

YSDT240 SERIES 240W



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

The series offer built-in constant current limiting circuit and active PFC function, and operating in wide temperature range.

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

Features



3-phase 340~550VAcwide Range Input
(2-phase operation possible)



Built-in passive pFc Function



protection:short circuit/overload
/over Voltage/over Temperature



Dc oK Relay contact



Built-in constant current Limiting circuit



High Efficiency 92% and
Low power Dissipation



Full power Between -30~+60 °C



Three years warranty

Model Information

yingjiao Part number	DC VOLTAGE	RATED CURRENT	RATED POWER	VOLTAGE ADJ. RANGE
YSDT240-24	24V	10A	240W	24 ~ 28V
YSDT240-48	48V	5A	240W	48 ~ 55V

Input

RATED INPUT	Three-Phase 380~ 480VAC (Dual phase operation possible in connecting L1,L3,FG or L2,L3,FG) or 480 ~ 780VDC
INPUTVOLTAGE RANGE	340 ~ 550VAC/480 ~ 780VDC
FREQUENCY RANGE	47~63Hz
POWER FACTOR (TYP.)	PF \geq 0.53/400VAC at full load PF \geq 0.52/500VAC at full load
EFFICIENCY (TYP.)	92%
AC CURRENT (TYP.)	0.69A/400VAC 0.6A/500VAC
INRUSH CURRENT (TYP.)	COLD START 50A
LEAKAGE CURRENT	<2mA / 530VAC

Output

RIPPLE & NOISE (max.)	100mVp-p YSDT240-24 120mVp-p YSDT240-48
VOLTAGETOLERANCE	\pm 1.0%
LINE REGULATION	\pm 0.5%
LOAD REGULATION	\pm 1.0%
SETUP, RISETIME	2000ms, 60ms/400VAC at full load 1500ms, 60ms/500VAC at full load
HOLD UPTIME (TYP.)	20ms / 400VAC at full load 40ms / 500VAC at full load

protection

OVER LOAD	105 ~ 130% rated output power protection tYpe : Constant current limiting, unit will hiccup after 3 sec.
OVERVOLTAGE	30~36V YSDT240-24 56~65V YSDT240-48 protection tYpe : Hiccup mode, recovers automaticallY after fault condition is removed.
OVERTEMPERATURE	Shutdown o/p voltage, recovers automaticallY after temperature goes down

Function

DC OK REALY CONTACT RATINGS (max.)	60VDC/0.3A, 30VDC/1A, 30VAC/0.5A resistive load
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Environment

WORKINGTEMP.	-30 ~ +70 °C (Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGETEMP., HUMIDITY	-40 ~ +85 °C, 10 ~ 95% RH non-condensing
COLD START	-40 °C
TEMP. COEFFICIENT	±0.05%/ °C (0 ~ 60 °C)
VIBRATION	Component:10 ~ 500Hz, 2G 10min./1cYcle, 60min. each along X,Y, Z axes; Mounting: Compliance to IEC60068-2-6
OPERATING ALTITUDE	5000 meters
OVERVOLTAGE CATEGORY	III; According to EN61558, EN50178, EN60664-1, EN62477-1, EN60204-1; altitude up to 2000 meters
MTBF	1500k hrs min.TelcordiaSR-332(Bellcore)

SAFETY & EMC

SAFETY STANDARDS	UL61010-1, UL61010-2-201, BS EN/EN61010-1
WITHSTANDVOLTAGE	I/P-O/P:4.87KVAC I/P-FG:2.4KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25°C/ 70% RH
EMC EMISSION	BS EN/EN55032(CISPR32)
EMC IMMUNITY	BS EN/EN61000-4-2, 3, 4, 5, 6, 8

Note

1.All parameters NOT specially mentioned at 400VAC input, rated load and 25°C 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.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.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to“EMI testing of component power supplies.”

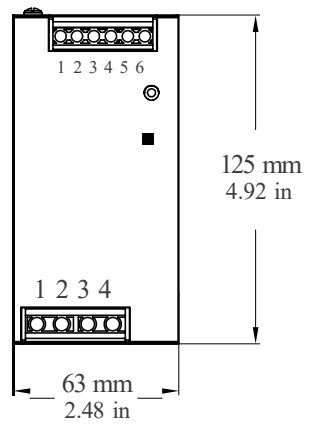
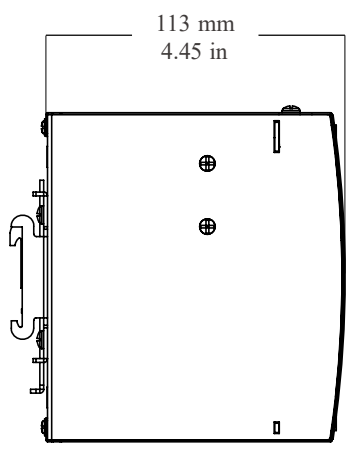
Dimensions & weight

Length:	63mm / 2.48in
width:	113mm / 4.45in
Height:	125mm / 4.92in
weight:	1kg

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carton size:	52.5 X 33 X 17.5 CM
	20.7 X 13 X 6.9 in
Master carton Quantities:	10pcs / Carton

