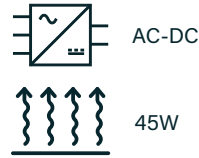
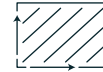


YSM60 45W SERIES



DIMENSIONS:



PCB: 3.42 x 2.05 x 1.16" (87 x 52 x 29.5mm)
T: 4.29 x 2.05 x 1.32" (109 x 52 x 33.5mm)



EN55032 LEVEL B

NO-LOAD POWER
<0.1W

-30 TO 70°C
OPERATION

Part numbers

YSM60	T	120	03800
Series	Terminal	Output voltage	Output current
	None = PCB mount T = Screw terminal	050 = 5VDC 120 = 12VDC 150 = 15VDC 240 = 24VDC 480 = 48VDC	08000 = 8A 03800 = 3.8A 03000 = 3A 01900 = 1.9A 00940 = 0.94A

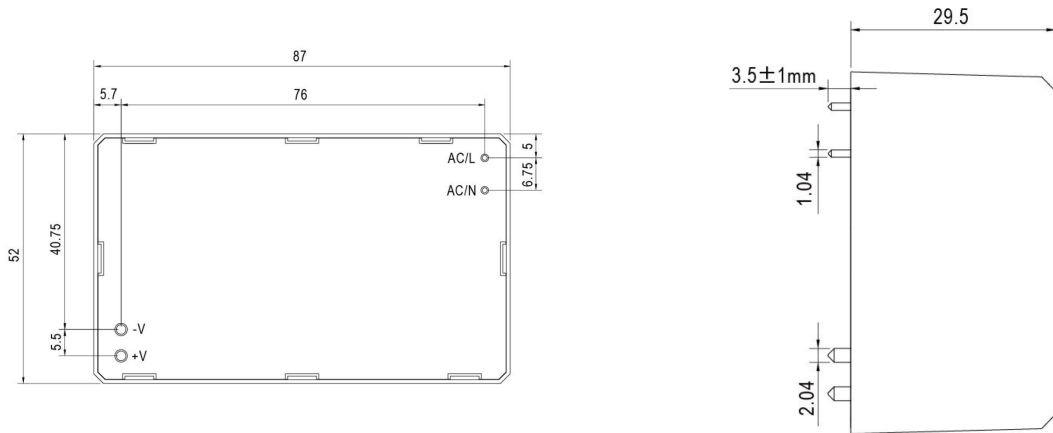
Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	IEC/UL/EN 62368-1 IEC/EN 60335-1	83.5-90.5%	-30 to 70°C

