Size:
3.00 x 2.00 x 1.13 inches
76.2 x 50.8 x 28.7 mm

Weight:
4.23oz (120g)

FEATURES

- RoHS Compliant
- High Power Density
- 2” x 3” Open Frame Footprint
- 90~264 VAC Input Voltage Range
- 87% High Efficiency (Except 5V models which are 85%)
- Up to 65 Watts Output Power
- Meets DOE Level VI
- Single Outputs Ranging from 5VDC to 56VDC
- -20°C to +70°C Operating Temperature Range
- No load Power Consumption < 0.2W at 230VAC
- Over Voltage, Over Load, and Short Circuit Protection
- Ultra Low Leakage Current < 189µA at 264VAC
- Both Medical 60601-1 3rd Ed. MOPP & ITE 60950-1 Approvals

DESCRIPTION

The PSIM65 series of AC/DC medical power supplies provides up to 65 Watts of output power in a compact 2 x 3 inch open frame package. This series consists of single output models ranging from 5VDC to 56VDC with a 90~264VAC input voltage range. These supplies also feature a low leakage current of less than 189µA at 264VAC, no load power consumption less than 0.2W, and 88% typical efficiency. These supplies are also protected against short circuit, over voltage, and over load conditions. The PSIM65 series is RoHS compliant and has both medical 60601-1 3rd edition and ITE 60950-1 safety approvals.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current		Output Power	Ripple & Noise (1)	Output Regulation	
			Min	Max.			-20°C~0°C	0°C~40°C
PSIM040B-1Y05	90 - 264 VAC	5 VDC	0A	8A	40W	150mVp-p	±10%	±5%
PSIM065B-1Y12		12 VDC	0A	5.416A	65W	240mVp-p	±10%	±3%
PSIM065B-1Y15		15 VDC	0A	4.333A	65W	300mVp-p	±10%	±3%
PSIM065B-1Y19		19 VDC	0A	3.421A	65W	300mVp-p	±10%	±3%
PSIM065B-1Y20		20 VDC	0A	3.25A	65W	300mVp-p	±10%	±3%
PSIM065B-1Y24		24 VDC	0A	2.708A	65W	300mVp-p	±10%	±3%
PSIM065B-1Y28		28 VDC	0A	2.321A	65W	300mVp-p	±10%	±3%
PSIM065B-1Y48		48 VDC	0A	1.354A	65W	300mVp-p	±10%	±3%
PSIM065B-1Y56		56 VDC	0A	1.161A	65W	300mVp-p	±10%	±3%

SPECIFICATIONS: PSIM65 SERIES

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.

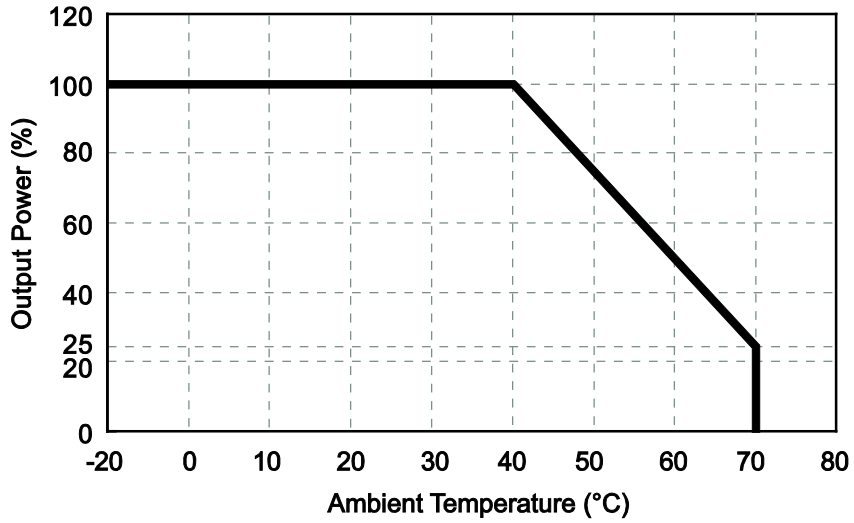
SPECIFICATION	TEST CONDITIONS		Min	Typ	Max	Unit
INPUT SPECIFICATIONS						
Input Voltage Range			90		264	VAC
Input Frequency			47		63	Hz
Input Current (rms)	115VAC and full load				1	A
	230VAC and full load				0.6	
Inrush Current	115VAC, cold start, 25°C				65	A
	230VAC, cold start, 25°C				130	
OUTPUT SPECIFICATIONS						
Output Voltage			See Table			
Output Regulation			See Table			
Output Power	5VDC output model				40	
	Others				65	
Output Current			See Table			
Minimum Load			0			%
Ripple & Noise (20MHz BW)	Measured at 20MHz limited bandwidth and with a 100µF electrolytic capacitor and a 0.1µF ceramic capacitor in parallel across the output		See Table			
Hold-up Time	115VAC and 75% load		10			ms
PROTECTION						
Over Voltage Protection	Shutdown and latch-off		AC recycle			
Over Load Protection	Automatic recovery		105		170	%
Short Circuit Protection			Automatic recovery			
GENERAL SPECIFICATIONS						
Efficiency	115VAC and full load	5V output model		85		%
		Others		87		
ENVIRONMENTAL SPECIFICATIONS						
Operating Ambient Temperature	Derating linearly 2.5% per °C from 41°C to +70°C		-20		+70	°C
Storage Temperature Range			-20		+85	°C
Humidity	Non-condensing		0		90	%
MTBF	Full load and 25°C ambient temperature		100,000			hours
PHYSICAL SPECIFICATIONS						
Weight			4.23oz (120g)			
Dimensions (L x W x H)			3.00 x 2.00 x 1.13 inch (76.2 x 50.8 x 28.7 mm)			
Input Connector (CN1)	Mates with JST VHR-3N or equivalent		JST B3P-VH-B pitch: 7.92mm or equivalent			
Output Connector (CN2)	Mates with JST VHR-4N or equivalent		JST B4P-VH-B pitch: 3.96mm or equivalent			
SAFETY & EMC						
Safety Approvals	ITE		UL60950-1[(2)], CSA-C22.2 NO.950-1, EN60950-1, CB IEC60950-1			
	Medical		UL60601-1 3rd ed., EN60601-1 3rd ed., CSA-C22.2 No.60601-1 3rd ed., IEC EN60601-1 3rd ed.			
EMC Standards	ITE		EN55022 Class B, CISPR22 Class B, FCC Part 15 Class B, CE			
	Medical		EN60601-1-2, FCC Part 18 Class B, EN55011 Class B, CE			

