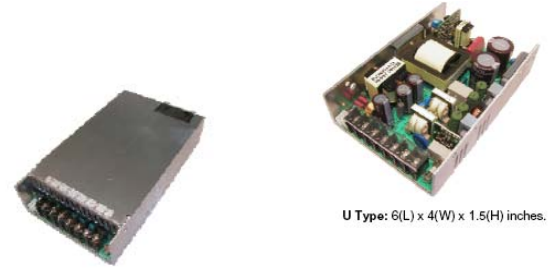


FEATURES

- Smallest 300W with 1U Height Power Density: 8.3 Watts/cu in
- Low Leakage Current 500uA @ 240VAC / 300uA @ 120VAC
- 5/ 12/ 24/ 48V Dual Output Optional Combinations
- Power Factor Corrected to EN61000-3-2 Class A
- Approved to UL CUL TUV CB and CE
- AC Input Range Auto-Selectable
- 4 - Mechanical Options
- 2 Year Warranty



E Type: 7(L) x 4(W) x 1.6(H) inches.



SPECIFICATIONS: PSRL0601D 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	90 - 132 / 180 - 264VAC Auto-ranging
Input Frequency	47 to 63Hz
Input Current	8 / 4A at 100 - 120 / 200 - 240VAC
Inrush Current	Max 70A @ 230VAC and 35A @ 115VAC; cold start.
Leakage Current	Regular type 1.5mA @240VAC. (Optional for 500µA max. at 240VAC / 300µA max. at 120VAC input).

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Output Power Range	320 Watts max with 22CFM airflow. (See Notes 2 and 3)
Output Adjustability	Output user adjustable ±5% minimum.
Total Regulation	±1%
Output Current	See Table
Ripple & Noise (peak to peak)	±1% (20MHz bandwidth)
Transient Response	Returns to within 1% in less than 2.5ms for a 50% load change and the peak transient does not exceed 5%.
Hold-Up Time	20ms min. at 80% of full load.
Overshoot	Turn-on & off < 5% over nominal voltage.
Turn On Delay	1 second maximum at 120VAC.

PROTECTION

Over Voltage Protection	Unit latching down when output exceeds 130% and recycle AC input to reset.
Short Circuit Protection	Trip without damage and auto-recovery.
Over Temperature Protection	Unit protected of excessive operating ambient 85°C; automatic recovery.
Over Power Protection	C.C. mode 110-140%; auto-recovery.
Input Fusing Protection	One T8A/250V fuse inserted in primary.

GENERAL SPECIFICATIONS

Switching Frequency	23KHz fixed frequency.
Efficiency	75% minimum (Measuring at 230VAC and full load).
Withstand Voltage	1500 VAC input line to chassis (10mA DC cut off current). 3000VAC primary to secondary windings; 1500VAC primary to core. All for 3 sec.
Burn In	45 ±5°C for one hour @ 230VAC with full load.
PFC	Power factor correction pass EN61000-3-2 Class A.
Power Good	Designated as PG on CN1 and TTL high 100-500ms after regulation. It goes low at least 1ms before loss of regulation and has ability to sink 100mA.
Power Supply On	Green LED designated as LED1 on the PCB.
Grounding Test	Apply 25A from ground pin of the three prong plug to the far most earth. Max. allowable resistance is 0.1 ohm.
Fan Fail (FF) Alarm	Designated as FF on pin 3 of CN1 is an open collector output rated for 15VDC/5mA sink current maximum; it will go high when a fan failure is detected.



Wall Industries, Inc.

