



SEL-2242 Chassis/Backplane

The SEL-2242 Chassis/Backplane is a 10-slot chassis for SEL Axion[®] systems. This data sheet provides installation instructions and specifications.

Front and Rear View

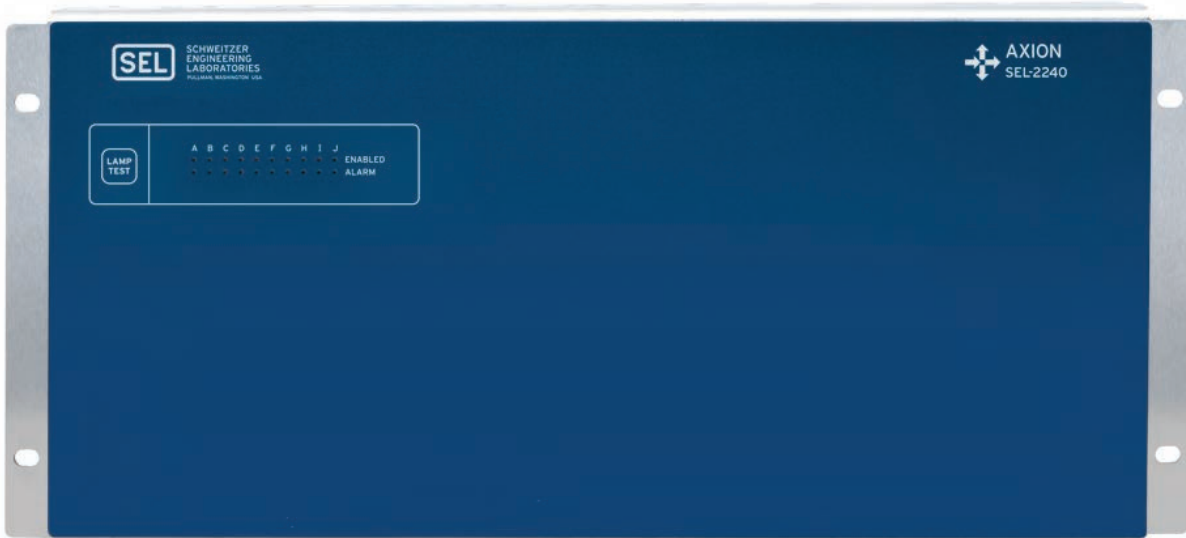


Figure 1 SEL-2242 10-Slot Front Panel, Rack-Mount



Figure 2 SEL-2242 10-Slot Rear View, Panel-Mount



Figure 3 SEL-2242 4-Slot Front Panel, Rack-Mount

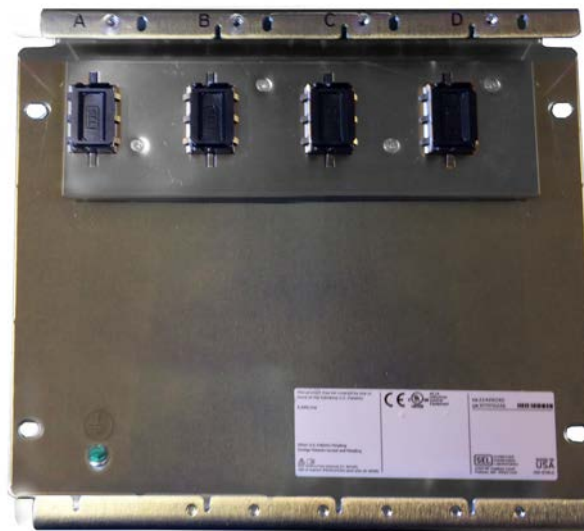


Figure 4 SEL-2242 4-Slot Rear View, Panel-Mount



Figure 5 SEL-2242 Dual 4-Slot Front Panel, Rack-Mount

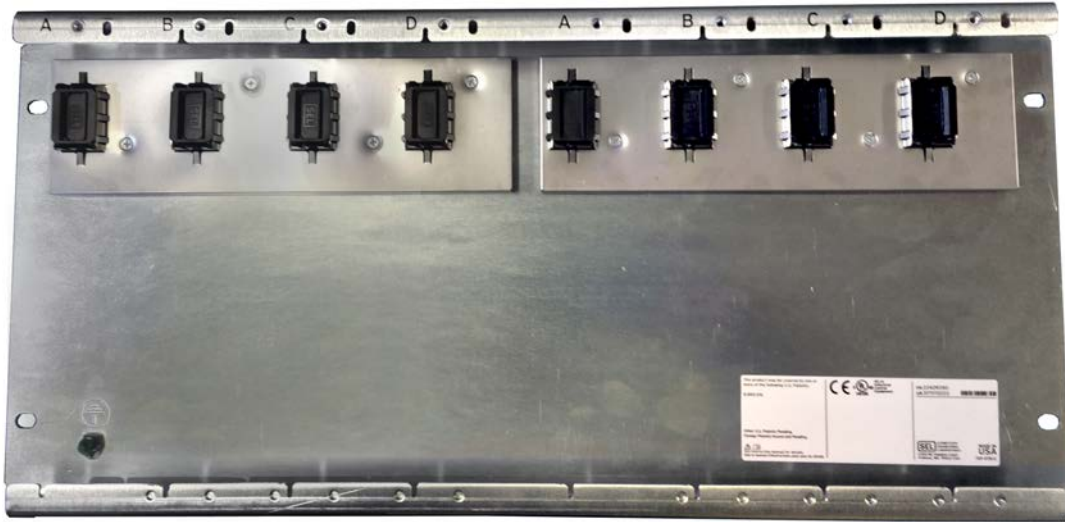


Figure 6 SEL-2242 Dual 4-Slot Rear View, Panel-Mount

Device Placement

You can mount the Axion in a sheltered indoor environment (a building or an enclosed cabinet) that does not exceed the temperature and humidity ratings for the modules.

NOTE: For applications compliant with IEC-60255-27, surface-mount units must be installed in IP4X enclosures.

