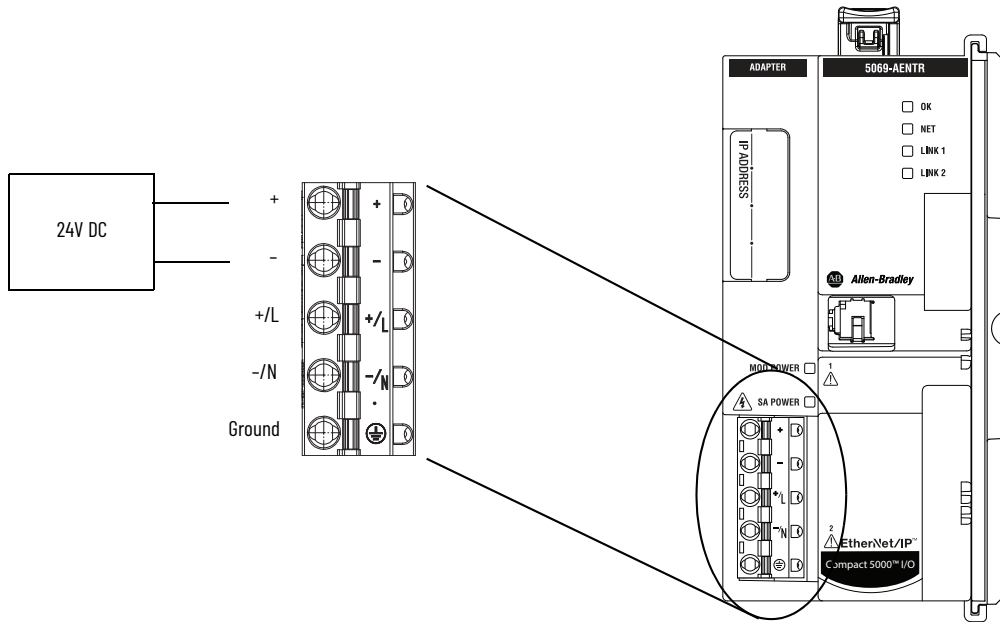


## 5069-AENTR and 5069-AENTRK EtherNet/IP Adapters

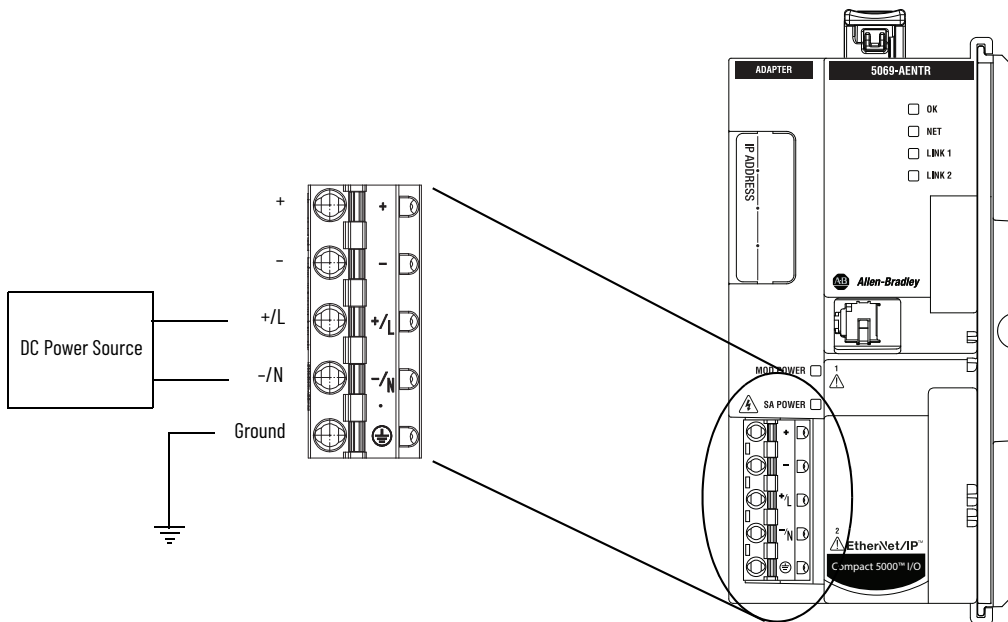
The following figure shows a wiring diagram for how to connect MOD power to the 5069-AENTR and 5069-AENTRK EtherNet/IP™ adapters.

