Size: 6.26in x 4.53in x 1.81in
(159mm x 97mm x 30mm)

FEATURES

- Universal 85 - 264V AC or 120 - 370VDC Input voltage
- Accepts AC or DC Input (Dual-Use of Same Terminal)
- Built-In Active PFC Function
- High I/O Isolation Test Voltage up to 4000VAC
- High efficiency, high reliability
- Output Short Circuit, Over Current, Over Voltage, and Over Temperature Protection
- Remote ON-OFF control
- Over-voltage class Ⅲ (designed to meet EN61558)
- Emissions Meet CISPR32/EN55032 Class B without extra components
- Safety According to IEC/EN/UL62368, EN60335, EN61558, and GB4943

APPLICATIONS

- Industrial
- LED
- Street Light Control
- Security
- Telecommunications
- Smart Home

DESCRIPTION

The PSEW75 series of AC/DC switching power supplies offers up to 76.8 watts of output power in an enclosed 6.26” x 4.53” x 1.81” package. This series consists of single output models with an input voltage range of 85~264VAC or 120~370VDC as this series accepts AC or DC input. Each model features built-in active PFC function, high isolation test voltage. These converters offer excellent EMC performance and meet CISPR32/EN55032 Class B without extra components, as well as short circuit, over current, over voltage, and over temperature protection. It also has safety according to IEC/EN/UL62368, EN60335, EN61558, and GB4943.

MODEL SELECTION TABLE

Model Number[1]	Input Voltage Range	Output Voltage	Output Current	Output Voltage Adjustable Range	Max. Ripple & Noise	Output Power	Maximum Capacitive Load	Efficiency
PSEW75-05S	85-264VAC (120-370VDC)	5V	15A	4.75-5.5V	120mV	75W	10000μF	82%
PSEW75-12S		12V	6.3A	11.4-13.2V	120mV	75.6W	6000μF	85%
PSEW75-15S		15V	5A	14.3-16.5V	120mV	75W	5000μF	86%
PSEW75-24S		24V	3.2A	22.8-26.4V	120mV	76.8W	1500μF	87%
PSEW75-48S		48V	1.6A	45.6-52.8V	200mV	76.8W	680μF	89%

SPECIFICATIONS

All specifications are based on 25°C, Humidity <75%RH, Nominal Input Voltage, and Rated Output Load 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	AC Input		85		264	VAC
	DC Input		120		370	VDC
Input Voltage Frequency			47		63	Hz
Input Current	115VAC				1.0	A
	230VAC				0.6	
Inrush Current	Cold Start	115VAC		20		A
		230VAC		35		
Power Factor	Full Load	115VAC		0.98		
		230VAC		0.93		
Hot Plug				Unavailable		
Leakage Current	240VAC/60Hz				2	mA
OUTPUT SPECIFICATIONS						
Output Voltage				See Table		
Voltage Accuracy	Full Load Range			±2		%
Line Regulation	Rated Load			±0.5		%
Load Regulation	0% - 100%	5V		±1		%
		12V/15V/24V/48V		±0.5		
Output Voltage Adjustable Range				See Table		
Output Power				See Table		
Output Current				See Table		
Minimum Load	Full Load Range		0			%
Maximum Capacitive Load				See Table		
Ripple & Noise[2]	20MHz bandwidth (peak-to-peak value)	5V/12V/15V/24V			120	mV
		48V			200	
Hold-Up Time	230VAC		16			ms
Start-Up Delay Time					3	s
Temperature Coefficient				±0.03		%/°C

