

**DESCRIPTION**

The RC3900A is a chassis that accommodates MS3900 series isolated signal conditioners. All wiring connections are made to the terminal blocks on the chassis. Single power connection to the chassis permits power supply to all I/O modules mounted therein through its motherboard.

**ORDERING INFORMATION**

<b>Ordering Code</b>
For Input Modules: RC3900A-□□AI-□□-□_
[1] [2][3]
For Output Modules: RC3900A-□□AO-□□-□_
[1] [2][3]

**SPECIFICATIONS**

**GENERAL**

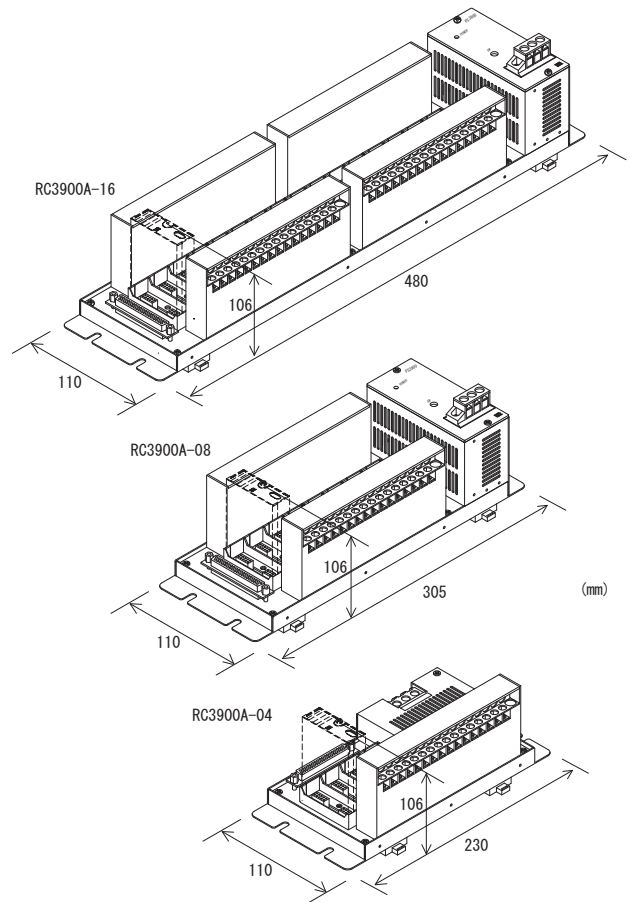
<b>Power Requirements</b> (Specify a code in the field [1].)	<ul style="list-style-type: none"> <li>■ 85–264V AC (47–63Hz) rated for 100V–240V ..... AU</li> <li>■ 24V DC ..... D1</li> </ul>
<b>Installation</b> (Specify a code in the field [2].)	<ul style="list-style-type: none"> <li>■ DIN rail mounting (Optional) ..... D</li> <li>■ Wall mounting ..... R</li> </ul>

**ADDITIONAL**

<b>Options [3]</b>	<ul style="list-style-type: none"> <li>■ CE compliant ..... /C</li> </ul> <p>Notes:</p> <ol style="list-style-type: none"> <li>1. This only applies to orders having a code of “-08AI” or “-16AI”.</li> <li>2. CE-compliant modules must be used to meet the CE marking requirements.</li> </ol> <ul style="list-style-type: none"> <li>■ Polyurethane conformal coating ..... /H</li> </ul>
--------------------	--

**PHYSICAL**

<b>Wiring (Connector)</b> (See the tables on page 2.)	<p>AI: Input, Output 1, and Output 2 terminal blocks: M3.5 screw Output 1 connector: 37-pin D-subminiature (Hirose SDCB-37S)</p> <p>AO: Input and Output terminal blocks: M3.5 screw Input connector: 37-pin D-subminiature (Hirose SDCB-37P)</p>
--	---