Mechanical Specification



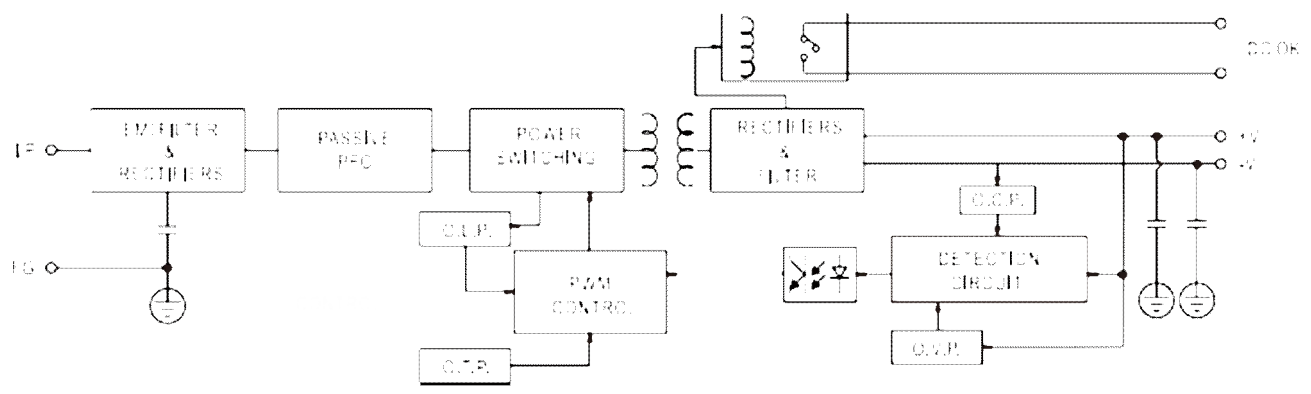
Input

No.	Description
1	AC/L1
2	AC/L2 or DC -
3	AC/L3 or DC +
4	FG ⊕

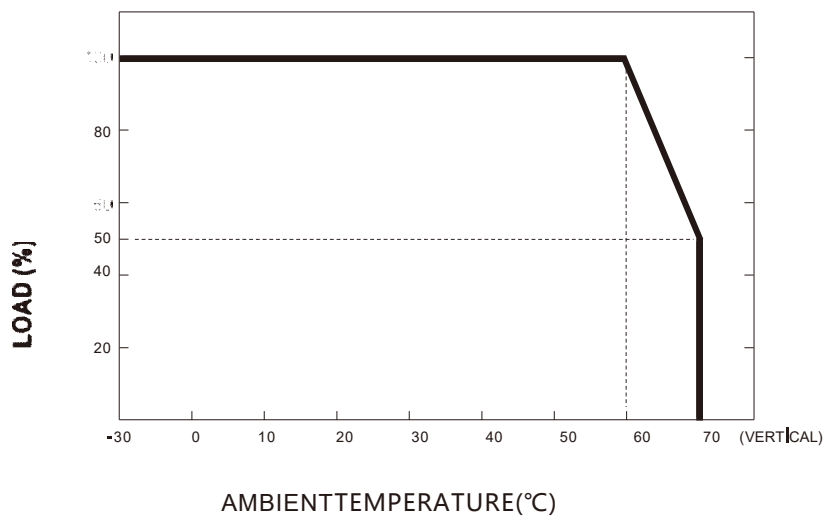
Output

No.	Description
1.2	DC OUTPUT +V
3.4	DC OUTPUT -V
5.6	DC OK Relay Contact

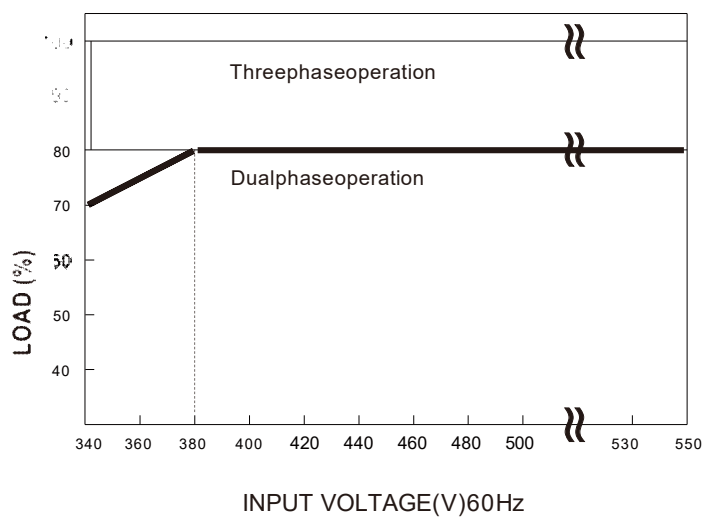
BIOcK Diagram



Deduction curve and Temperature



Minus output and Input voltage curves



DC OK RELAY CONTACT

Contact Close	PSU turns on (DC OK).
Contact Open	PSU turns off (DC Fail).
Contact Ratings (max.)	30VDC 1A, 30VAC 0,5A resistive load.

Output:

No.	Description
5.6	DC OK Relay Contact