SPECIFICATIONS

All specifications are based on 25°C, Humidity <75%RH, Nominal Input Voltage, and Rated Output Load unless otherwise noted.
We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS			Min	Typ	Max	Unit
REMOTE CONTROL							
Power ON				0		0.8	VDC
Power OFF				4		10	VDC
PROTECTION							
Short Circuit Protection	Recovery time <3s after the short circuit disappears			Constant current, continuous, self-recovery			
Over Current Protection	Self-Recovery				≥105		%Io
Over Voltage Protection	Output Voltage Turn-Off, Re-Power on For Recovery	5V			≤7		V
		12V			≤20		
		15V			≤25		
		24V			≤32.4		
		48V			≤60		
Over Temperature Protection(3)	Over-temperature Protection Activation					85	°C
	Over-temperature Protection Deactivation			50			
ENVIRONMENTAL SPECIFICATIONS							
Operating Temperature	5V			-25		+60	°C
	others			-25		+70	
Storage Temperature				-40		+85	°C
Storage Humidity	Non-Condensing					95	%RH
Operating Humidity	Non-Condensing			20		90	%RH
Power Derating	Operating Temperature Derating	-25℃ to -20℃		4.0			%/°C
		+40℃ to +60℃	5V	2.0			
		+50℃ to +70℃	Others	2.0			
	Input Voltage Derating	85VAC-100VAC		1.33			%/VAC
		100VAC-264VAC		0			
MTBF	MIL-HDBK-217F@25°C			300,000			H
GENERAL SPECIFICATIONS							
Efficiency				See Table			
Isolation Test	Electric Strength Test for 1min., leakage current <10mA		Input - ⏚	2000			VAC
			Input – Output	4000			
	Electric Strength Test for 1min., leakage current <5mA		Output - ⏚	500			
Insulation Resistance	Environment Temperature: 25±5°C, Relative Humidity: <95%RH, non-condensing Testing Voltage: 500VDC		Input - ⏚	100			MΩ
			Input – Output	100			
			Output - ⏚	100			
PHYSICAL SPECIFICATIONS							
Weight				0.84lbs (380g)			
Dimensions (L x W x H)				6.26in x 4.53in x 1.81in (159mm x 97mm x 30mm)			
Case Material				Metal (AL1100, SGCC)			
Cooling				Free air convection			
SAFETY CHARACTERISTICS							
Safety Standard(4)				Meet IEC/EN/UL62368/EN60335/EN61558 /GB4943			
Safety Certification				IEC/EN62368/EN60335/EN61558/GB4943			
Safety Class				Class I			
Emissions	CE	CISPR32/EN55032		Class B			
	RE	CISPR32/EN55032		Class B			
	Harmonic Current	IEC/EN61000-3-2		Class A			
Immunity	ESD	IEC/EN 61000-4-2	Contact ±6KV/Air ±8KV	Perf. Criteria B			
	RS	IEC/EN 61000-4-3	10V/m	Perf. Criteria A			
	EFT	IEC/EN 61000-4-4	±2KV	Perf. Criteria B			
	Surge	IEC/EN 61000-4-5	Line to Line ±1KV / Line to Ground ±2KV	Perf. Criteria B			
	CS	IEC/EN 61000-4-6	10 Vr.m.s	Perf. Criteria A			
	DIP	IEC/EN 61000-4-11	0%, 70%	Perf. Criteria B			

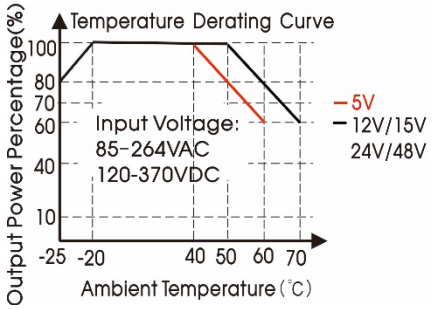
NOTES

1. Add “C” to model number to indicate terminal with protective cover, and “Q” to model number for conformal coating.
2. Tip and barrel method is used for ripple and noise test. Output parallel 47uF electrolytic capacitor and 0.1uF ceramic capacitor, contact factory for more information.
3. Over-Temperature Protection needs to be tested under rated full load conditions.
4. This product is Listed to applicable standards and requirements by UL.
5. The power supply is considered a component which will be installed into terminal equipment. All EMC tests should be confirmed with final equipment. Consult factory for more information.
6. In order to improve the efficiency at high input voltage, there will be audible noise generated, but does not affect product performance and reliability.
7. Product customization service is available, please contact factory for more details.
8. Out case needs to be connected to PE (⏚) of system when terminal equipment in operating.
9. Products should be classified according to ISO14001 and related environmental laws and regulations and should be handled by qualified units.

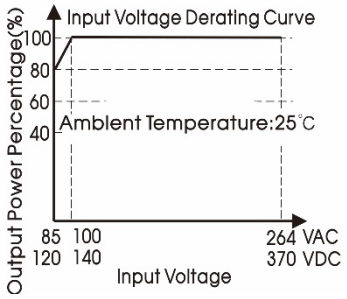
**Due to advances in technology, specifications subject to change without notice.*

DERATING CURVES

Temperature Derating Curve



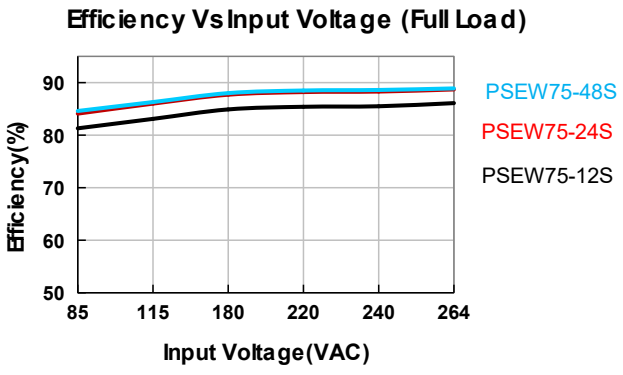
Input Voltage Derating Curve



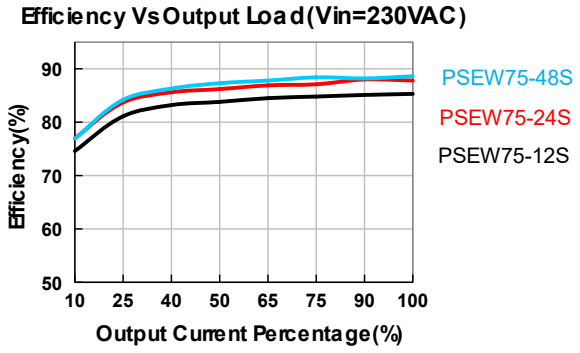
Note:
1. With an AC input voltage between 85-100VAC and a DC input between 120-140VDC the output power must be derated as per the temperature derating curves.
2. This product is suitable for applications using forced air cooling: for applications in closed environment, please contact factory.

