

Wall Industries, Inc.

PSM360 SERIES

**90~264VAC Input Voltage Range
360 Watts with 30CFM Forced Airflow
Active PFC, Single Output
Medical AC/DC Switching Power Supplies**



Type U



Type E



Type F

FEATURES

- Active PFC
 - Single Output
 - Remote Inhibit Function
 - 5V / 1A Standby Output
 - 12V / 1A Output for Fan
 - 90~264Vac Input Voltage Range
 - 360W with 30CFM Forced Airflow
 - Current Sharing Option (Single Wire)
 - Short Circuit, Over Load, and Over Voltage Protection
 - UL60601-1, CB IEC60601-1, TUV EN60601-1 Safety Approvals
 - 3 Mechanical Options Available: U-Chassis, Enclosed with Rear Side Fan, Enclosed with Top Fan
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DESCRIPTION

The PSM360 series of medical AC/DC switching power supplies offers 360 watts of output power with 30CFM forced airflow. All models have a single output, 90~264VAC full range input, and active PFC. These supplies also have UL60601-1, TUV EN60601-1, CB IEC60601-1, and CE safety approvals. All models are protected against short circuit, over load, and over voltage conditions. Models are available in U-Chassis (Type U), enclosed with rear side built-in fan (Type E), and enclosed with top built-in fan (Type F) designs. This series also has a current sharing option (suffix "D").

SPECIFICATIONS: PSM360 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.

INPUT SPECIFICATIONS

Input Voltage Range	90 ~ 264Vac (Full Range)
Input Frequency	47 ~ 63Hz
Input Current	4.5A max. at 115Vac
Inrush Current	< 30A peak at 115Vac cold start and 25°C < 80A peak at 230Vac cold start and 25°C
Power Factor	> 0.9 at 115Vac/230Vac

OUTPUT SPECIFICATIONS

Output Current	See Table
Output Voltage	See Table
Output Regulation (<i>See Note 3</i>)	5%
Output Power	360W max. with 30CFM forced air cooling
Ripple & Noise (20MHz BW) (<i>See Note 4</i>)	±1%
Hold Up Time	20ms typical at 115Vac input
Temperature coefficient	±0.04%/°C

PROTECTION

Short Circuit Protection	Auto-recovery
Over Voltage Protection	110% to 130% above nominal output. Latching type, AC recycle
Over Load Protection	110% to 150% maximum rating. Auto-recovery

GENERAL SPECIFICATIONS

Efficiency	83% typical at 115Vac and full load 86% typical at 230Vac and full load
Isolation Voltage	Input to Output: 5656Vdc Input to Ground: 2121Vdc Output to Ground: 707Vdc
Leakage Current	< 300μA at 264Vac
Current Share Option (<i>See Note 1</i>)	Single wire (add the suffix "D" to the part number)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°C to +50°C ambient; each output derates at 2.5% per degree from +50°C to +70°C
Humidity (non-condensing)	5% to 95%
MTBF	>100,000 hours at full load and 25°C ambient temperature

PHYSICAL SPECIFICATIONS

Dimensions (L x W x H)	U Type: 8.00 x 4.66 x 1.51 inches (203.2 x 118.5 x 38.5 mm) E Type: 9.03 x 4.66 x 1.63 inches (229.4 x 118.5 x 41.5 mm) F Type: 8.00 x 4.66 x 2.85 inches (203.2 x 118.5 x 72.5 mm)
Weight	U Type: 40oz (1134g) E Type: 52.8oz (1497g) F Type: 52.8oz (1497g)

SAFETY & EMI

Safety Standards	UL 60601-1, CSA-C22.2 NO.601.1-M90, TUV EN60601-1, CB IEC60601-1
EMI Standards	EN60601-1-2, FCC Part 18 Class B, EN55011 Class B, CE