<b>External Dimensions (with modules mounted)</b>	<p>04AI/04AO: Wall mount: W230 × H110 × D99 mm DIN rail mount: W230 × H110 × D106 mm</p> <p>08AI (exc. 08AI-AU-□/C)/08AO: Wall mount: W305 × H110 × D99 mm DIN rail mount: W305 × H110 × D106 mm</p> <p>08AI-AU-□/C: Wall mount: W305 × H110 × D123 mm DIN rail mount: W305 × H110 × D130 mm</p> <p>16AI (exc. 16AI-AU-□/C)/16AO: Wall mount: W480 × H110 × D99 mm DIN rail mount: W480 × H110 × D106 mm</p> <p>16AI-AU-□/C: Wall mount: W480 × H110 × D123 mm DIN rail mount: W480 × H110 × D130 mm</p>
---	--

**WIRING CONNECTIONS**

**Chassis for Input Modules**

Input Side	Output Side	
M3.5 screw terminals	Output 1	Output 2
	M3.5 screw terminals or 37-pin D-subminiature connector	M3.5 screw terminals

**Chassis for Output Modules**

Input Side	Output Side
M3.5 screw terminals or 37-pin D-subminiature connector	M3.5 screw terminals

**PERFORMANCE**

Number of MS3900 Modules Accommodated	Up to 16 modules Note: The RC3900A-□□AO only accommodates two models, MS3954 and MS3954HI (High Level Signal Conditioners).
Power Indicator LED	Green LED lights when the power is ON. (Only for 04AI/AO)
Insulation Resistance	100MΩ min. (@ 500V DC) between input, [output 1, output 2], power, and FG.
Dielectric Strength	<p>AI:</p> <p>Input / (Output 1, Output 2, Power, FG): 1500V AC for 1 minute (Cutoff current: 0.5mA)</p> <p>Output 1 / Output 2 / (Power, FG): 500V AC for 1 minute (Cutoff current: 0.5mA)</p> <p>Power / FG: 500V AC for 1 minute (Cutoff current: 5mA)</p> <p>Output channel to output channel: 200V AC for 1 minute (Cutoff current: 0.5mA)</p> <p>AO:</p> <p>Output / (Input, Power, FG): 1500V AC for 1 minute (Cutoff current: 0.5mA)</p> <p>Input / (Power, FG): 500V AC for 1 minute (Cutoff current: 0.5mA)</p> <p>Power / FG: 500V AC for 1 minute (Cutoff current: 5mA)</p> <p>Input channel to input channel: 200V AC for 1 minute (Cutoff current: 0.5mA)</p>
Operating Environment	Ambient temperature: 0 to 55°C Humidity: 5 to 90% RH (non-condensing)
Current Consumption	<p>04AI:</p> <p>AC powered: ≤ 25VA (rated for 100VAC; fully loaded) ≤ 35VA (rated for 240VAC; fully loaded)</p> <p>DC powered: ≤ 350mA (rated for 24VDC; fully loaded)</p>

