PS62 375 Watt DC-DC Converter

Wide Operating Voltage
High Current
Compact Size

Features

-48VDC or -60VDC (option) input

-Greater than 500,000 hours calculated MTBF at 30ºC

-International Safety Agency Certification

-Full protection on all outputs

-Over-temperature protection

-Inrush limiting and soft start

-Low voltage input protection

-Optimum cost/performance and size

-Compact package 7.00” long x 5.00” wide x 2.50” high

-Optional Fan

PS62 Standard 375W (460W peak)

	Rated	Output	Line/Load	Protection				Noise & Ripple
Rail	Voltage	Current	Regulation	ocp	ovp	uvp	otp	Max. Load
1	5V	5-60A	±1%	Yes	Yes	Yes	Yes	<50mVp-p
2	12V	0-6A (20Apk)	±7/±1%	Yes	Yes	Yes	Yes	<100mVp-p
3	-5V	0-1A	±5%	Yes	Opt	Opt	Yes	<50mVp-p
4	-12V	0-1A	±5%	Yes	Opt	Opt	Yes	<100mVp-p

PS62 Family 375W (460W peak)

	Rated	Output	Output Power	Line/Load	Protection				Noise & Ripple
Rail	Voltage	Current	(will not exceed)	Regulation	ocp	ovp	uvp	otp	Max. Load
1	2V to 15V	5-60A	350W	±1%	Yes	Yes	Yes	Yes	<50mVp-p
2	-36V to 36V	15A (20Apk)	225W (240Wpk)	±12%,-5%/±1%	Yes	Yes	Yes	Yes	<100mVp-p
3	-36V to 36V	10A	160W (240Wpk)	±5%	Yes	Opt	Opt	Yes	<50mVp-p
4	-36V to 36V	10A	160W (240Wpk)	±5%	Yes	Opt	Opt	Yes	<100mVp-p

For detailed specifications and ordering:
US (408) 369-2200
Canada (416) 298-0560
www.saepower.com

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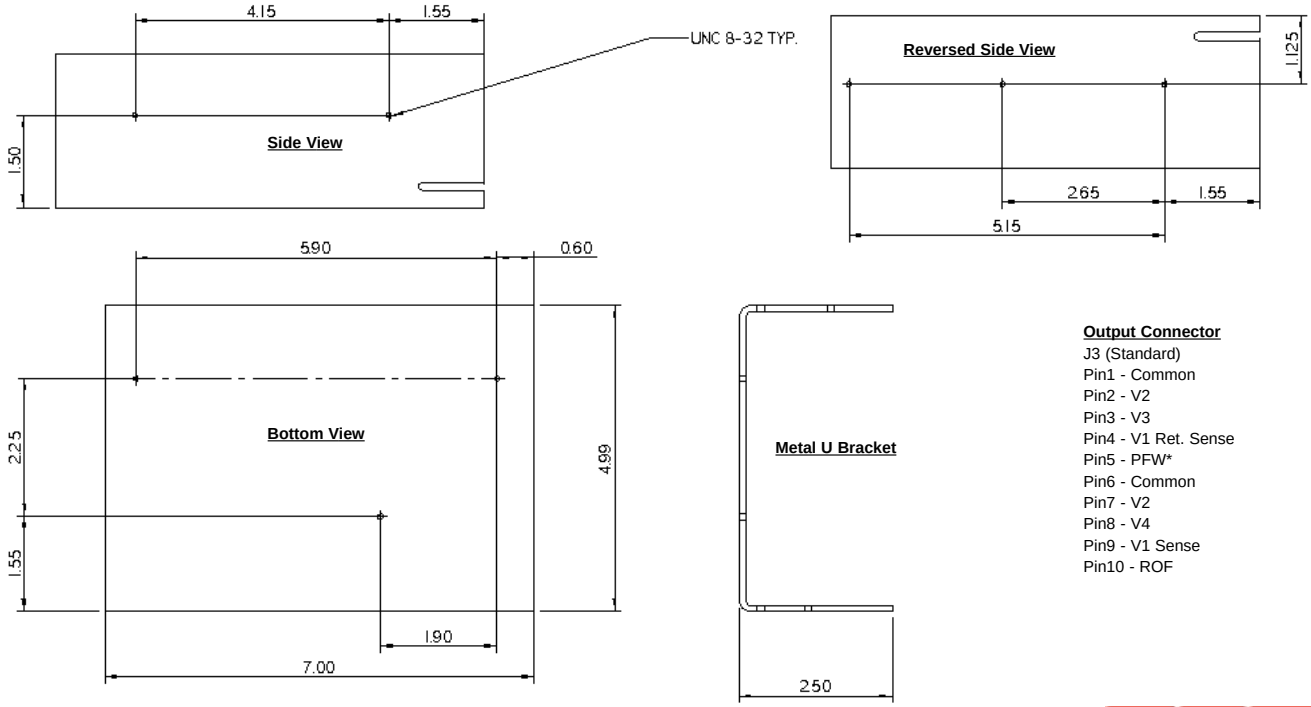
Specifications

