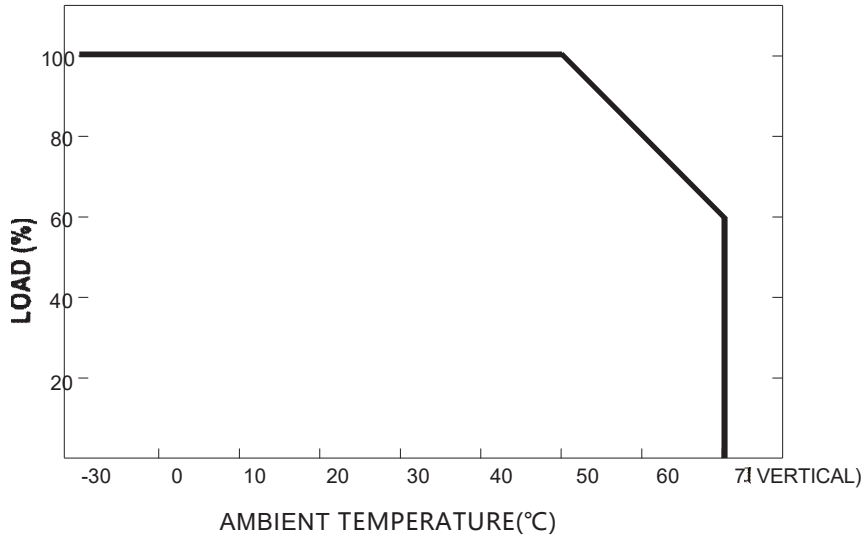


No.	Description
1	P-(Current Share)
2	P+(Current Share)
3,4	DC OK Relay Contact

Block Diagram



Deduction Curve and Temperature



Minus output and Input voltage curves