**PSRL0601D Series
300 Watt Dual Output
AC/DC Switching Power Supply**

SPECIFICATIONS (CONTINUED)	
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature	0°C to +70°C ambient, de-rating at 2.5% per degree from 50°C to 70°C.
Storage Temperature	-20°C to +85°C
Operating Humidity	5% to 90% RH, non-condensing
Storage Humidity	5% to 95% RH, non-condensing
Vibration	5 ~ 50Hz, acceleration 7.35 m/(s x s) on X, Y, and Z axis.
Cooling	U Type (U-Chassis): 300W max with 18CFM forced airflow or 150W under convection cooling. C Type (U-Chassis with top cover): 150W max convection cooling. E Type (Enclosed with rear side built-in fan): 320W max. F Type (Enclosed with top built-in fan): 320W max.
Fan Drive	12VDC/400mA is available to drive an external fan.
MTBF	100,000 hours (according to MIL-HBK-217F) at 30°C.
PHYSICAL SPECIFICATIONS	
Weight	U Type (U-Chassis): 600g C Type (U-Chassis with top cover): 650g E Type (Enclosed with rear side built-in fan): 750g F Type (Enclosed with top built-in fan): 800g
Dimensions	U Type (U-Chassis): 6(L) x 4(W) x 1.5(H) inches. C Type (U-Chassis with top cover): 6(L) x 4(W) x 1.55(H) E Type (Enclosed with rear side built-in fan): 7(L) x 4(W) x 1.6(H) F Type (Enclosed with top built-in fan): 6(L) x 4(W) x 2(H) inches.
Warranty	2 years
SAFETY	
Emissions	FCC Part 15, CISPR 22 Class B, Conducted.
Safety Regulations	Approved to UL60950-1, CSAC22.2 No. 60950-1-03, TUV EN60950-1, CE Mark (LVD) EN61000-3-2,3 & IEC61000-4 Series Regulations and CB.

OUTPUT VOLTAGE / CURRENT RATING CHART

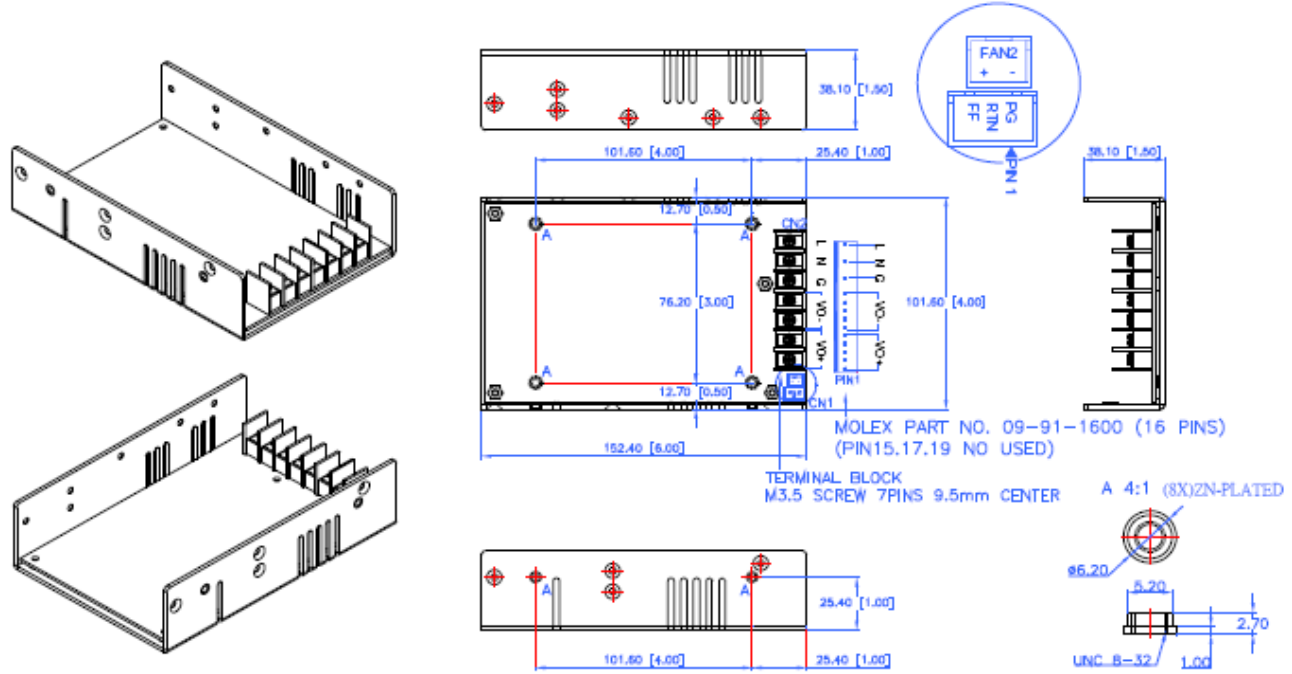
Model	Output Voltage	Max. Output Current		Regulation	Ripple & Noise
		Types U & C (Convection)	Types E, F, and U (forced air)		
PSRL0601Dx-0512	V ₁ :+5 VDC	15A	30A	± 5%	1%
	V ₂ :+12 VDC	10.42A	16.67A	± 5%	1%
PSRL0601Dx-0524	V ₁ :+5 VDC	15A	30A	± 5%	1%
	V ₂ :+24 VDC	5.2A	8.33A	± 5%	1%
PSRL0601Dx-0548	V ₁ :+5 VDC	15A	30A	± 5%	1%
	V ₂ :+48 VDC	2.6A	4.16A	± 5%	1%
PSRL0601Dx-1224	V ₁ :+12 VDC	12.5A	16.67A	± 5%	1%
	V ₂ :+24 VDC	6.25A	8.33A	± 5%	1%

