INSTALLATION INSTRUCTION

MAP110 Series
AC-DC Power Supplies

AC INPUT

100 V – 250 V~, 3.3 A, 47 – 63 Hz (Input selection is automatic; no manual change is required.)

OUTPUT(S)

MODEL	RATING TYPE	V1	COM	V2	V3	V4
MAP110-1012G	"B"	12V/10A or 15V/8A	RETURN	N/C	N/C	N/C
MAP110-1024G	"B"	24V/5A or 28V/4.3A	RETURN	N/C	N/C	N/C
MAP110-4000G	"A"	+5V/12A-20Apk*	RETURN	+12V/5A-9Apk*	-12V/1A-1.5Apk*	-5V/1A-1.5Apk*
MAP110-4002G	"A"	+5V/12A-20Apk*	RETURN	+12V/5A-9Apk*	-12V/1A-1.5Apk*	+12V/1A-1.5Apk*
MAP110-4004G	"A"	+5V/12A-20Apk*	RETURN	+24V/3A-4Apk*	-15V/1A-1.5Apk*	+15V/1A-1.5Apk*
MAP110-4011G	"A"	+5V/12A-20Apk*	RETURN	+12V/5A-9Apk*	-12V/1A-1.5Apk*	+24V/1A-1.5Apk*
MAP110-4200G	"A"	+12V/5A-9Apk*	RETURN	+24V/4A	-12V/1A-1.5Apk*	+5V/2A-2.5Apk*
(J2 PIN HOOK-UP)		1 - 3	4 - 7	8, 9	11	13

Note: All V1 5V output models are factory shipped set at 5.1 V.

MAXIMUM OUTPUT RATINGS

RATING TYPE OPTION	"A" BOARD ONLY	"B" BOARD ONLY	"A" 'L'-BRACKET	"B" 'L'-BRACKET	"A" *** 'C'-COVER	"B" 'C'-COVER
CONVECTION Continuous/Peak*	80 W / 110 W	90 W / 120 W	80 W / 110 W	90 W / 120 W	60 W / 110 W	65 W / 120 W
FORCED AIR** 200 LFM	110 W	120 W	110 W	120 W	110 W	120 W

* Peak ratings for 60 second maximum duration up to a 10% duty cycle.
** Forced air required when operating power supply above convection output rating.
*** V1 5 V maximum 11 A on multiple output models for 50°C operation.

OPTION SUFFIXES (Standard board only models are listed in the Output Model table above)

'C' – Cover and mounting bracket models
'L' – L- bracket mounting models
'M' – Indicates M4 x 0.7 - 6H metric mounting and / or Melcher labeling
'P' – Power fail signal models
'T' – Thermal shutdown models
Models without suffix G are not RoHS-compliant (Leaded solder used) and are not recommended for new designs or already EOL.

PROTECTIVE EARTHING

The Power Supply must be properly grounded to mains protective earthing termination at end use.

ENVIRONMENTAL CONDITIONS

TRANSPORTATION & STORAGE:
Ambient Temperature Range: -55 °C to +85 °C
Relative Humidity Range: 10% to 100% Including Condensing
Atmospheric Pressure Range: 500 hPa to 1060 hPa

OPERATION:
Ambient Temperature Range: 0°C to +50°C
Relative Humidity Range: 5% to 95% Non-Condensing
Atmospheric Pressure Range: 700 hPa to 1060 hPa

SAFETY APPROVALS

Approved to the latest version of the following safety standards: UL/CSA 62368-1, EN 62368-1 and IEC 62368-1.

FUSING

Power supply is protected by a M6.3 A, 250 V internal fuse.

SERVICING

In case of failure, the Power Supply must be returned to a Bel Power Solutions Authorized Service Center. There are no user serviceable parts in the Power Supply.

LIMITED WARRANTY

Bel Power Solutions warrants each power supply of its manufacture for a period of two years from the date of original shipment. This warranty applies to defects in materials and workmanship that result in non-performance to published specifications. The product(s) must be returned to a Bel Power Solutions Authorized Service Center for repair with a Bel Power Solutions preassigned RMA number.
Bel Power Solutions assumes no liabilities for consequential damages of any kind through the use or misuse of its products by any user. No other obligations are expressed or implied.
Please note that the specifications, terms, and conditions stated are subject to change without notice.