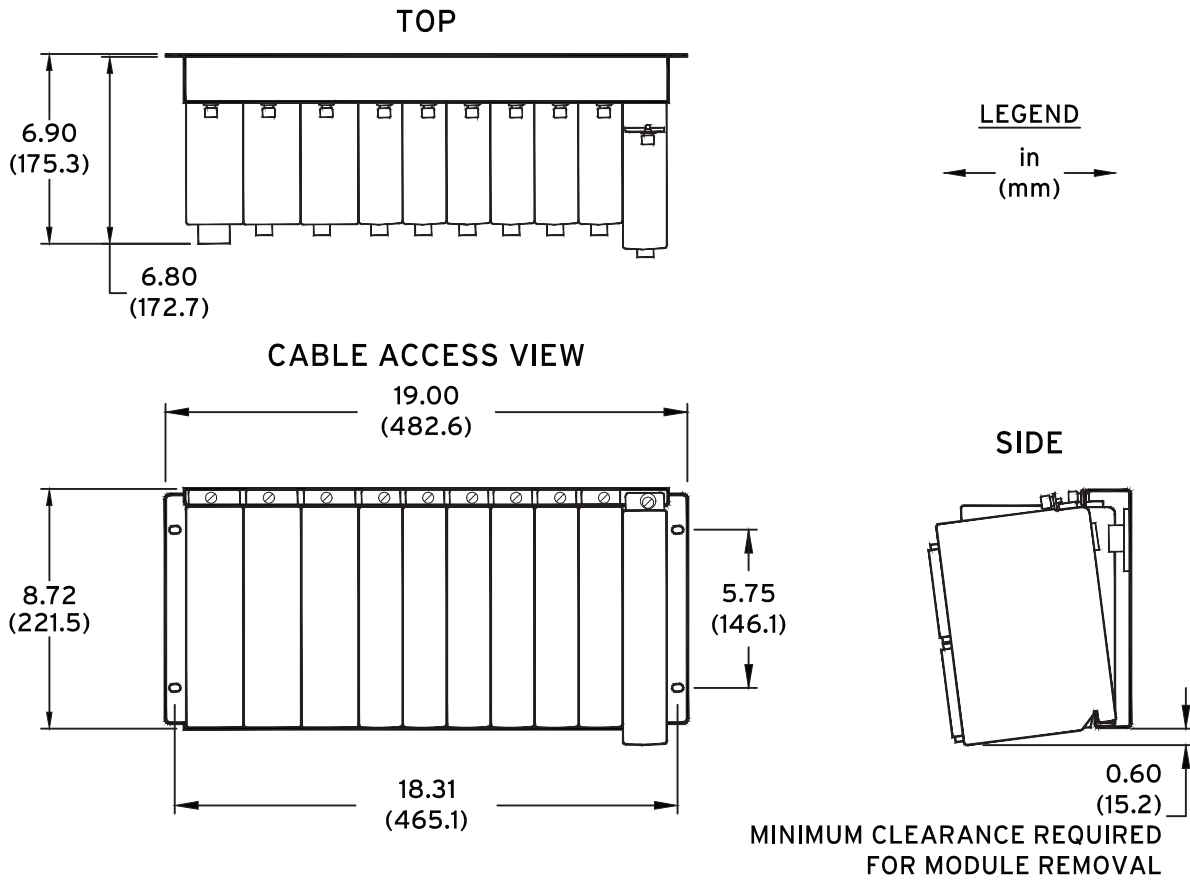


Figure 7 SEL-2240 10-Slot Rack and Surface-Mount Dimensions