NOTES

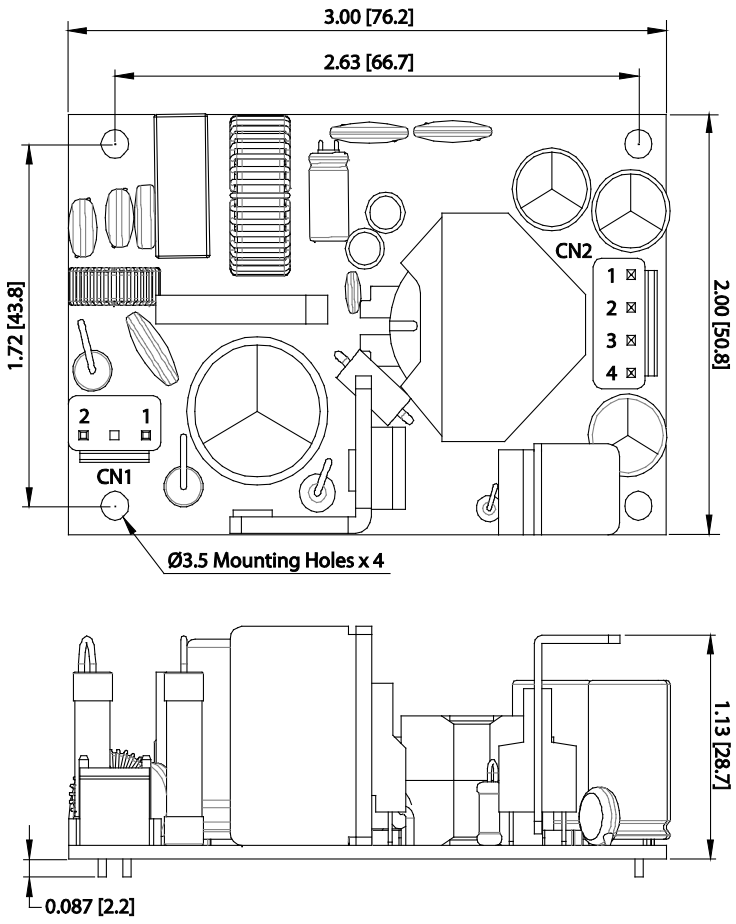
1. Ripple & noise is measured at 20MHz limited bandwidth and with a 100µF electrolytic capacitor and a 0.1µF ceramic capacitor in parallel across the output
2. This product is Listed to applicable standards and requirements by UL.

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

DERATING CURVES



MECHANICAL DRAWING



CN1: INPUT CONNECTOR	
Pin No.	Signal
1	AC Line
2	AC Neutral

JST B3P-VH-B pitch: 7.92mm or equivalent, mates with JST VHR-3N or equivalent

CN2: OUTPUT CONNECTOR	
Pin No.	Signal
1	-Vo
2	-Vo
3	+Vo
4	+Vo

JST B4P-VH-B pitch: 3.96mm or equivalent, mates with JST VHR-4N or equivalent

NOTES:
1. Unit: inches [mm]
2. Weight: 4.23oz (120g)
3. Dimensions: 5.00" x 3.00" x 1.13"
4. All dimensions are for reference only

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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