NUCLEAR AND MEDICAL APPLICATIONS

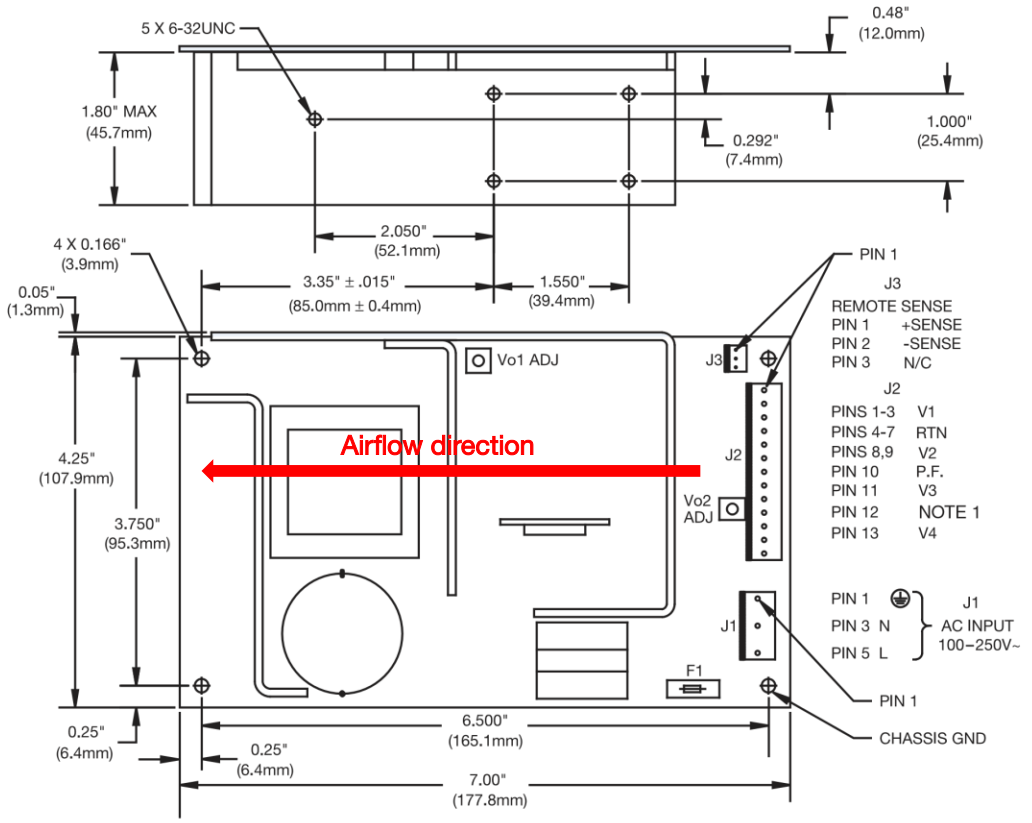
Bel Power Solutions products are not designed, intended for use in, or authorized for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems without the express written consent of the respective divisional president of Bel Power Solutions.

TECHNICAL REVISIONS

The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.

MECHANICAL SPECIFICATIONS

Overall Size:	177.8 x 109.2 x 50.0 mm (7.00 x 4.30 x 1.97 inch)
Weight:	0.59 kg (1.3 lbs)
Tolerances:	.XX = ± 0.03 in (± 0.76 mm); .XXX = ± 0.010 in (± 0.25 mm)



MOLEX PCB PIN CONNECTOR INFORMATION				
REF DESIG	SERIES	MOLEX P/N	SPACING	PINS, SQUARE
J1	41671 or	26-48-1055*	0.156 (3.96)	0.045 (1.14)
	41791	26-60-4050*	0.156 (3.96)	0.045 (1.14)
J2	41671 or	26-48-1135	0.156 (3.96)	0.045 (1.14)
	41791	26-60-4130	0.156 (3.96)	0.045 (1.14)
J3	6373	22-23-2031	0.100 (2.54)	0.025 (0.64)

*With pins 2 & 4 removed for double spacing.

NOTES:

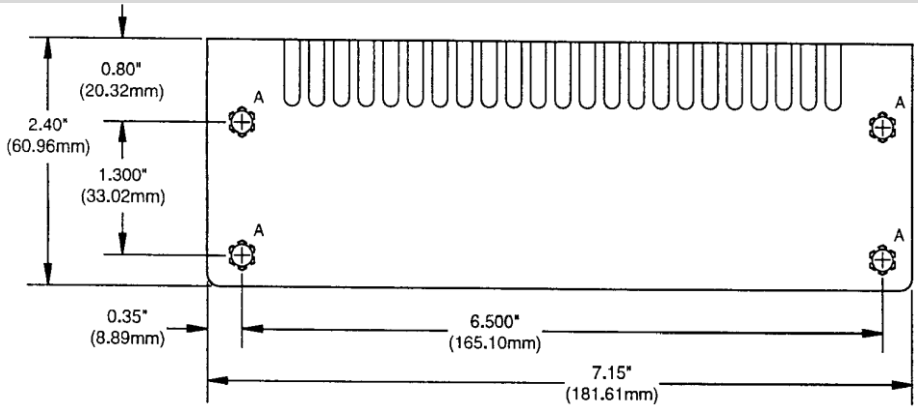
1.) When the V4 output is a positive (+) output, pin 12 on J2 is connected to RTN.

