



Size: 3.50in x 2.5in x 1.06in (89mm x 63.5mm x 27mm)

FEATURES

- Universal Input Range of 90~264VAC
- Switching Power Modules for PCB Mounting
- Fully Encapsulated Plastic Case
- Over Current, Over Voltage, and Short Circuit Protection
- Isolation Class II
- Regulated Outputs
- CE, CB, UL, and cUL Safety Approvals

DESCRIPTION

The PSCSM60 series of medical AC/DC power modules offers up to 60 watts of output power in a fully encapsulated 3.50" x 2.5" x 1.06" plastic case. This series consists of regulated single output models with a universal input range of 90~264VAC. Each model in this series features over current, over voltage, and short circuit protection, isolation class II and CE, CB, UL, and cUL safety approvals. Please call factory for order details.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Max. Ripple & Noise ⁽²⁾	Maximum Capacitive Load	Efficiency	Output Power	No Load Input Power
PSCSM60-5S	90~264VAC (120~370VDC)	5.1VDC	10,000mA	100mVp-p	10000µF	86%	51W	<0.3W
PSCSM60-9S		9VDC	6666mA	100mVp-p	5000µF	87%	60W	
PSCSM60-12S		12VDC	5000mA	1% of Vout	5000µF	88%	60W	
PSCSM60-15S		15VDC	4000mA	1% of Vout	4000µF	86%	60W	
PSCSM60-24S		24VDC	2500mA	1% of Vout	2000µF	87%	60W	

SPECIFICATIONS

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS			Min	Typ	Max	Unit
INPUT SPECIFICATIONS							
Input Voltage Range				90		264	VAC
Frequency				47		440	Hz
Input Current	Full Load, 115VAC					1.5	A
	Full Load, 230VAC					1	
Inrush Current (<2ms, Cold Start)	@115VAC					55	A
	@230VAC					95	
Leakage Current	@264VAC (Touch Current)					0.1	mA
External Fuse (Recommended)	Slow Blow Type				3.15		A
OUTPUT SPECIFICATIONS							
Output Voltage				See Table			
Voltage Accuracy					±2		%
Line Regulation					0.5		%
Load Regulation	1-100%	5V & 9V Models			1.5		%
		12V, 15V, & 24V Models			1		
Output Power				See Table			
Output Current				See Table			
Maximum Capacitive Load	@230VAC			See Table			
Ripple & Noise ⁽²⁾				See Table			
Hold-Up Time				10			mS.
Temperature Coefficient					±0.05		%/°C
PROTECTION							
Short Circuit Protection				Automatic Recovery			
Over Current Protection				Automatic Recovery			
Over Voltage Protection				Zener Diode Clamp			
ENVIRONMENTAL SPECIFICATIONS							
Operating Temperature	With Derating			-40		+80	°C
Storage Temperature				-40		+90	°C
Max. Case Operating Temperature	Under 115VAC					73	°C
	Others					80	
Altitude	During Operation				5000		m
Humidity						95	%RH
Atmospheric Pressure				70		106	kPa
MTBF	@25°C			200,000		400,000	Hours