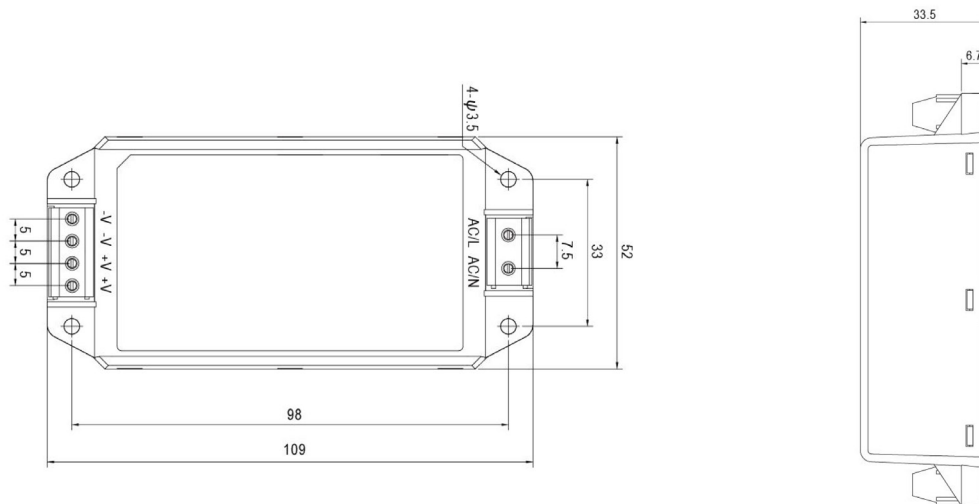
YSM60 45W SERIES

Mechanical

PCB Mount



Screw Terminal

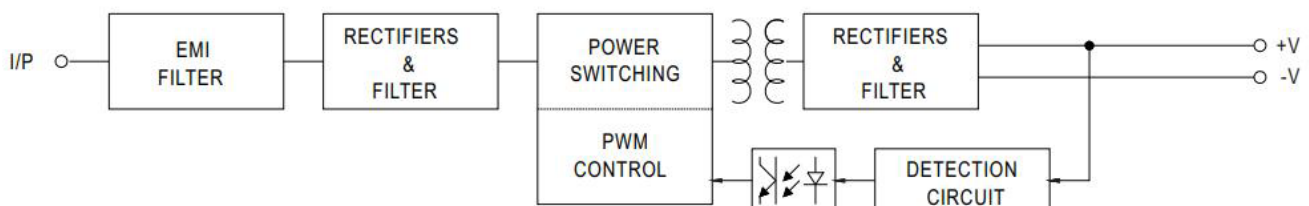


Application Notes

Notes

1. All dimensions shown in mm
2. Weight PCB: 163g Terminal: 260g

fosc : 65KHz



YSM60 45W SERIES

Models & Ratings

Model Number ⁽¹⁾	Output Power	Output Voltage	Output current	Efficiency ⁽²⁾	Noise and ripple ⁽³⁾
YSM60-05008000	40W	5V	8A	83.5%	80mVp-p
YSM60-12003800	45.6W	12V	3.8A	87.5%	150mVp-p
YSM60-15003000	45W	15V	3A	88.5%	180mVp-p
YSM60-24001900	45.6W	24V	1.9A	89.5%	200mVp-p
YSM60-48000940	45.12W	48V	0.94A	90.5%	300mVp-p

1. Add T for screw terminal version i.e :- YSM60T-05008000

2. Typical at 230VAC

3. 10uF and 0.1uF capacitor 20 MHz bandwidth

Input

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Input voltage	90		264	VAC	See page 5 for derating curve
Input frequency	50		60	Hz	
Input current	0.9		1.5	A	1.5A 115VAC / 0.9A 230VAC
Inrush current	30		60	A	30A at 115VAC and 60A at 230VAC. Cold start.
No load input power			0.1	W	
Leakage current			0.25	mA	264VAC

Output

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Output voltage	5		48	VDC	See Models & Ratings table
Set point accuracy		±2		%	
Line regulation		±0.5		%	
Load regulation	±0.5		±1	%	±1% for 5V
Ripple and noise	80		300	mV pk-pk	10uF and 0.1uF capacitor 20 MHz bandwidth
Hold up time	12		50	mS	12ms for 115VAC and 50ms for 230VAC

YSM60 45W SERIES

Protections

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Overload	115		160	%	Trip and restart. Automatic recovery
Short circuit					Trip and restart. Automatic recovery
Over voltage		5V model = 6.75 12V model = 16.2 15V model = 20.25 24V model = 32.4 48v model = 64.8		V MAX	Max. Clamp by Zener Diode, latch rest

Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	IEC/EN/UL62368-1, IEC/EN 60335-1				
Isolation: Input to output	4000			VAC	

EMC: Immunity

	Standard	Test level	Criteria	Notes/Conditions
ESD	EN61000-4-2	2/3	A	±4kV contact / ±8kV Air
Radiated	EN61000-4-3	2	A	3V/m
EFT	EN61000-4-4	2	A	±1kV N/L
Surges	EN61000-4-5	Installation class 3	B	±1kV L/N
Conducted	EN61000-4-6	2	A	3Vrms
Voltage dips and interruptions	EN61000-4-11	0% dips, 70% dips and interruptions performance criteria A,B,C		

EMC: Emissions

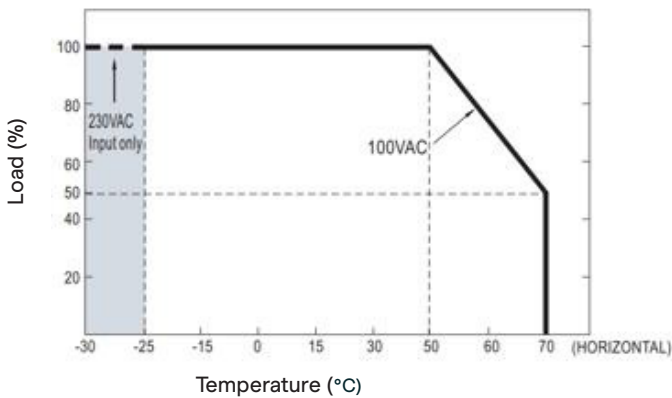
	Standard	Test level	Criteria	Notes/Conditions
Conducted	EN55032	B		
Radiated	EN55032	B		
Harmonic current	EN61000-3-2	Class A		
Voltage flicker	EN61000-3-3			

YSM60 45W SERIES

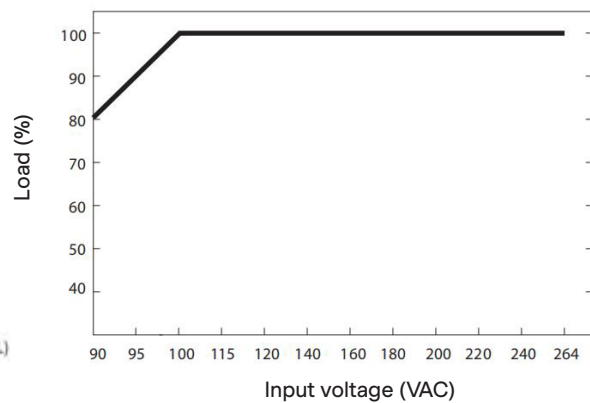
Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	-30		70	°C	See derating curve. 20-90% RH
Storage temperature	-40		85	°C	20-90% RH non-condensing
Temperature coefficient			±0.03	%/°C	0-50°C
MBTF	1200			KHrs	MIL-HDBK-217F(25°C)

Deduction Curve and Temperature



Minus Output and Input Voltage Curves



6th June 2024