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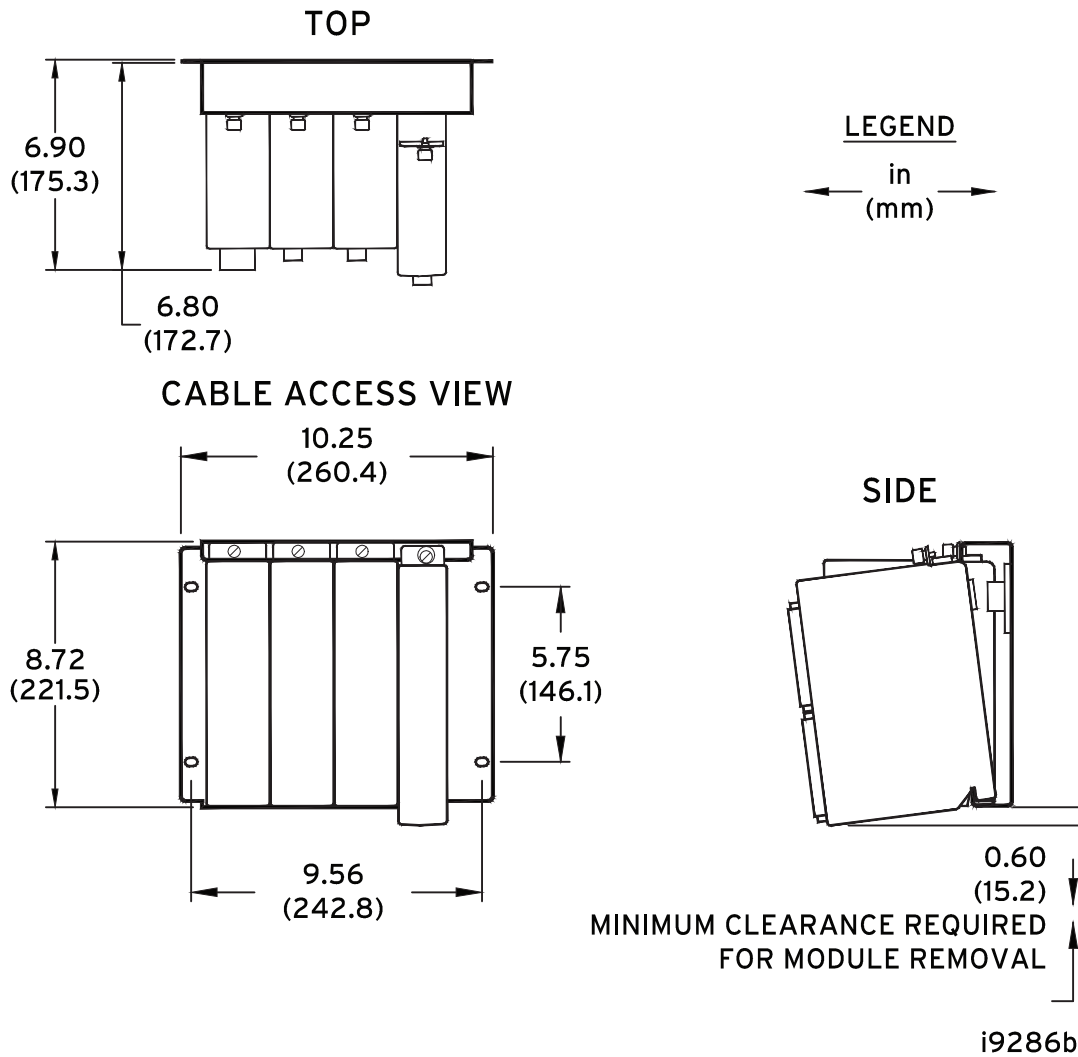