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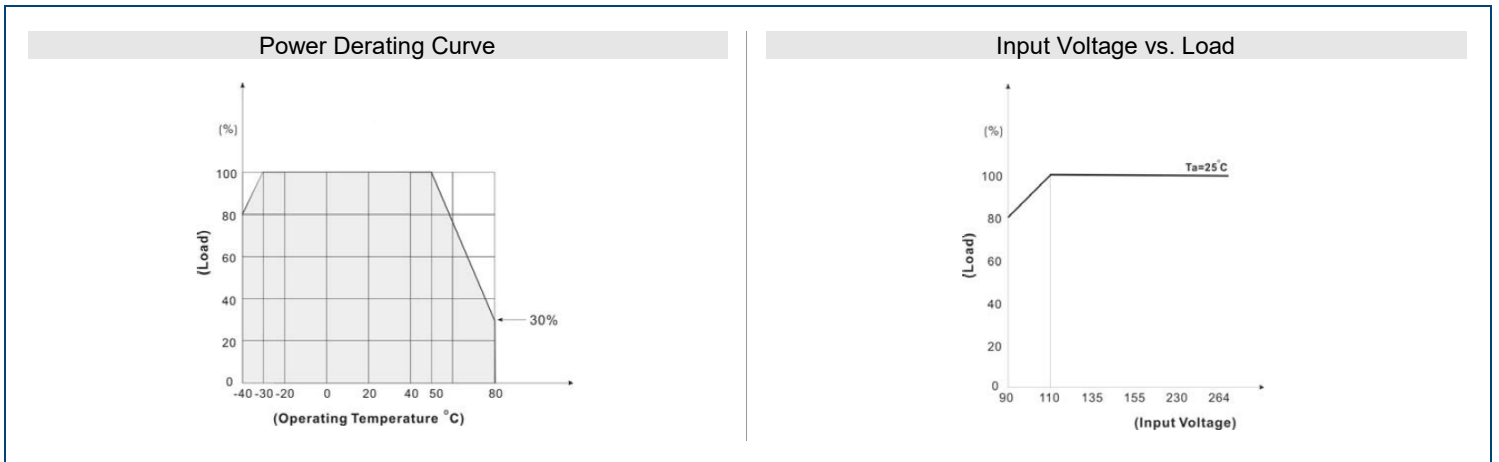
SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
GENERAL SPECIFICATIONS					
Efficiency	@230VAC	See Table			
Isolation Voltage			4000		VAC
PHYSICAL SPECIFICATIONS					
Weight		9.17oz (260g)			
Dimensions (L x W x H)	Standard	3.50in x 2.5in x 1.06in (89mm x 63.5mm x 27mm)			
	Screw Terminal	4.44in x 2.55in x 1.30in (112.9mm x 64.7mm x 33mm)			
Case Material		Plastic Resin (Flammability to UL 94V-0)			
Cooling ⁽³⁾		Free Air Convection			
SAFETY CHARACTERISTICS					
Safety Approvals ⁽⁴⁾	cUL/UL Standard:	UL 60950-1 ⁽⁶⁾ CAN/CSA C22.2 No. 60950-1-07 ANSI/AAMI ES60601-1 (2005 + C1:09 + A2:10) CAN/CSA-C22.2 No. 60601-1 (2008) 2 x MOPP			
	CB Standard:	IEC 60950-1:2005 (2 nd Edition) + Am 1:2009 + Am 2:2013 IEC 60601-1:2005 (3 rd Edition) + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1 (2012 Reprint) 2 x MOPP			
EMC	Conducted and Radiated EMI	EN55011 Class B ⁽⁵⁾			
	EMS	EN60601-1-2 4 th Edition			

NOTES

- This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems, or other such applications which necessitate specific safety and regulatory standards other than the ones listed in this datasheet.
- Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
- Natural convection is about 20LFM but is not equal to still air (0 LFM).
- Safety approvals cover frequency 47-63Hz.
- Radiation Class A for screw terminal series.
- It is recommended to add Varistor 14S471K at L/N input side in parallel.
- A screw terminal is available for this series. To select this option, add "-A" to the end of model number. Ex. PSCSM60-12S-A
- This product is Listed to applicable standards and requirements by UL.

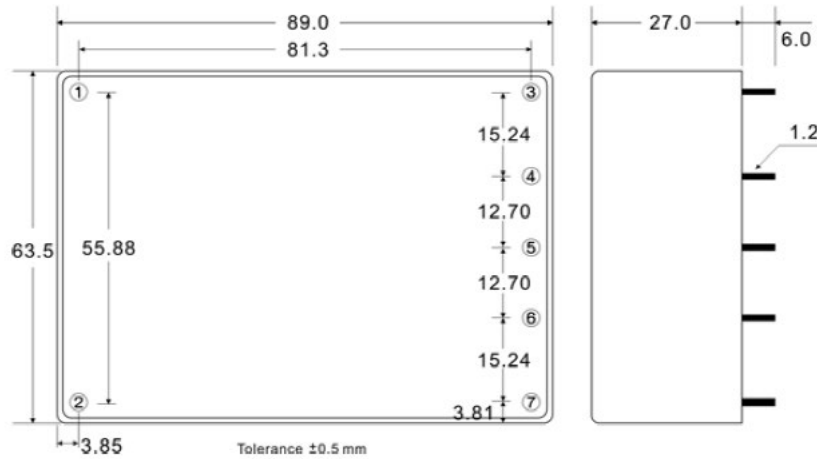
*Due to advances in technology, specifications subject to change without notice.