NOTES

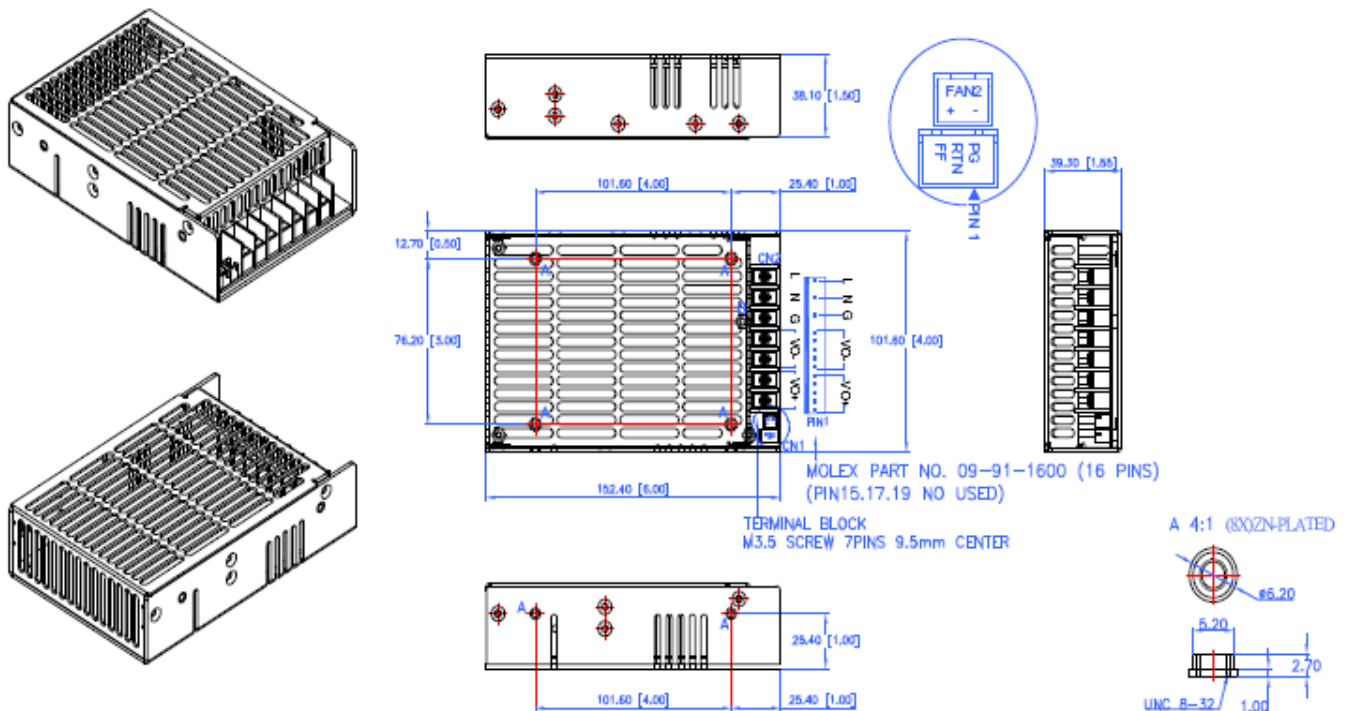
- PSRL0601D series is designated as PSRL0601Dx-y where x can be U (U-Chassis), C (U-Chassis with top cover), E (Enclosed Type with side built-in Fan) or F (Enclosed Type with top built-in Fan); y can be 0512, 0524, 0548, 1224.
- PSRL0601DU (with min. 18CFM forced air flow) & PSRL0601DE & PSRL0601DF Series: Max. 300W total combined power of V1 and V2 for PSRL0601Dx-1224 and 250W for other models.
- PSRL0601DU and PSRL0601DC Series with convection cooling: Max. 150W total combined power of V1 and V2 for PSRL0601Dx-1224 and 125W for other models.
- Ripple and noise is measured from 10KHZ to 20MHz bandwidth at output with parallel 0.1µF ceramic and 22µF electrolytic capacitors.
- 10% minimum load is required to maintain the ripple and regulation.
- Output is fully isolated.

