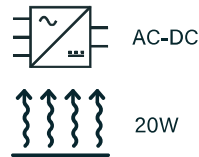
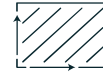


YSM20 20W SERIES



DIMENSIONS:



2.07 x 1.07 x 0.94" (52.4 x 27.2 x 24mm)

EN55032 LEVEL B

**NO-LOAD POWER
<0.1W**

**-30 TO 70°C
OPERATION**

Part numbers

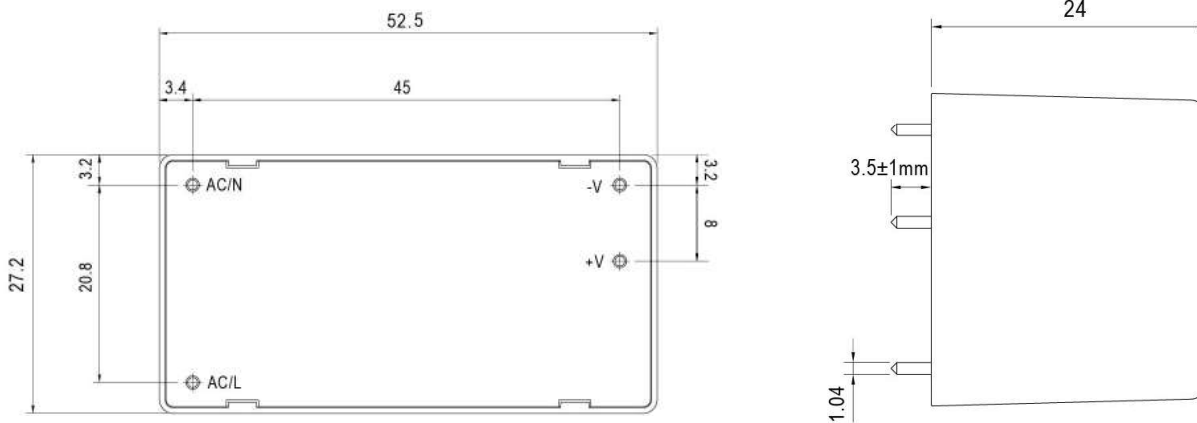
YSM20	033	4500
Series	Output voltage	Output current
	033 = 3.3VDC 050 = 5VDC 120 = 12VDC 150 = 15VDC 240 = 24VDC	4500 = 4.5A 4000 = 4A 1800 = 1.8A 1400 = 1.4A 0900 = 0.9A

Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	IEC/UL/EN 62368-1	76-85%	-30 to 70°C

YSM20 20W SERIES

Mechanical

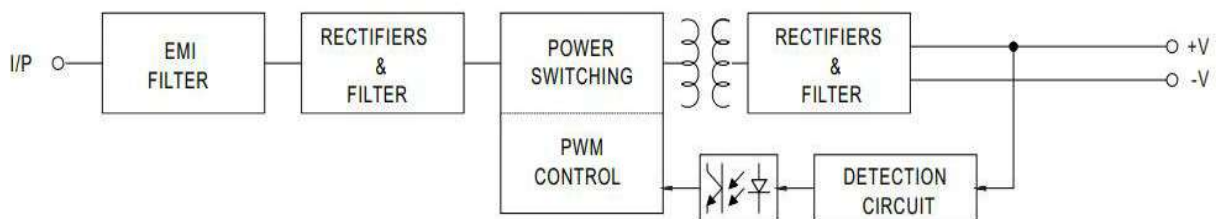


Notes

1. All dimensions shown in mm
2. Weight - 58g

Application Notes

fosc : 65KHz



YSM20 20W SERIES

Models & Ratings

Model Number	Output Power	Output Voltage	Output current	Efficiency (1)
YSM20-0334500	14.85W	3.3V	4.5A	76%
YSM20-0504000	20W	5V	4A	79%
YSM20-1201800	21.6W	12V	1.8A	84%
YSM20-1501400	21W	15V	1.4A	84%
YSM20-2400900	21.6W	24V	0.9A	85%

1. Typical efficiency at 230VAC

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	0.4		0.6	A	0.6A 115VAC /0.4A 230VAC
Inrush current	25		45	A	25A at 115VAC and 45A 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	3.3		24	VDC	See Models & Ratings table
Set point accuracy		±2		%	
Line regulation		±0.5		%	
Load regulation		±0.5		%	0 to 100% load
Ripple and noise		200		mV pk-pk	All models measured with 10uF and 0.1uF capacitor. 20 MHz bandwidth
Hold up time	10		40	mS	10ms for 115VAC and 40ms for 230VAC

YSM20 20W 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		3.3V model = 4.46V 5V model = 6.75V 12V model = 16.2V 15V model = 20.25V 24V model = 32.4V		V max	Protection type - clamp by Zener Diode. Latch reset

Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards		IEC/EN/UL62368-1			
Isolation: Input to output	3000			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	A	±1kV L/N
Conducted	EN61000-4-6	2	A	3Vrms
Voltage dips and interruptions	EN61000-4-11			0% dips, 70% dips and interruption performance criteria B,C,C

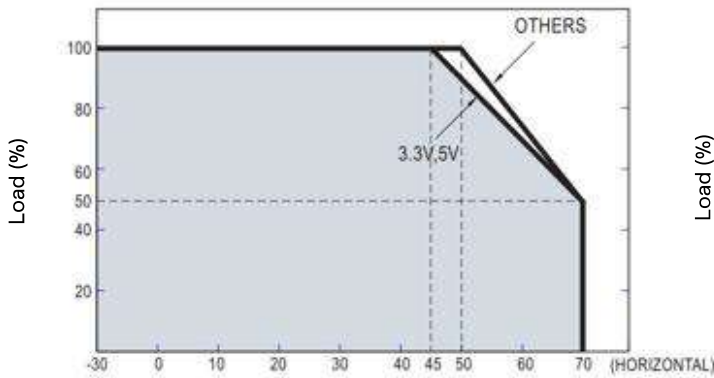
EMC: Emissions

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

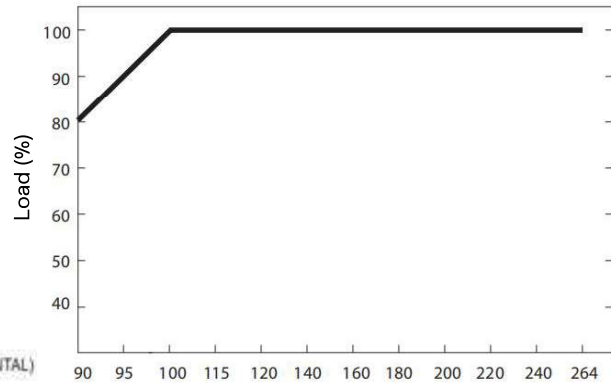
YSM20 20W SERIES

Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	-30		70	°C	See derating curve. 20-90% RH
Storage temperature	-30		85	°C	10-95% RH non-condensing
Temperature coefficient			±0.03	%/°C	0-50°C
MBTF	>1.4			MHrs	As per MIL-HDBK-217F, 25°C GB



Environmental temperature (°C)



Input voltage (VAC)

6th June 2024