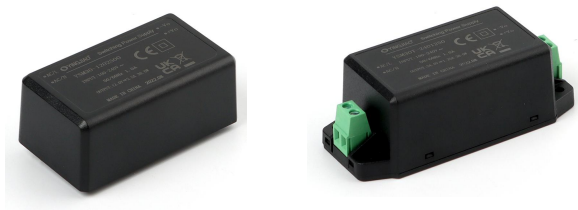


YSM30 SERIES 30W



YSM30 series is a 30W Smaller(69.5*39*24mm) AC-DC modul power supply adopting the full range:90-264VAC input The series has extremely low no-load power consumption below 0.1W.High efficiency up to 90% to reduce power loss

The series cost-effective,, high reliability,operates from-30 ~85°C.A variety of appearance sizes are available for easy installation and use.

These converfers offer excellent EMC performance and meet internation standards , ready to be soldered onto the PCB boards of Industrial design,household appliances, communication equipment, testing instruments and other electronic instruments

Features



Universal Input: 90~264VAC



Compact Size Design



Low no-load power consumption



Low Ripple & Noise, high efficiency



Protection:Short Circuit/Over Current/
Over Voltage

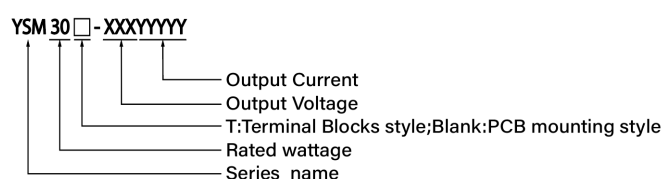


Three Years Warranty

Model Information

Yingjiao Part Number	DC Voltage	Rated Current	Rated Power	Max.Capaciti ve Load
YSM30□-0506000	5V	6A	30W	6000uF
YSM30□-1202500	12V	2.5A	30W	4400uF
YSM30□-1502000	15V	2A	30W	3300uF
YSM30□-2401250	24V	1.25A	30W	700uF
YSM30□-4800630	48V	0.63A	30W	470uF

Model Encoding



Input

VOLTAGE RANGE	90~264VAC
FREQUENCY RANGE	47-63Hz
NO LOAD POWER CONSUMPTION	0.1W MAX
AVERAGE EFFICIENCY(Typ.)	83.0% YSM30□-0506000
	88.0% YSM30□-1202500
	88.0% YSM30□-1502000
	88.0% YSM30□-2401250
	90.0% YSM30□-4800630
AC CURRENT(Typ.)	0.75A/115VAC
	0.5A/230VAC
INRUSH CURRENT(Typ.)	Cold Start 25A/115VAC
	Cold Start 45A/230VAC
LEAKAGE CURRENT	<0.25mA/264VAC,50Hz

Output

RIPPLE & NOISE(max.)	120mVp-p	YSM30□-0506000
	150mVp-p	YSM30□-1202500
	200mVp-p	YSM30□-1502000
	240mVp-p	YSM30□-2401250
	300mVp-p	YSM30□-4800630
VOLTAGE TOLERANCE	±2.0%	
LINE REGULATION	±0.5%	ALL SERIES
LOAD REGULATION	±1.0%	YSM30□-0506000
	±0.5%	YSM30□-1202500
	±0.5%	YSM30□-1502000
	±0.5%	YSM30□-2401250
	±0.5%	YSM30□-4800630
SETUP,RISE TIME	1500ms, 30ms/230VAC at full load	
	1900ms, 30ms/115VAC at full load	
HOLD UP TIME (Typ.)	40ms/230VAC at full load	
	10ms/115VAC at full load	

Protection

OVER CURRENT	115%-160% Rated Output current	
	Protection type: Hiccup mode, recovers automatically after current goes down	
SHORT CIRCUIT	Protection type: Hiccup mode, recovers automatically after fault condition is removed	
OVER VOLTAGE	YSM30□-0506000: 5.25 ~ 7.5V	
	YSM30□-1202500: 12.6 ~ 16.5V	
	YSM30□-1502000: 15.75 ~ 24V	
	YSM30□-2401250: 25.2 ~ 34V	
	YSM30□-4800630: 50.4 ~ 65V	
	Protection type: Shut off o/p voltage, clamping by zener diode	