MECHANICAL DRAWINGS

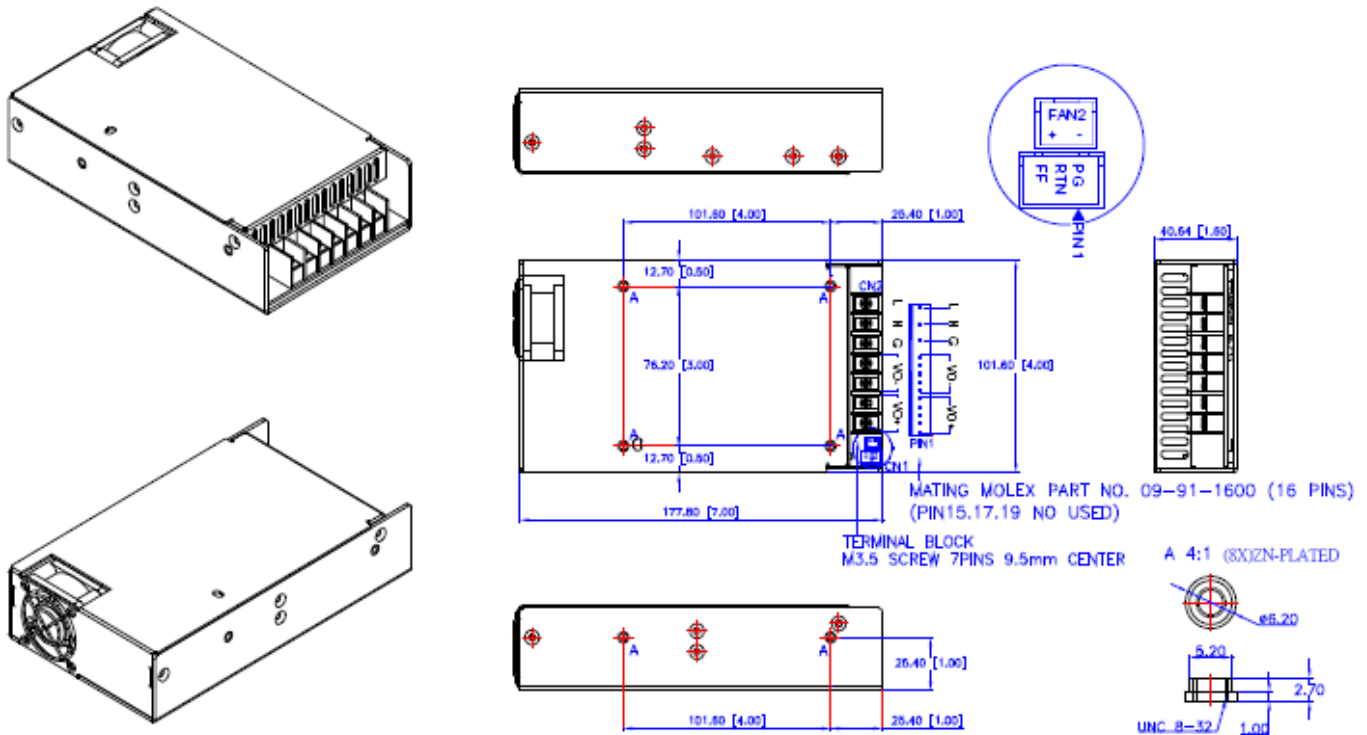
PSRL0601DU Series (U-Chassis Type only): 6(L) x 4(W) x 1.5(H) inches; Weight: 600g



