

PSI300 SERIES

DC / AC Sine Wave Inverters: 300 VA



General Specifications

Input Voltage	24VDC, 36VDC, 48VDC, 110V & 125VDC. ♦ Other input voltage options on request
Input Range	±-15% of input, other options on request
Input Protection	Inrush current limiting Internal safety fuse, Reverse Polarity Protection
Isolation	For input > 60vdc : Input – Output: 2250vdc For input <60vdc: Input – Output: 1500vdc ♦ Other options on request
EMI	EN55022 Class A conducted
Immunity	EN 61000-4
Output voltage	115VAC / 230VAC options Isolated / Floating output Neutral can be connected to earth terminal if required.
Output Waveform	Sinusoidal
Harmonic Distortion	Less than 5% at 100% load.
Output Freq.	50Hz, 60Hz, 400Hz options
Load Crest Factor	Maximum 3% at 90% load
Output Power	300VA
Regulation	Load: ±2% from 10% to 100% load step. Line: ±1.0% over input range
Output Noise	High Frequency ripple is better than 500mVrms (20MHz BW)
Protection	Current limiting with short circuit protection Self re-setting thermostat for thermal protection
Output Over Voltage Protection	Output voltage is limited by internal supply voltage
Efficiency	Input voltage / model dependent typically 80% at 100% load
Operating Temp	-40°C to +70°C cold plate temperature
Cooling	Convection / Conduction cooled
Shock & Vibration	Designed to meet IEC61373 Cat 1 A & B
Humidity	5-95% non-condensing
MTBF	>150,000 hrs at 45°C
LED Indicator	Optional
Connector	Terminal block, other options on request
Dimensions	155 x 72 x 269mm (P600)
Weight	3.4kg

Features

- ♦ Complete encapsulated package
- ♦ 300VA output power
- ♦ Sinusoidal output waveform
- ♦ Convection / Conduction cooled – No Fans
- ♦ Frequency options 50Hz / 60Hz / 400Hz
- ♦ Wide range of input options: 24 ~ 125VDC
- ♦ Optional output fail alarm on some models
- ♦ Low profile 72mm
- ♦ Rugged design for harsh environments
- ♦ Full electronic protection
- ♦ Non standard input voltage options

Description

The **PSI300** is rugged, fully **encapsulated** product with a thermally conductive MIL-grade silicon rubber compound, to ensure immunity to shock, vibration and humidity.

It uses field proven, microprocessor controlled high frequency PWM technology to generate 300VA output power with pure sine wave output voltage.

It is a mature design with a track record in numerous applications. The DC/DC input stage boosts the input voltage to a higher DC voltage, which feeds the DC/AC inverter to generate the required AC output.

The use of high frequency conversion enables a compact construction, low weight and high efficiency. The unit has full electronic protection. The input and output are filtered for low noise. Cooling is via baseplate to a heatsinking surface and by natural convection.