Figure 8 SEL-2240 4-Slot Rack- and Surface-Mount Dimensions

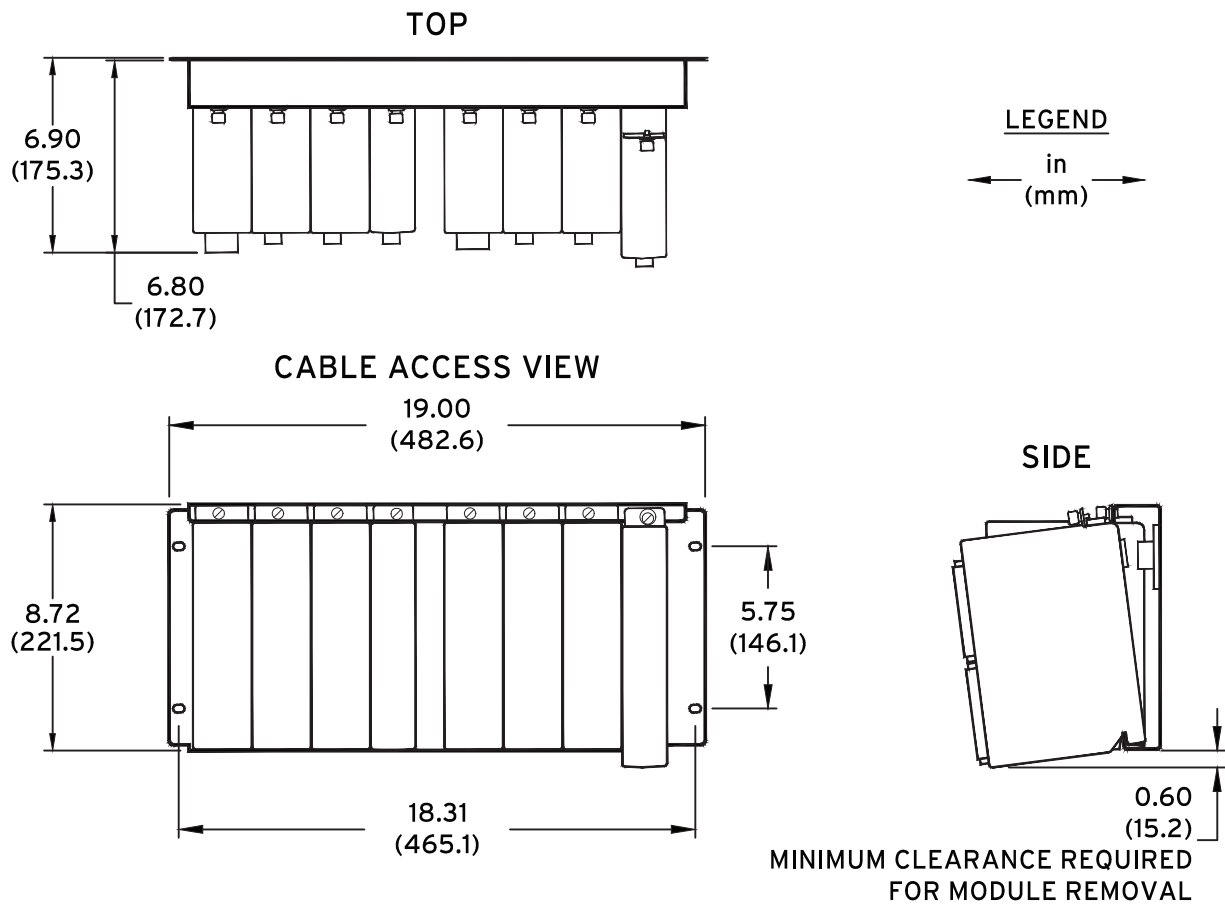


Figure 9 SEL-2240 Dual 4-Slot Rack- and Surface-Mount Dimensions

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Protective Connector Covers

The SEL-2242 is shipped with protective covers installed in each backplane connector. Prior to installing any Axion modules, grasp either side of the connector cover and pull it straight out of the connector. We suggest that you leave the covers inserted in any unused slots in order to provide dust and mechanical protection.

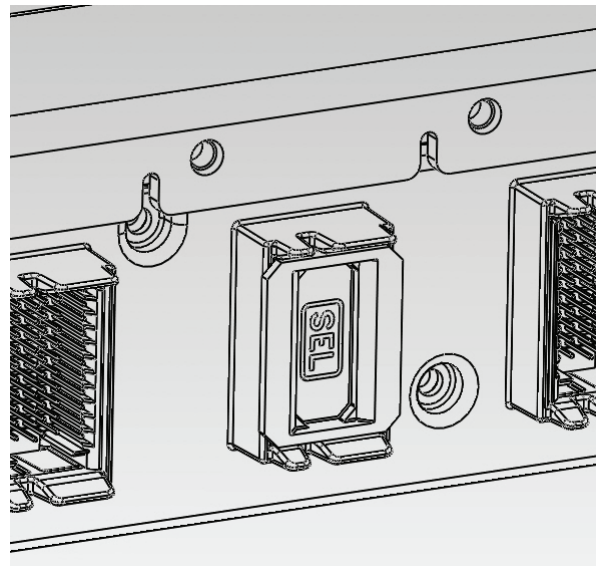


Figure 10 Protective Connector Cover

Specifications

Compliance

Designed and manufactured under an ISO 9001 certified quality management system

UL Listed to U.S. and Canadian safety standards (File NRAQ, NRAQ7 per UL508, and C22.2 No. 14)