MODEL SELECTION TABLE

Model ⁽¹⁾	Input Voltage	Output Voltage	Output Current (30CFM forced air)	Maximum Output Power ⁽²⁾ (30CFM forced air)
PSM360B-1Y12-X (D)	90 ~ 264 VAC	12 VDC	30A	360W
PSM360B-1Y24-X (D)	90 ~ 264 VAC	24 VDC	15A	360W
PSM360B-1Y30-X (D)	90 ~ 264 VAC	30 VDC	12A	360W
PSM360B-1Y36-X (D)	90 ~ 264 VAC	36 VDC	10A	360W
PSM360B-1Y48-X (D)	90 ~ 264 VAC	48 VDC	7.5A	360W
PSM360B-1Y54-X (D)	90 ~ 264 VAC	54 VDC	6.67A	360W
PSM360B-1Y57-X (D)	90 ~ 264 VAC	57 VDC	6.32A	360W

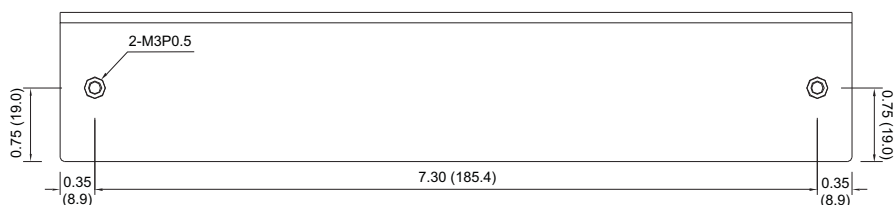
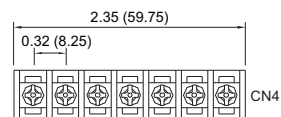
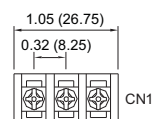
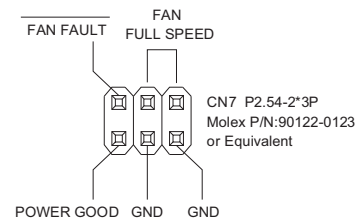
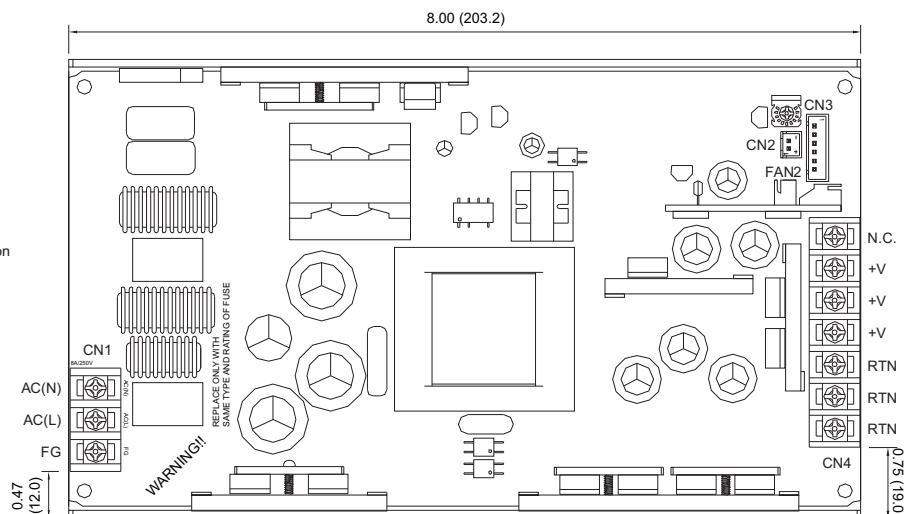
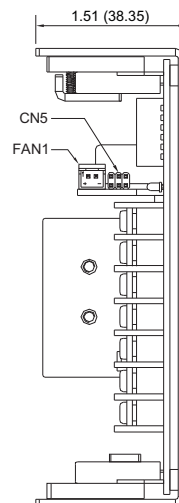
NOTES

1. Mechanical Options: The “x” in the part number can be “U” for U-chassis type, “E” for enclosed type with rear side built-in fan, or “F” for enclosed type with top side built-in fan. The “D” is for current sharing option.
2. **U Type:** 360W max. with 30CFM forced air at +50°C ambient temperature.
E Type: 360W max. at +50°C ambient temperature.
F Type: 360W max. at +50°C ambient temperature.
3. At 25°C including initial tolerance, line voltage, load currents, and output voltages adjusted to factory settings.
4. Ripple & Noise is measured at 20MHz bandwidth with a tantalum 10μF in parallel with a 0.1μF ceramic capacitor.