Environment

WORKING TEMP.	-30 °C to +85 °C (Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 90% RH Non-Condensing
STORAGE TEMP, HUMIDITY	- 40°C ~ +85°C, 10 ~ 95% RH non-condensing
TEMP. COEFFICIENT	± 0.03%/°C(0~50°C)
VIBRATION	PCB mounting:10~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes Terminal Blocks:10~500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes
SOLDERING TEMPERATURE	Wave soldering:265°C,5s(max.); Manual soldering:390°C,3s(max.)
OVER VOLTAGE CATEGORY	III; According to EN62368-1; altitude up to 2000 meters
SAFETY PROTECTION	CLASS II
ALTITUDE APPLICATION	2000m
MTBF	> 600K hrs min. MIL-HDBK-217F (25°C)

SAFETY

SAFETY STANDARDS	IEC/UL62368-1, EN62368-1 safety approval
WITHSTAND VOLTAGE	I/P-O/P:4.00KVAC/1min
ISOLATION RESISTANCE	I/P-O/P:100M Ohms/ 500VDC/25 °C/70% RH

EMC

EMC EMISSION	Parameter	Standard	Test Level/Note
	Conducted	BS EN/EN55032(CISPR32)	CLASS B
	Radiated	BS EN/EN55032(CISPR32)	CLASS B
	Harmonic Current/Note5	BS EN/EN61000-3-2	CLASS A
	Voltage Flicker	BS EN/EN61000-3-3
EMC IMMUNITY	BS EN/EN55035, BS EN/EN61000-6-2		
	Parameter	Standard	Test Level/Note
	ESD	BS EN/EN61000-4-2	Level 3, 8KV air; Level 2, 4KV contact, criteria A
	Radiated Susceptibility	BS EN/EN61000-4-3	Level 3, criteria A
	EFT/Burest	BS EN/EN61000-4-4	Level 3, criteria A
	Surge	BS EN/EN61000-4-5	Level 4, 2KV/L-N, criteria A
	Conducted	BS EN/EN61000-4-6	Level 3, criteria A
	Magnetic Field	BS EN/EN61000-4-8	Level 4, criteria A
	Voltage Dips and interruptions	BS EN/EN61000-4-11	> 95% dip 0.5 periods, 30% dip 25 periods, > 95% interruptions 250

Note

1. All parameters NOT specially mentioned are measured at 230VAC 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 0.1μF & 47μF parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The ambient temperature derating of 3.5°C /1000m with fanless models and of 5 °C/1000m with fan models for operating altitude higher than 2000m(6500ft).
5. The power supply is considered as an independent unit ,but the final equipment still need to re-confirm that the whole system complies with the EMC directives.

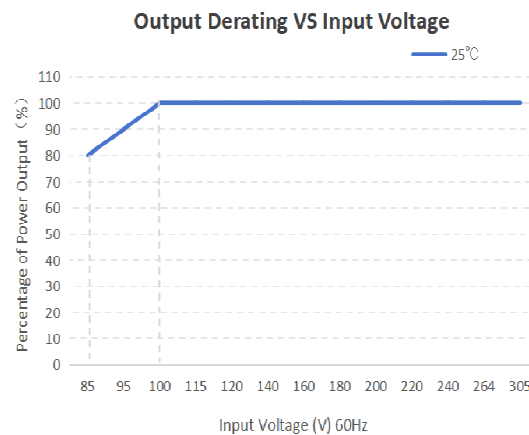
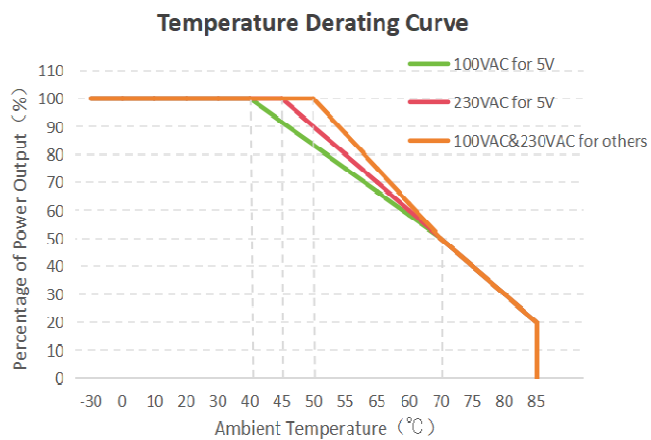
PHYSICAL PROPERTY

