

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


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3-phase 340~550VAcwide Range Input
(2-phase operation possible)
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Built-in passive pFc Function
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protection:short circuit/overload
/over Voltage/over Temperature
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Dc oK Relay contact
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Bulit-in constant current Limiting circuit
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High Efficiency 92% and
Low power Dissipation
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Full power Between -30~ +60 °C
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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/450 ~ 850VDC
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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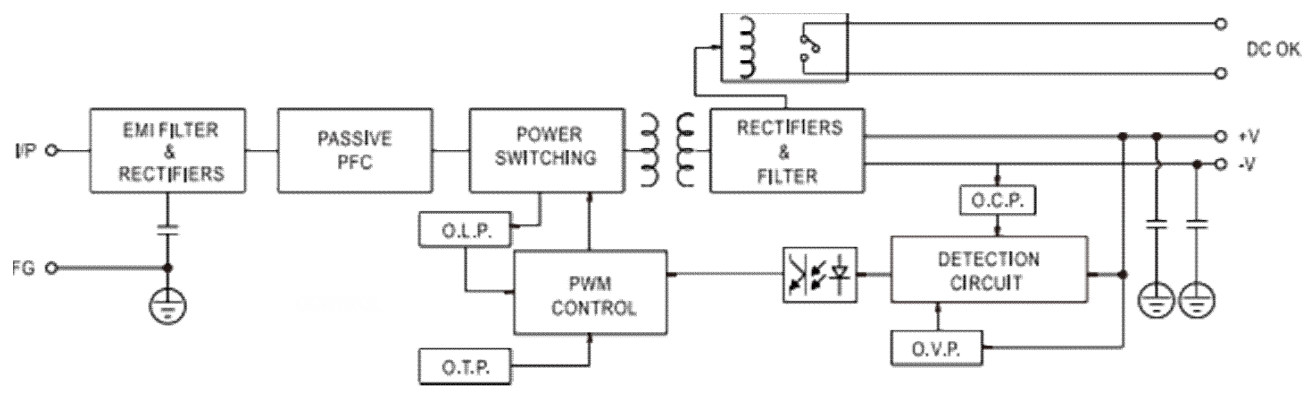
carton size:	52.5 X 33 X 17.5 CM
	20.7 X 13 X 6.9 in
Master carton Quantities:	10pcs / Carton

Mechanical Specification

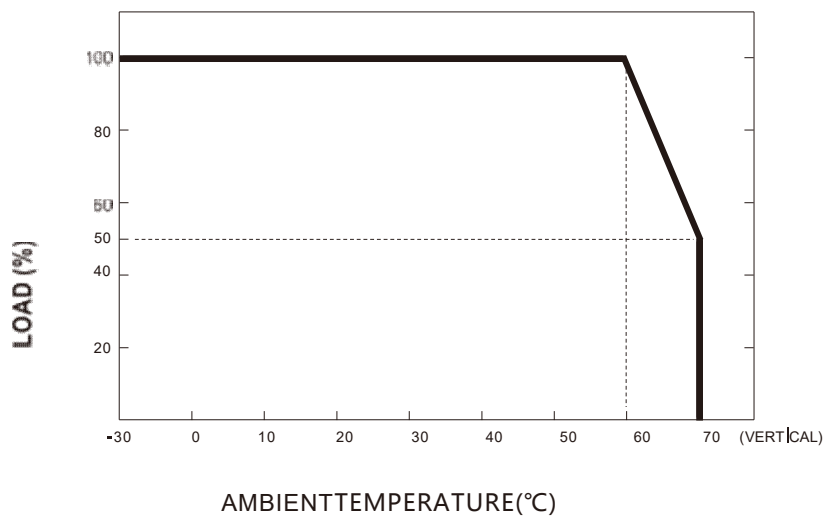
No.	Description
1	AC/L1
2	AC/L2 or DC -
3	AC/L3 or DC +
4	FG ⊕

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

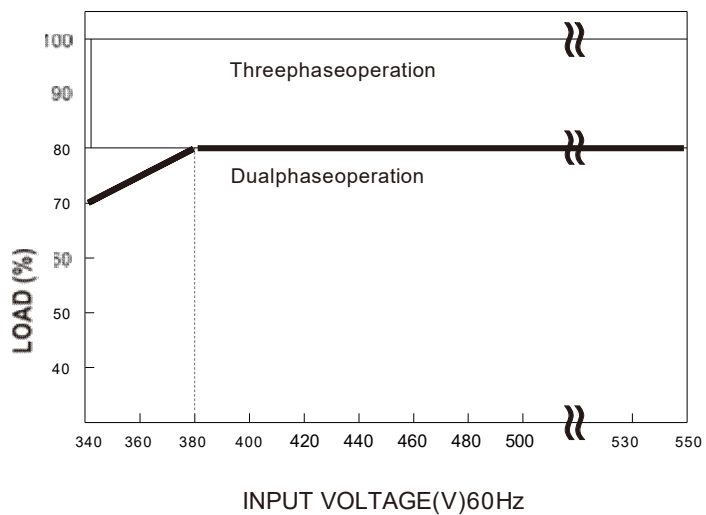
Block Diagram



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