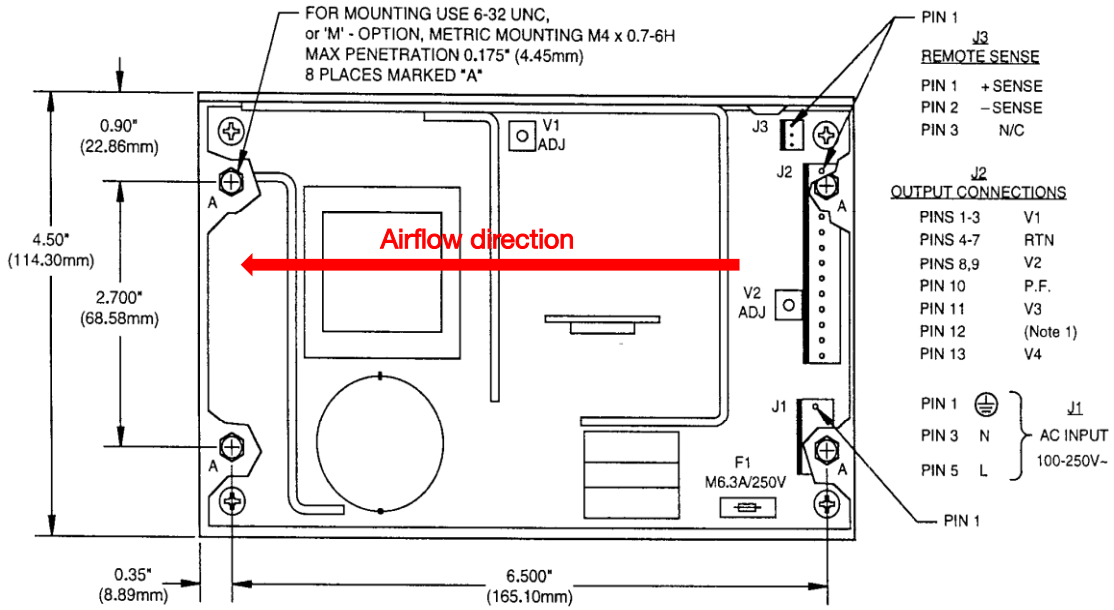
When the V4 output is a negative (–) output, pin 12 on J2 is connected to V4.

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'L' - BRACKET OPTION OUTLINE AND MOUNTING INFORMATION

Overall Size:	181.61 x 114.30 x 60.96 mm (7.15 x 4.50 x 2.40 inch)
Weight:	0.77 kg (1.68 lbs)





MOLEX PCB PIN CONNECTOR INFORMATION				
REF DESIG	SERIES	MOLEX P/N	SPACING	PINS, SQUARE
J1	41671 or	26-48-1055*	0.156" (3.96mm)	0.045" (1.14mm)
	41791	26-60-4050*	0.156" (3.96mm)	0.045" (1.14mm)
J2	41671 or	26-48-1135	0.156" (3.96mm)	0.045" (1.14mm)
	41791	26-60-4130	0.156" (3.96mm)	0.045" (1.14mm)
J3	6373	22-23-2031	0.100" (2.54mm)	0.025" (0.64mm)

* With pins 2 & 4 removed for double spacing.