EFFICIENCY GRAPHS

Efficiency vs Input Voltage (Full Load)

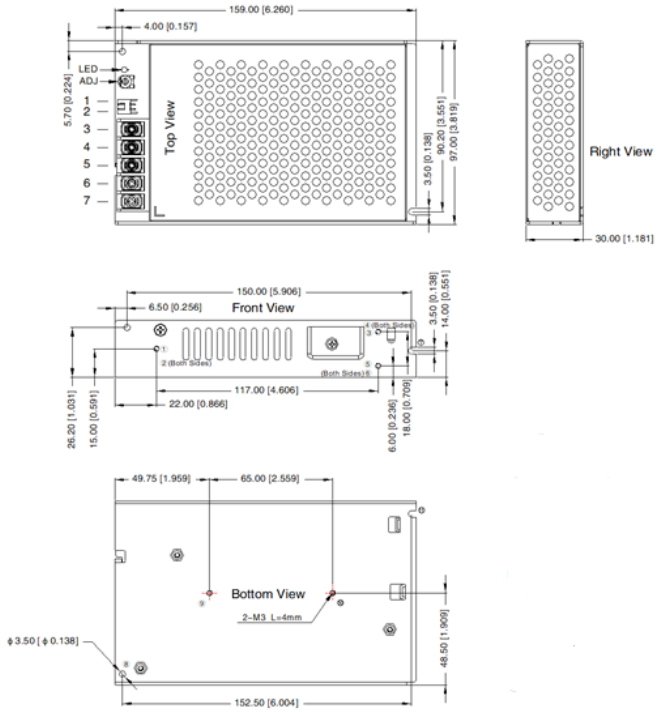


Efficiency vs Output Load (Vin=230VAC)



MECHANICAL DRAWINGS

Standard and “Q” Suffix Models



THIRD ANGLE PROJECTION

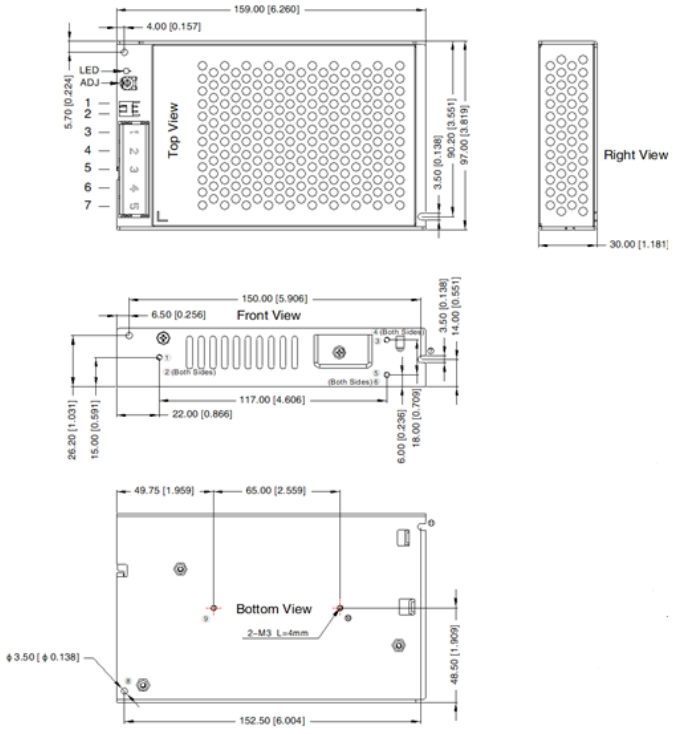
Pin Out

Pin	Function
1	RC+
2	RC-
3	+Vo
4	-Vo
5	⏚
6	AC(N)
7	AC(L)

CN1: KANGDAO TJC3-NAWD-2P or the same spec.

Pin	Function	Connector	Terminal
1	RC+	KANGDAO XH25001-2Y or the same spec	KANGDAO XH2.54-TE or the same spec
2	RC-		

“C” Suffix Models



Note:
Unit: mm [inch]
Wire range: 22-12AWG
Tightening Torque: M3.5, 0.8N·m
General Tolerances: ±1.00 [±0.039]
①-⑪ any position must be connected to PE

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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