DERATING CURVES



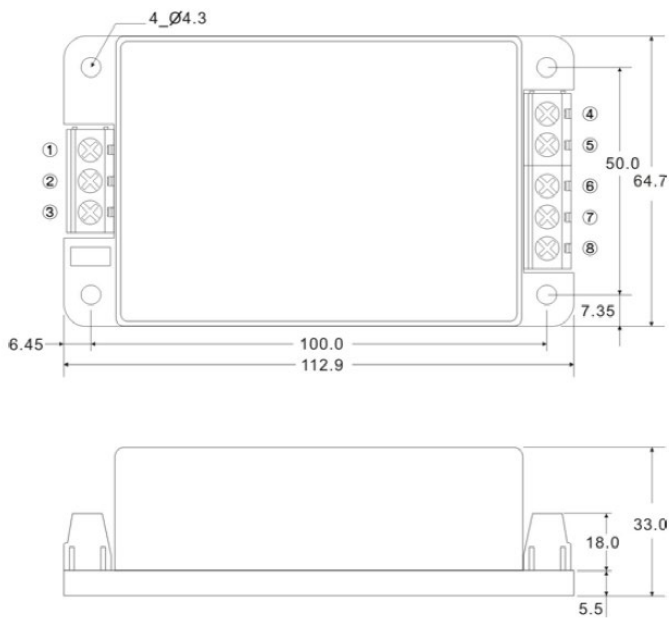
MECHANICAL DRAWINGS

Standard Case



Pin#	Single
1	AC IN (L)
2	AC IN (N)
3	+DC OUT
4	NO PIN
5	-DC OUT
6	NO PIN
7	NO PIN

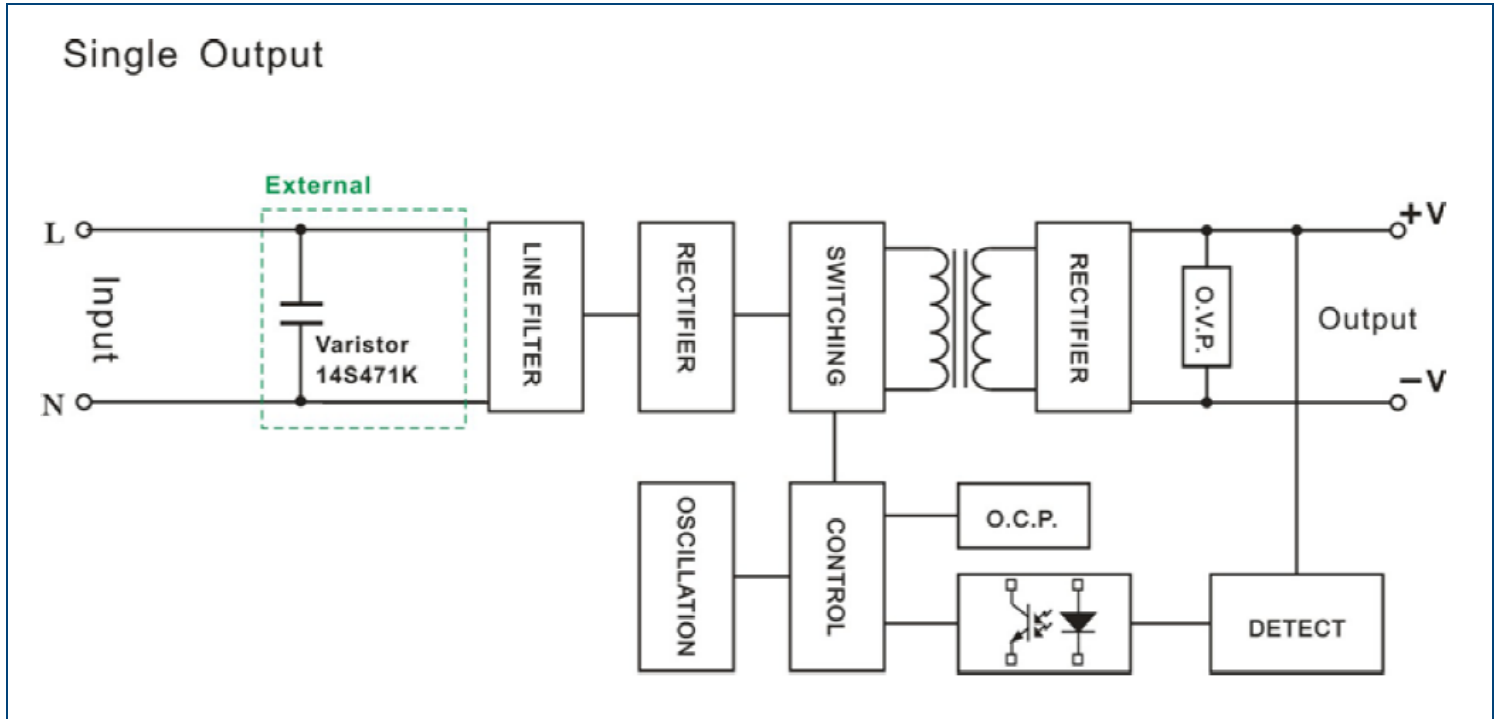
SCREW TERMINAL ("-A" Suffix)



PIN#	Single
1	NO CONNECT
2	AC IN (L)
3	AC IN (N)
4	+DC OUT
5	NO CONNET
6	-DC OUT
7	NO CONNECT
8	NO CONNECT



BLOCK DIAGRAM



COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001: 2015 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

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