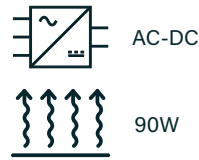
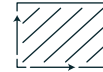


YSM90 SERIES



DIMENSIONS:



PCB: 3.42 x 2.04 x 1.16" (87 x 52 x 29.5mm)
T: 4.29 x 2.04 x 1.32" (109 x 52 x 33.5mm)



EN55032 LEVEL B

NO-LOAD POWER
<0.1W

-30 TO 80°C
OPERATION

Part numbers

YSM	90	T	120	6700
Series	Power	Terminal	Output voltage	Output current
	90W	None = PCB mount T = Screw terminal	120 = 12VDC 150 = 15VDC 240 = 24VDC 480 = 48VDC	6700 = 6.7A 5670 = 5.67A 3750 = 3.75A 1880 = 1.88A

Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	IEC/UL/EN 62368-1 IEC/EN60335-1 (pending)	92-93%	-30 to 80°C

YSM90 SERIES

Models & Ratings

Model Number ⁽¹⁾	Output Power	Output Voltage	Output current	Efficiency ⁽²⁾	Noise and ripple ⁽³⁾
YSM90-1206700	80.4W	12V	6.7A	92%	120mVp-p
YSM90-1505670	85.05W	15V	5.67A	92.5%	150mVp-p
YSM90-2403750	90W	24V	3.75A	93%	200mVp-p
YSM90-4801880	90.2W	48V	1.88A	93%	240mVp-p

1. Add T for screw terminal version i.e.: YSM90T-1206700

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	1.1		1.9	A	1.9A 115VAC / 1.1A 230VAC
Inrush current	30		65	A	30A at 115VAC and 65A 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	12		48	VDC	See Models & Ratings table
Set point accuracy		±2		%	
Line regulation		±0.5		%	
Load regulation	±0.5		±1	%	±1% for 12V
Ripple and noise	120		240	mV pk-pk	10uF and 0.1uF capacitor 20 MHz bandwidth
Hold up time	12		50	mS	12ms for 115VAC and 50ms for 230VAC

YSM90 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		12V model = 16.2 15V model = 20.3 24V model = 32.4 48v model = 64.8		Vdc	Max. Clamp by Zener Diode, latch rest

Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards		IEC/EN/UL62368-1 IEC/EN60325-1 (pending)			
Isolation: Input to output	4000			VAC	

EMC: Immunity (pending)

	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	A	±1kV L/N
Conducted	EN61000-4-6	2	A	3Vrms
Voltage dips and interruptions	EN61000-4-11	0% interruptions 70% dips performance criteria B,C,C		

EMC: Emissions (pending)

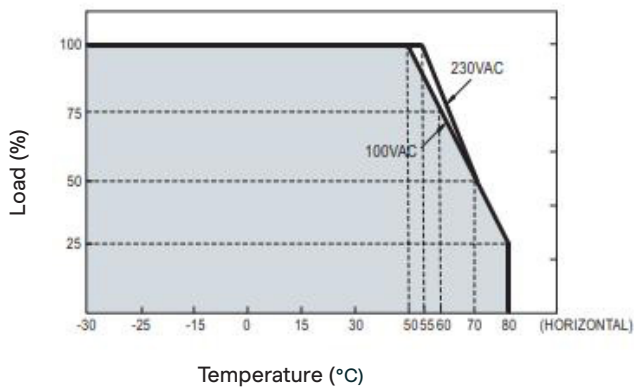
	Standard	Test level	Criteria	Notes/Conditions
Conducted	EN55032	B		
Radiated	EN55032	B		
Harmonic current	EN61000-3-2	Class A		
Voltage flicker	EN61000-3-3			

YSM90 SERIES

Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	-30		80	°C	See derating curve. 20-90% RH
Storage temperature	-40		85	°C	10-95% RH non-condensing
Temperature coefficient			±0.03	%/°C	0-50°C
MBTF	500			KHrs	Mil-HDBK-217F(25°C)

Deduction Curve and Temperature



Minus Output and Input Voltage Curves