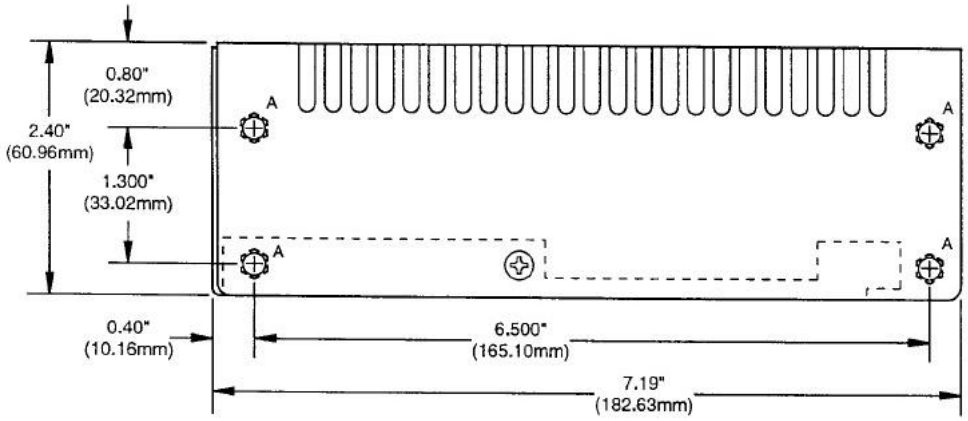
UNLESS OTHERWISE SPECIFIED
TOLERANCES: .XX = ± 0.03 mm = ± 0.76 .XXX = ± 0.010 mm = ± 0.25
DIMENSIONS ARE IN INCHES & (MILLIMETERS)

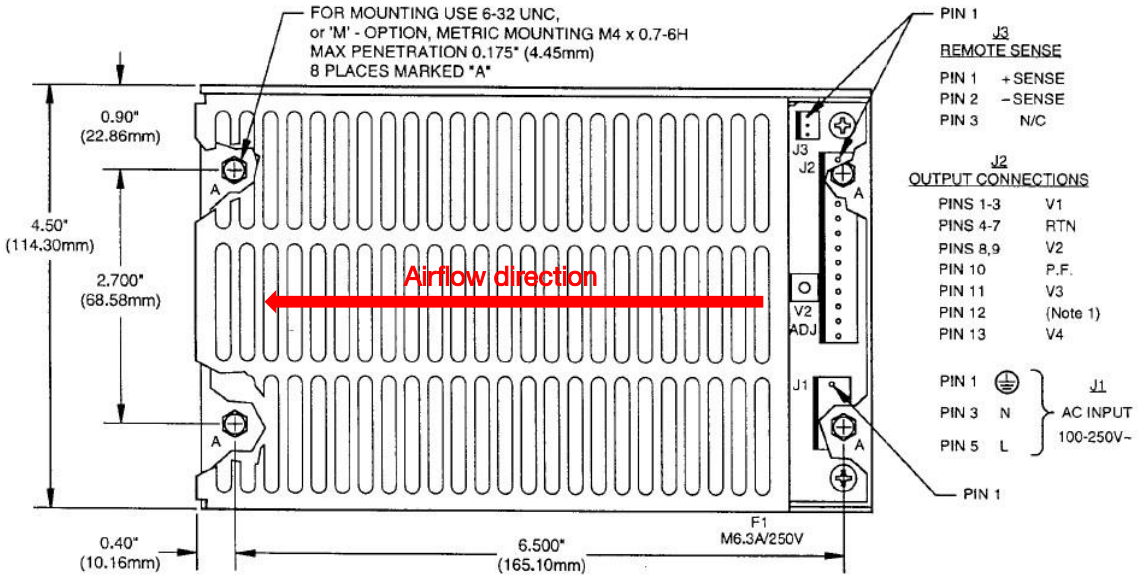
Notes:

1.) When the V4 output is a positive (+) output, pin 12 on J2 is connected to RTN.
When the V4 output is a negative (−) output, pin 12 on J2 is connected to V4.

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'C' – COVER OPTION OUTLINE AND MOUNTING INFORMATION	
Overall Size:	182.7 x 114.30 x 61.0 mm (7.19 x 4.5 x 2.4 inch)
Weight:	0.83 kg (1.82 lbs)





MOLEX PCB PIN CONNECTOR INFORMATION				
REF DESIG	SERIES	MOLEX P/N	SPACING	PINS, SQUARE
J1	41671 or	26-48-1055*	0.156" (3.96mm)	0.045" (1.14mm)
	41791	26-60-4050*	0.156" (3.96mm)	0.045" (1.14mm)
J2	41671 or	26-48-1135	0.156" (3.96mm)	0.045" (1.14mm)
	41791	26-60-4130	0.156" (3.96mm)	0.045" (1.14mm)
J3	6373	22-23-2031	0.100" (2.54mm)	0.025" (0.64mm)

* With pins 2 & 4 removed for double spacing.

UNLESS OTHERWISE SPECIFIED
TOLERANCES: .XX = ± 0.03 mm = ± 0.76 .XXX = ± 0.010 mm = ± 0.25
DIMENSIONS ARE IN INCHES & (MILLIMETERS)

Notes:

1.) When the V4 output is a positive (+) output, pin 12 on J2 is connected to RTN.
When the V4 output is a negative (–) output, pin 12 on J2 is connected to V4.

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