### 5069-AENTR and 5069-AENTRK Wiring Diagram - MOD Power (DC)



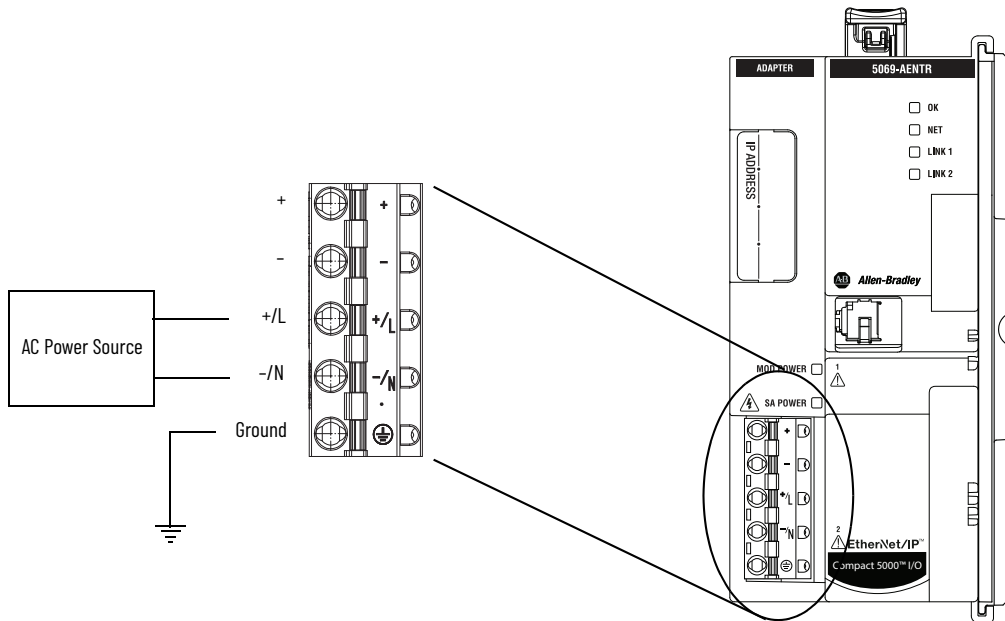
The following figure shows a wiring diagram for how to connect SA power (DC) to the 5069-AENTR and 5069-AENTRK EtherNet/IP adapters.

### 5069-AENTR and 5069-AENTRK Wiring Diagram - SA Power (DC)



The following figure shows a wiring diagram for how to connect SA power (AC) to the 5069-AENTR and 5069-AENTRK EtherNet/IP adapters.

### 5069-AENTR and 5069-AENTRK - Wiring Diagram - SA Power (AC)



### Technical Specifications - 5069-AENTR and 5069-AENTRK

Attribute	5069-AENTR, 5069-AENTRK
Enclosure type rating	None (open-style)
Voltage and current ratings	
MOD Power	220 mA @ 18...32V DC
MOD Power inrush	1750 mA for 70 ms
MOD Power Passthrough, max <sup>(1)</sup>	9.78 A @ 18...32V DC
SA Power	5 mA @ 0...32V DC 2 mA @ 0...240V AC, 47...63 Hz ATEX/IECEX, 125V AC Max
SA Power Passthrough, max <sup>(2)</sup>	9.95 A @ 0...32V DC 9.975 A @ 0...240V AC, 47...63 Hz ATEX/IECEX, 125V AC Max
Do not exceed 10 A current draw at the MOD or SA Power RTB.	
Recommended external overcurrent protection	MOD Power: 10...12A @ 22.5...43.2 A2t, Fast Acting SA Power: 20 A @ 250V AC
Power dissipation, max	8.5 W
Thermal dissipation, max	29 BTU/hr

## Technical Specifications - 5069-AENTR and 5069-AENTRK

Attribute	5069-AENTR, 5069-AENTRK
Isolation voltage	250V (continuous), Basic Insulation Type, SA, and MOD Power to Backplane 250V (continuous), Basic Insulation Type, SA to MOD Power 250V (continuous), Basic Insulation Type, Ethernet to Backplane Type tested at 1500V AC for 60 s 250V (continuous), Double Insulation Type, Ethernet to MOD Power 250V (continuous), Double Insulation Type, Ethernet to SA Power Type tested at 4242V DC for 60 s No isolation between Ethernet ports
Module keying	Electronic keying via programming software
Dimensions (HxWxD), approx	138 x 56 x 105 mm (5.43 x 2.20 x 4.15 in.)
RTB	We recommend that you order only the RTB type that your system requires. RTBs are available in separately ordered 5069 RTB kits. The following kits are available: <ul style="list-style-type: none"> <li>Kit catalog number 5069-RTB5-SCREW kit contains two 5069-RTB5-SCREW RTBs.</li> <li>Kit catalog number 5069-RTB5-SPRING kit contains two 5069-RTB5-SPRING RTBs.</li> </ul> <b>IMPORTANT:</b> You must order RTBs separately. RTBs do not ship with Compact 5000 I/O EtherNet/IP adapters. We recommend that you order only the RTB type that your system requires.
RTB torque (5069-RTB5-SCREW RTB only)	0.5...0.6 N•m (4.4...5.3 lb•in)
RTB keying	None
Wiring category <sup>(3), (4)</sup>	2 - on signal ports 1 - on power ports 2 - on Ethernet ports
Wire size	0.25...2.5 mm <sup>2</sup> (22...14 AWG) solid or stranded copper wire rated at 105 °C (221 °F), or greater, 1.2 mm (3/64 in.) insulation m, single wire connection only. Grounding: 2.5 mm <sup>2</sup> (14 AWG) solid or stranded copper wire rated at 105 °C (221 °F), or greater, 3.5mm (0.14in) max diameter including insulation, single wire connection only. Ethernet connections: Ethernet Cabling and Installation according to IEC 61918 and IEC 61784-5-2.
Insulation stripping length	
5069-RTB5-SPRING connections	10 mm (0.39 in.)
5069-RTB5-SCREW connections	10 mm (0.39 in.)
North American temp code	T4
ATEX temp code	T4
IECEx temp code	T4