Electromagnetic Compatibility

Certifications	UL 1950 Recognized; CSA C22.2 No. 950 and CSA C22.2 No. 234 certified; licensed by TUV to EN 60950 and DIN VDE 0805.
Meets	Bellcore's Technical Reference TR-TSY00 1003, Issue 1, May 1990, Generic Requirements for Embedded DC to DC Converters & Bellcore's Technical Advisory, TA-NWT-001089, Issue 1, AUG 90 for input conducted RFI.
DC Input	Nominal: -48VDC or -60VDC (optional), Operating: -42V to -56V, or -42V to -75V(optional).
Input Protection	Reverse (100V) & under-voltage protection. The under and over voltage thresholds are -40V and -58V (-40V and -77V), respectively.
Fault Reset Time	A latched fault shut-down requires an interruption of the DC input for one second to reset or cycling of R.O.F.
Efficiency	The efficiency is greater than 75% at full load.
Fusing	The supply is fused internally with a 20A, 250VAC fuse with a DC interrupting rating of 10,000 A at 125VDC.
Inrush Current	Inrush current will be less than 10 A peak, followed by an exponential decay with a time constant of less than 250mSec.
Shut-down Input	An optional input is available to force latched shut-down for remote over temperature or fan failure detection applications (100Ω PTC, normally closed contact or open collector gate required). The DC input (or optional ROF) must be recycled to reset.
Output Protection	All outputs are fully protected . The DC input or R.O.F. must be recycled to reset fault shut-down.
Remote ON-OFF	Logic level remote power ON-OFF capability is available. The input is TTL compatible, or it may be connected to a switch or open collector gate without pull-up.
Dynamic Load	A 7 Amp step (or 70% of the full load current, whichever is less) on the +12V rail results in an output voltage transient of less than 3%.
Start Up	Turn on delay at nominal input is about 3 seconds. Output rise time is below 50 mS and is under control of a soft start circuit, with overshoot under 2%.
Temperature	Operating: 5ºC to 50ºC with minimum 35 CFM airflow lengthwise at full rated load. Non-Operating: -5ºC to 75ºC.
Remote Sense	Compensates up to 0.25V total on the +5V channel.
Power On Reset	An open collector, TTL compatible, active low signal gives a power turn-on reset for typically 250mS; other delay times are available.
DC Connector	The input DC connector is a Terminal Block, 7/16" x 1/4" binding head screws.
Output Connectors	Two 10-32 studs for output 1; Molex Mini-Fit, Jr series (39-28-1103) for balance on most versions.
MTBF	The power supply has an MTBF greater than 500,000 hours at 30ºC.

Outline Drawing



Output Connector
J3 (Standard)
Pin1 - Common
Pin2 - V2
Pin3 - V3
Pin4 - V1 Ret. Sense
Pin5 - PFW*
Pin6 - Common
Pin7 - V2
Pin8 - V4
Pin9 - V1 Sense
Pin10 - ROF

All technical specifications are subject to change without notice.