LENGTH*WIDTH*HEIGHT:	69.5mm*39mm*24mm/2.74in*1.54in*0.94in;PCB mounting style
	91mm*39.5mm*28.5mm/1.56in*1.24in*1.12in;Terminal Blocks style
WEIGHT:	94g(PCB mounting style)
	113.0g(Terminal Blocks style)
COOLING METHOD:	Natural Air Cooling
TEXTURE:	Black flame retardant and heat resistant plastic

Packing

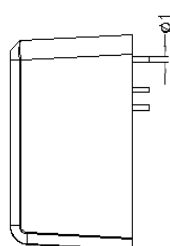
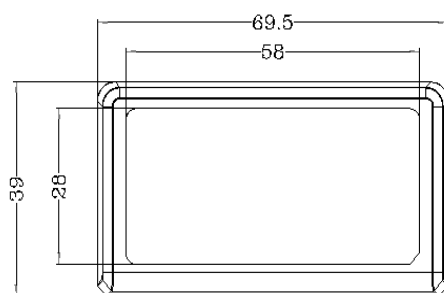
Carton Size:	32.5 × 17.5 x 25 cm/12.8 x 6.89 x 9.84 in; PCB mounting style
	41.5 × 25 x 17 cm/ 16.34 x 9.84 x 6.69 in; Terminal Blocks style
Master Carton Quantities:	100pcs/Carton(PCB mounting and Terminal Blocks style)

Curve

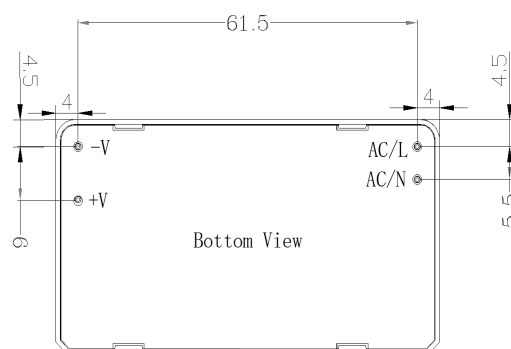
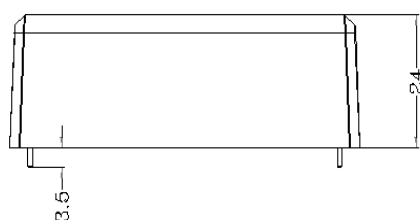


Dimensions and Installation

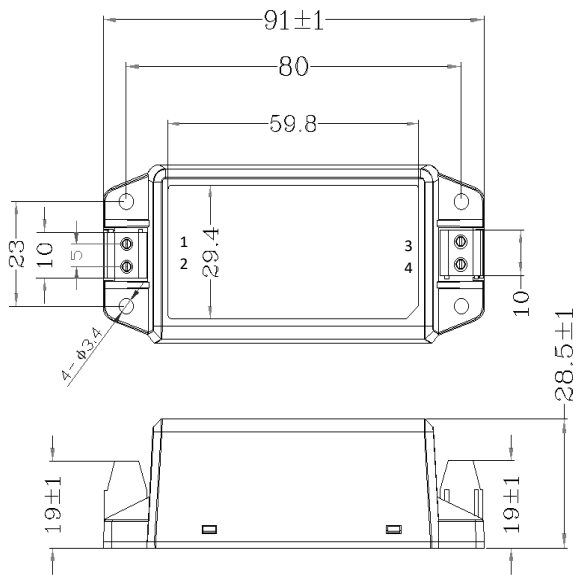
third-angle projectio 



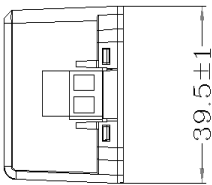
annotation:
unit of size:mm
Pin diameter tolerances:±0.10
General tolerances:±0.50



YSM30T external dimension



third-angle projection 



annotation:
unit of size:mm
Connection wire diameter:24-12AWG
Screw clamp unit: M2.5 Max 0.4 N*m
Unmarked tolerance:±1.00

Pin Mode	
Pin	Function
1	AC/L
2	AC/N
3	-VO
4	+VO

Functional Diagram