CE Mark

General

Operating Temperature Range

-40° to +85°C (-40° to +185°F)

Note: Not applicable to UL applications.

Operating Environment

Pollution Degree:	2
Overtoltage Category:	II
Insulation Class:	1
Relative Humidity:	5–95%, noncondensing
Maximum Altitude:	2000 m

Type Tests

Environmental Tests

Enclosure Protection:	IEC 60529:2001 + CRGD:2003 IP3X excluding the terminal blocks
Vibration Resistance:	IEC 60255-21-1:1988 Vibration Endurance, Severity: Class 2 Vibration Response, Severity: Class 1
Shock Resistance:	IEC 60255-21-2:1988 Bump Test, Severity: Class 1 Shock Withstand, Severity: Class 1 Shock Response, Severity: Class 1
Seismic:	IEC 60255-21-3:1993 Quake Response, Severity: Class 1
Cold:	IEC 60068-2-1:2007 -40°C, 16 hours
Dry Heat:	IEC 60068-2-2:2007 +85°C, 16 hours
Damp Heat, Cyclic:	IEC 60068-2-30:2005 25°C to 55°C, 6 cycles, 95% relative humidity

Dielectric Strength and Impulse Tests

Impulse:	IEC 60255-5:2000 Severity Level: 0.5 Joule, 5 kV IEEE C37.90:2005 Severity Level: 0.5 Joule, 5 kV
Dielectric (HiPot):	IEC 60255-5:2000 IEEE C37.90:2005
Insulation:	IEC 60255-5:2000 Severity Level: 500 V for greater than 1 minute

RFI and Interference Tests

EMC Immunity

Electrostatic Discharge Immunity:	IEEE C37.90.3:2001 IEC 60255-22-2:2008 IEC 61000-4-2:2008 Severity Level 4 8 kV contact discharge 15 kV air discharge
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Radiated RF Immunity:	IEEE C37.90.2:2004 Severity Level: 35 V/m IEC 61000-4-3:2010 Severity Level: 10 V/m IEC 60255-22-3:2007 Severity Level: 10 V/m
Digital Radio Telephone RF Immunity:	ENV 50204:1995 Severity Level: 10 V/m at 900 MHz and 1.89 GHz
Conducted RF Immunity:	IEC 60255-22-6:2001 Severity Level: 10 Vrms IEC 61000-4-6:2008 Severity Level: 10 Vrms
Surge Immunity:	IEC 60255-22-5:2008 Severity Level: 1 kV Line to Line, 2 kV Line to Earth IEC 61000-4-5:2005 Severity Level: 1 kV Line to Line, 2 kV Line to Earth
Fast Transient, Burst Immunity:	IEC 60255-22-4:2008 Severity Level: Class A: 4 kV, 5 kHz; 2 kV, 5 kHz on communication ports IEC 61000-4-4:2011 Severity Level: 4 kV, 5 kHz
Power Supply Immunity:	IEC 61000-4-11:2004 IEC 61000-4-29:2000 IEC 60255-11:2008
Magnetic Field Immunity:	IEC 61000-4-8:2009 Severity Level: 1000 A/m for 3 seconds, 100 A/m for 1 minute IEC 61000-4-10:2001 Severity Level: 100 A/m
Surge Withstand Capability Immunity:	IEEE C37.90.1:2002, 2.5 kV oscillatory, 4 kV fast transient IEC 60255-22-1:2007 2.5 kV common-mode 1.0 kV differential-mode
Oscillatory Waves Immunity:	IEC 61000-4-12:2006 Ring Wave: 2 kV common, 1.0 kV differential Oscillatory: 2.5 kV common, 1.0 kV differential
Common Mode Disturbance Immunity:	IEC 61000-4-16:2002 Frequency: 0 Hz to 150 Hz Severity: Level 4, segment 4: 30 Vrms open-circuit, 15 kHz–150 kHz

Emissions

Radiated and Conducted Emissions:	IEC 60255-25:2000
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