Current Consumption (Continued)	<p>04AO:</p> <p>AC powered: ≤ 15VA (rated for 100VAC; fully loaded) ≤ 25VA (rated for 240VAC; fully loaded)</p> <p>DC powered: ≤ 200mA (rated for 24VDC; fully loaded)</p>																								
	<p>08AI:</p> <p>AC powered: ≤ 45VA (rated for 100VAC; fully loaded) ≤ 60VA (rated for 240VAC; fully loaded)</p> <p>DC powered: ≤ 600mA (rated for 24VDC; fully loaded)</p>																								
	<p>08AO:</p> <p>AC powered: ≤ 25VA (rated for 100VAC; fully loaded) ≤ 35VA (rated for 240VAC; fully loaded)</p> <p>DC powered: ≤ 400mA (rated for 24VDC; fully loaded)</p>																								
	<p>16AI:</p> <p>AC powered: ≤ 75VA (rated for 100VAC; fully loaded) ≤ 95VA (rated for 240VAC; fully loaded)</p> <p>DC powered: ≤ 1.2A (rated for 24VDC; fully loaded)</p>																								
	<p>16AO:</p> <p>AC powered: ≤ 45VA (rated for 100VAC; fully loaded) ≤ 60VA (rated for 240VAC; fully loaded)</p> <p>DC powered: ≤ 750mA (rated for 24VDC; fully loaded)</p>																								
	Inrush Current	<p>04AI/AO:</p> <p>AC powered: ≤ 30A (240VAC @ 25°C) DC powered: ≤ 5A (24VDC @ 25°C)</p> <p>08AI/AO &amp; 16AI/AO:</p> <p>AC powered: ≤ 35A (240VAC @ 25°C) DC powered: ≤ 30A (24VDC @ 25°C)</p>																							
	Storage Temperature	-10 to 60°C																							
	<b>MATERIAL</b>																								
	Case	SECC-JN																							
	PC Board	Glass fabric, epoxy resin																							
<b>WEIGHT</b>																									
<table border="1"> <tbody> <tr><td>RC3900A-16AI/AO-AU-D</td><td>2,100g max.</td></tr> <tr><td>RC3900A-16AI/AO-AU-R</td><td>2,100g max.</td></tr> <tr><td>RC3900A-16AI/AO-D1-D</td><td>2,000g max.</td></tr> <tr><td>RC3900A-16AI/AO-D1-R</td><td>2,000g max.</td></tr> <tr><td>RC3900A-08AI/AO-AU-D</td><td>1,400g max.</td></tr> <tr><td>RC3900A-08AI/AO-AU-R</td><td>1,400g max.</td></tr> <tr><td>RC3900A-08AI/AO-D1-D</td><td>1,300g max.</td></tr> <tr><td>RC3900A-08AI/AO-D1-R</td><td>1,300g max.</td></tr> <tr><td>RC3900A-04AI/AO-AU-D</td><td>900g max.</td></tr> <tr><td>RC3900A-04AI/AO-AU-R</td><td>850g max.</td></tr> <tr><td>RC3900A-04AI/AO-D1-D</td><td>800g max.</td></tr> <tr><td>RC3900A-04AI/AO-D1-R</td><td>760g max.</td></tr> </tbody> </table>		RC3900A-16AI/AO-AU-D	2,100g max.	RC3900A-16AI/AO-AU-R	2,100g max.	RC3900A-16AI/AO-D1-D	2,000g max.	RC3900A-16AI/AO-D1-R	2,000g max.	RC3900A-08AI/AO-AU-D	1,400g max.	RC3900A-08AI/AO-AU-R	1,400g max.	RC3900A-08AI/AO-D1-D	1,300g max.	RC3900A-08AI/AO-D1-R	1,300g max.	RC3900A-04AI/AO-AU-D	900g max.	RC3900A-04AI/AO-AU-R	850g max.	RC3900A-04AI/AO-D1-D	800g max.	RC3900A-04AI/AO-D1-R	760g max.
RC3900A-16AI/AO-AU-D	2,100g max.																								
RC3900A-16AI/AO-AU-R	2,100g max.																								
RC3900A-16AI/AO-D1-D	2,000g max.																								
RC3900A-16AI/AO-D1-R	2,000g max.																								
RC3900A-08AI/AO-AU-D	1,400g max.																								
RC3900A-08AI/AO-AU-R	1,400g max.																								
RC3900A-08AI/AO-D1-D	1,300g max.																								
RC3900A-08AI/AO-D1-R	1,300g max.																								
RC3900A-04AI/AO-AU-D	900g max.																								
RC3900A-04AI/AO-AU-R	850g max.																								
RC3900A-04AI/AO-D1-D	800g max.																								
RC3900A-04AI/AO-D1-R	760g max.																								

STANDARDS CONFORMITY

EC Directives Conformity	EMC Directive (2014/30/EU) EN61326-1:2013 Low Voltage Directive (2014/35/EU) IEC61010-1 EN61010-1:2010/A1:2019 Installation Category II Pollution Degree 2 Maximum operating voltage 300V
-----------------------------	--