(1) Maximum level of MOD Power current that the adapter can pass through to the next module in the system.

(2) Maximum level of SA Power current that the adapter can pass through to the next module in the system.

(3) Use this Conductor Category information for planning conductor routing. See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

(4) Use this Conductor Category information for planning conductor routing as described in the appropriate System Level Installation Manual.

**Environmental Specifications - 5069-AENTR, 5069-AENTRK**

<b>Attribute</b>	<b>5069-AENTR, 5069-AENTRK</b>
Temperature, operating IEC 60068-2-1 (Test Ab, Operating Cold), IEC 60068-2-2 (TestBb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Operating Thermal Shock)	0 °C < Ta < +60 °C (+32 °F < Ta < +140 °F)
Temperature, surrounding air, max	60 °C (140 °F)
Temperature, nonoperating IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40...+85 °C (-40...+185 °F)
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)	5...95% noncondensing
Vibration IEC 60068-2-6 (Test Fc, Operating)	5 g @ 10...500 Hz
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	50 g
Emissions	CISPR 11/22, Class A
ESD immunity IEC61000-4-2	6 kV contact discharges 8 kV air discharges
Radiated RF immunity IEC61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM at 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM at 1890 MHz 10V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz
EFT/B immunity IEC 61000-4-4	±3 kV @ 5 kHz on power ports ±3 kV @ 5 kHz on Ethernet ports
Surge transient immunity IEC 61000-4-5	±1 kV line-line (DM) and ±2 kV line-earth (CM) on power ports ±2 kV line-earth (CM) on Ethernet ports
Conducted RF immunity IEC 61000-4-6	10V rms with 1 kHz sine-wave 80% AM from 150 kHz...80 MHz on power and Ethernet ports

## Certifications - 5069-AENTR and 5069-AENTRK

Certifications <sup>(1)</sup>	5069-AENTR, 5069-AENTRK
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E322657. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E334470.
CE	European Union 2014/30/EU EMC Directive, compliant with: <ul style="list-style-type: none"> <li>• EN 61326-1; Meas./Control/Lab., Industrial Requirements</li> <li>• EN 61000-6-2; Industrial Immunity</li> <li>• EN 61000-6-4; Industrial Emissions</li> <li>• EN 61131-2; Programmable Controllers (Clause 8, Zone A &amp; B)</li> </ul> European Union 2014/35/EU LVD, compliant with: <ul style="list-style-type: none"> <li>• EN 61010-2-201; Control Equipment Safety Requirements</li> </ul> European Union 2011/65/EU RoHS, compliant with: <ul style="list-style-type: none"> <li>• EN 50581; Technical documentation</li> </ul>
RCM	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions
Ex	European Union 2014/34/EU ATEX Directive, compliant with: <ul style="list-style-type: none"> <li>• EN 60079-15; Potentially Explosive Atmospheres, Protection "n"</li> <li>• EN 60079-0; General Requirements</li> <li>• II 3 G Ex nA IIC T4 Gc</li> <li>• DEMKO 16 ATEX 1758X</li> </ul>
IECEX	IECEX System, compliant with: <ul style="list-style-type: none"> <li>• IEC 60079-15; Potentially Explosive Atmospheres, Protection "n"</li> <li>• IEC 60079-0; General Requirements</li> <li>• II 3 G Ex nA IIC T4 Gc</li> <li>• IECEX UL 16.0124X</li> </ul>
KC	Korean Registration of Broadcasting and Communications Equipment, compliant with: Article 58-2 of Radio Waves Act, Clause 3
EAC	Russian Customs Union TR CU 020/2011 EMC Technical Regulation Russian Customs Union TR CU 004/2011 LV Technical Regulation
EtherNet/IP	ODVA conformance tested to EtherNet/IP specifications

(1) When marked. See the Product Certification link at <http://www.ab.com> for Declarations of Conformity, Certificates, and other certification details.