M449 SERIES

3 SPLIT DC OUTPUTS
(SAME OUTPUT VOLTAGE),
AC & DC INPUT CONVERTERS
(UP TO 150W)

APPLICATIONS
Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES
- Three (3) DC outputs, of which one is used as a charger.
- High efficiency
- Wide input range
- AC Input / Output isolation
- Fixed switching frequency (330 KHz)
- EMI/RFI filters included
- Indefinite short circuit protection with auto-recovery
- Over-voltage protection
- Thermistor battery input
- Battery Discharge Pin

ENVIRONMENTAL
Meets or exceeds MIL-STD-810E,
Method 510.3, Proc. I & II,
MIL-STD-1275A, FCC part 15/J1
UL 1950 Approved.

Temperature:
Operating –25C to +50°C
Storage –55C to +125°C

RELIABILITY
150,000 hours, calculated per
MIL-STD-217F at +50°C,
ground fixed.

* Specifications are subject to change without prior notice by the manufacturer

ELECTRICAL SPECIFICATIONS

INPUTS

DC Input range: 16 to 33 VDC

AC Input – Universal:
90÷264 VAC, 47÷440 Hz, Single Phase
Operates from either or both AC and DC inputs
(if both are applied, the AC input is selected)

Input transient protection:
All models meet or exceed (no damage)
MIL-STD-1275A (100V for 50 mSec, 9V for 1 Sec)
MIL-STD-704A, MIL-STD-704D (80V for 0.1 Sec)

Efficiency: up to 85% (DC input) & 75% (AC input)

EMI/RFI:
Meets or exceeds MIL-STD-461D,
CE101, CE102, CS101, CS114,
RE102, RE103, S101, RS103

Isolation:
2000V between AC Input and Output
2000V between AC Input and Case
200V between DC Input and Case

DC OUTPUTS (floating to AC)

Line/Load regulation:
Less than 2% (no load to full load, –25°C to +50°C)
Ripple and Noise: 500mVp-p, typical (max. 2%)

Current limiting (Foldback & Hiccup):
Continuous protection for unlimited time.

Over voltage protection:
Passive tranzorb on outputs.

SELECTION GUIDE

Model	Output #1	Output #2	Output #3 (Battery Charge)
M449	32V/3.3A	32V/1A	700 mA

Note: other voltages and currents are available, consult factory.

PIN ASSIGNMENT

PIN Name	J1 PIN Function
L	PHASE
N	NEUTRAL
1	CHASSIS

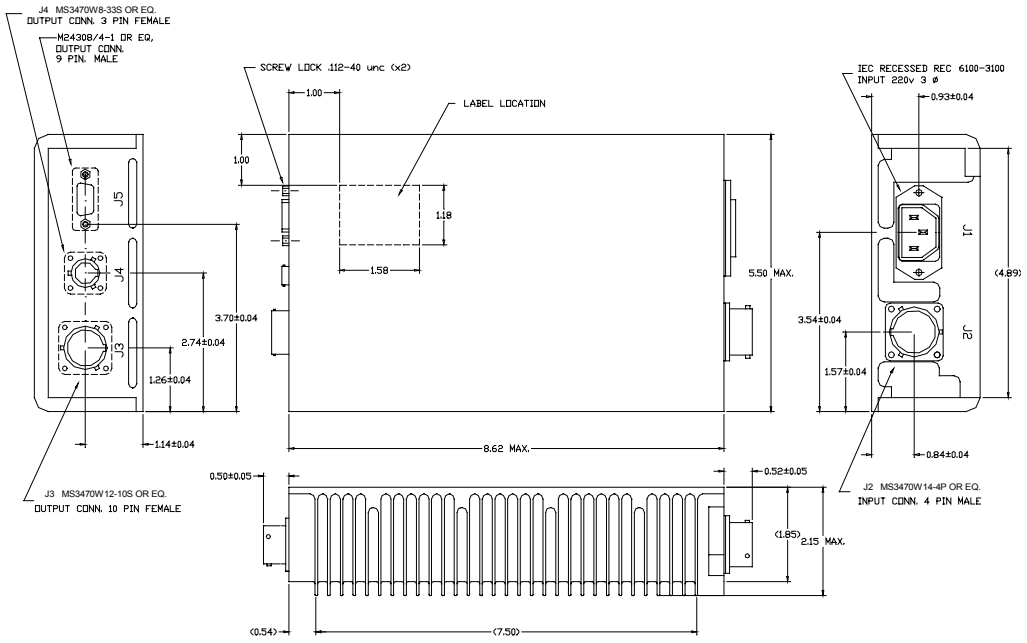
PIN Name	J4 PIN Function
A	CHASSIS
B	+32VDC
C	+32VDC RTN

PIN Name	J3 PIN Function
A	+32VDC
B	+32VDC RTN, B. THM. -
C	CHASSIS
D	+32VDC
E	+32VDC RTN, B. THM. -
F	ABM. THERMISTOR +
G	BATTERY CHR. +
H	B. THM. +, AMB THM. -
J	BATTERY RTN
K	N.C.

PIN Name	J2 PIN Function
A	+28VDC
B	+28VDC
C	+28VDC RTN
D	+28VDC RTN

PIN Name	J5 PIN Function
1	N.C.
2	BATTERY DIS. +
3	N.C.
4	N.C.
5	BATTERY THM. -
6	BATTERY CHR. +
7	ABM. THERMISTOR +
8	B. THM. +, AMB THM. -

OUTLINE DRAWING



Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
   .XX ±.02 IN
   .XXX ±.01 IN
3. Weight: 4 lb (1800 gr)

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