Options

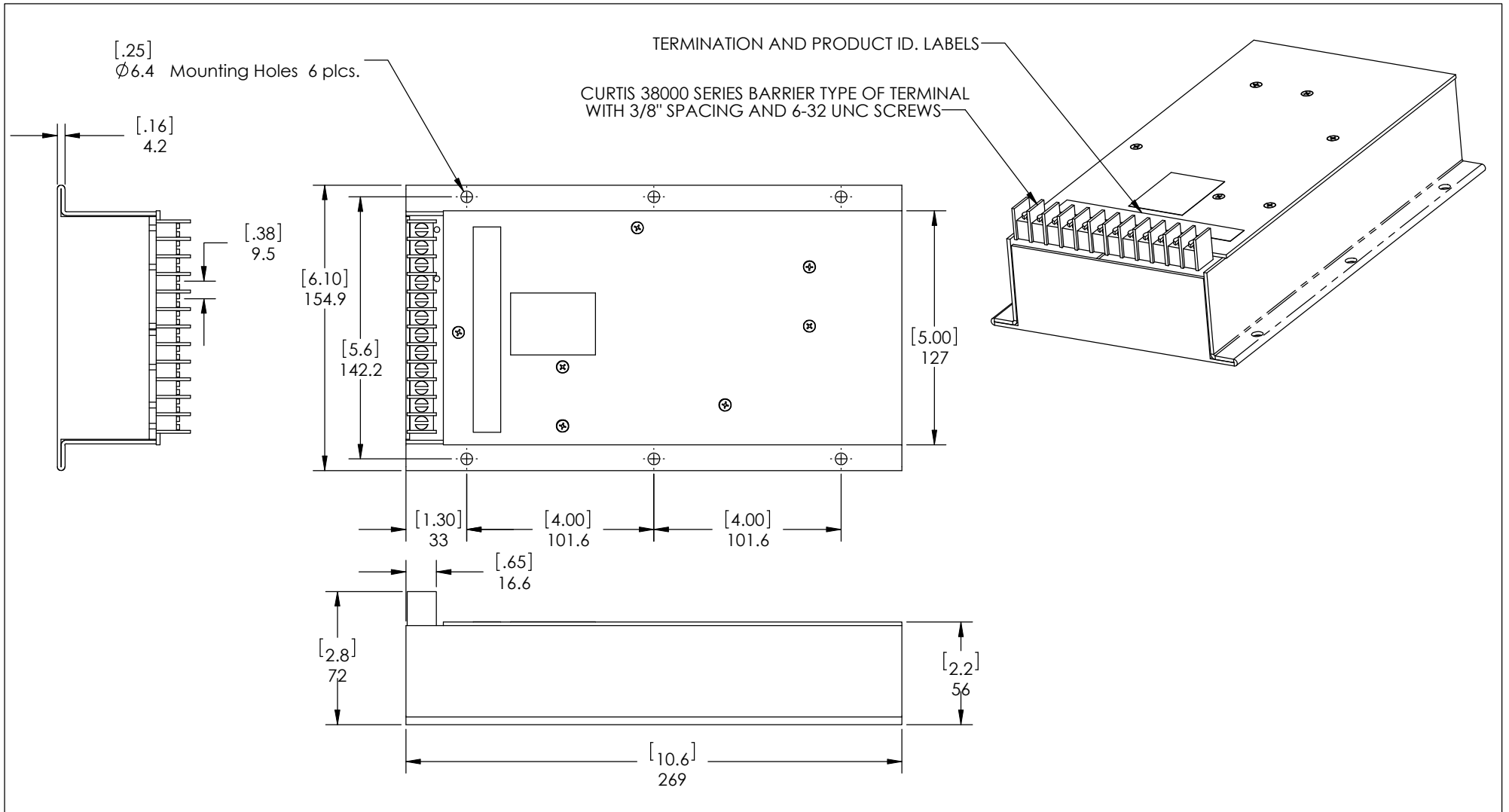
- ♦ Remote enable / disable
- ♦ Alarm output
- ♦ And we can customise the design to suit a range of special customer requirements.

Model No Example:

PSI300-4E-FT (48VDC / 230VAC 50Hz)

PSI	Power	Input Vdc	Output	FT
PSI	300	2 = 24V	A = 115V/60Hz	Std Package
		3 = 36V		
		4 = 48V	E = 230V/50Hz	
		7 = 72V	M = 115V/400Hz	
		9 = 96V		
		108 = 108V		
		5 = 125V		

1. Standard input / Output combinations are illustrated.
2. Non standard combinations are available on request
3. Final Part no will be allocated at time of order to reflect customer specifications and options.



CASE MATERIAL: ALUMINUM 5052-H32
 THE UNIT IS POTTED WITH THERMALLY CONDUCTIVE
 POTTING COMPOUND

DIMENSIONS ARE IN MILLIMETERS
 [INCHES] TOLERANCES ON
 DECIMALS: XXX ± 0.2mm
 XX ± 0.3mm
 ANGLES: ± 2°
 FRACTIONS: ± 0.4mm
 UNLESS OTHERWISE STATED

Title: OUTLINE DRAWING
 Model No: P600 BC J % !\$,