MECHANICAL DRAWINGS

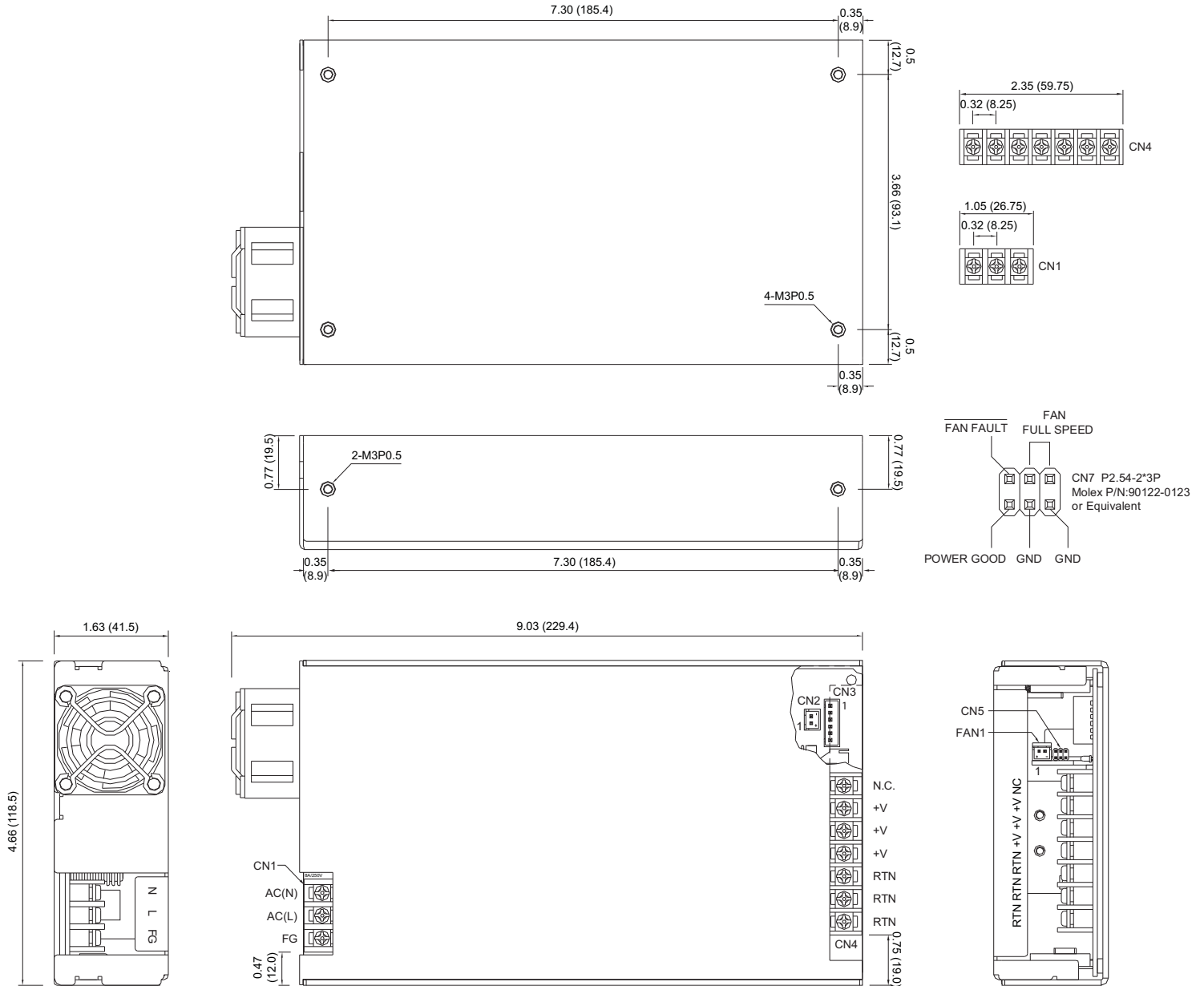
Type "U" Models (U-Chassis Type): 8.00 x 4.66 x 1.51 inches

Unit: inches (mm)