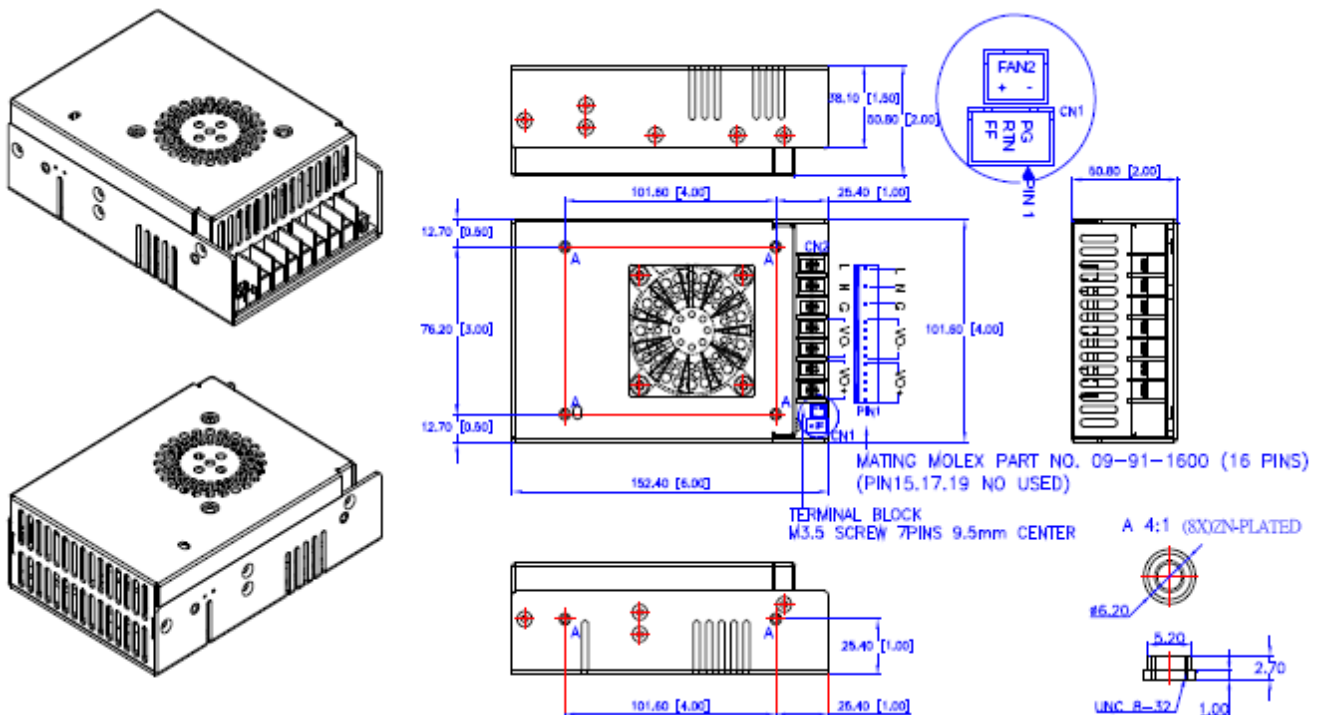
PSRL0601DC Series (U-Chassis with Top Cover): 6(L) x 4(W) x 1.55(H) inches; Weight: 650g



PSRL0601DE Series (Enclosed with Rear Side built-in Fan Type): 7(L) x 4(W) x 1.6(H) inches; Weight: 750g



PSRL0601DF Series (Enclosed with Top built-in Fan Type): 6(L) x 4(W) x 2(H) inches; Weight: 800g





Wall Industries, Inc.

PSRL0601D Series
300 Watt Dual Output
AC/DC Switching Power Supply

I/O CONNECTOR PIN ASSIGNMENT

Input and Output Connector (CN2):

Howder Terminal block Part No. HB-95-7P or Mating Molex Part No. 09-91-1600 (16 pin).

Output Pin Assignment:

(See table below).

Logic signal connector (CN1): Mating JST XHP-3 or equivalent (CHYAO SHIUNN JS-2001-03);

Mating Pins: ST SXH-002T-P0.6 FOR AWG 30 to 26.

Mounting Inserts: 8 Places M4X0.7 (8-32 Optional). Maximum Penetration 4mm see outline drawing for location.

Fan driver connector (FAN2): Mating connector is a Molex P/N 22-01-1022 (2 pins 0.98 pitch) or equivalent with Series 2759 or 5159 terminals.

OUTPUT PIN ASSIGNMENT	
Howder	Molex
Pins 1: V1	Pins 1 ~ 3: V1
Pins 2 ~ 3: RTN	Pins 4 ~ 8: RTN
Pin 4: V2	Pins 9 ~ 10: V2
Pin 5: GND	Pin 12: GND
Pin 6: Neutral	Pin 14: Neutral
Pin 7: Line	Pin 16: Line