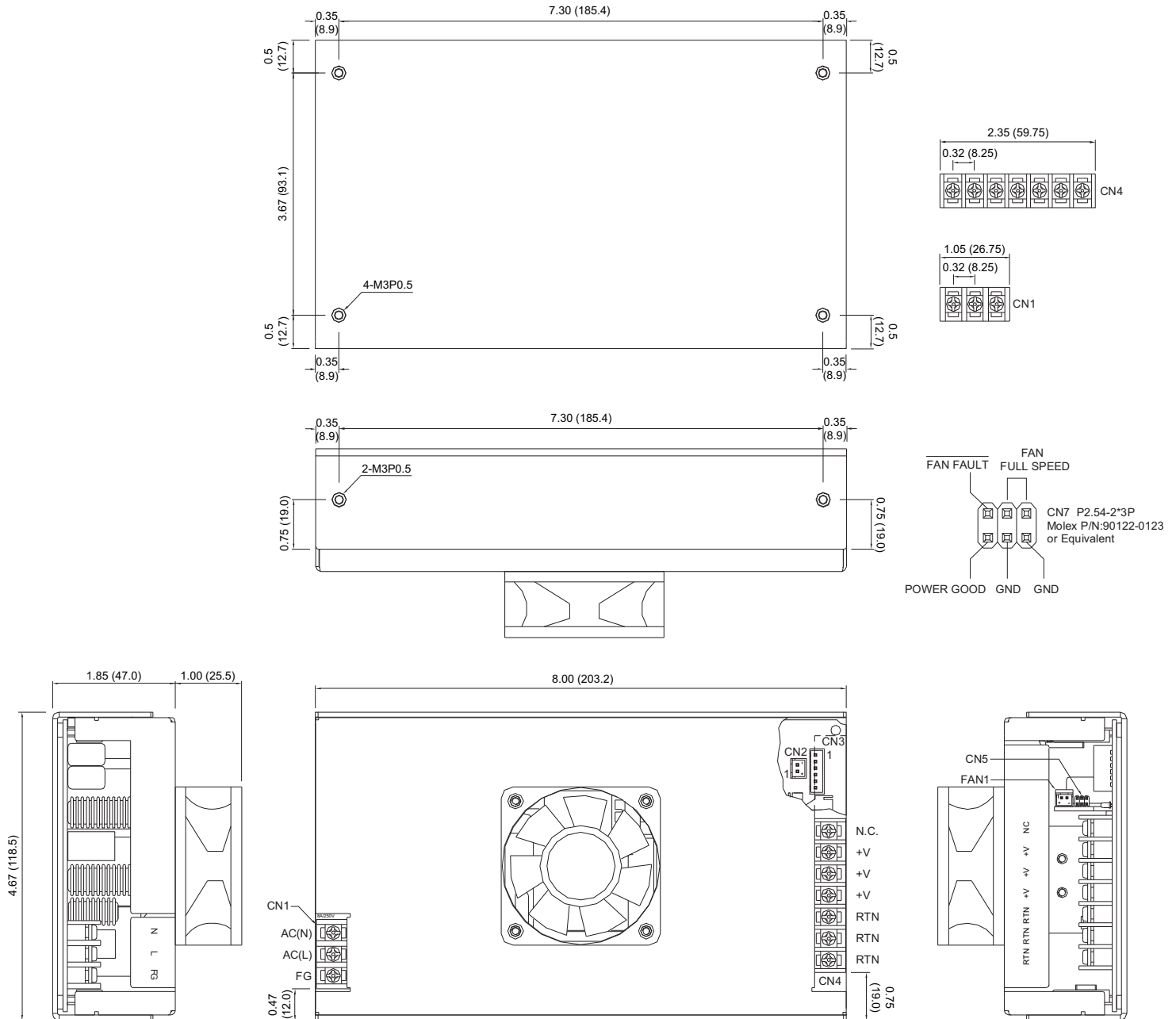
Type "E" Models (Enclosed with Rear Side Built-in Fan Type): 9.03 x 4.66 x 1.63 inches

Unit: inches (mm)



Type "F" Models (Enclosed with Top Side Built-in Fan Type): 8.00 x 4.66 x 2.85 inches

Unit: inches (mm)





Wall Industries, Inc.

Rev. A

PSM360 Series
Up to 360 Watts
Active PFC, Single Output
Medical AC/DC Switching Power Supply

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 ISO9001-2008 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.

Contact **Wall Industries** for further information:

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