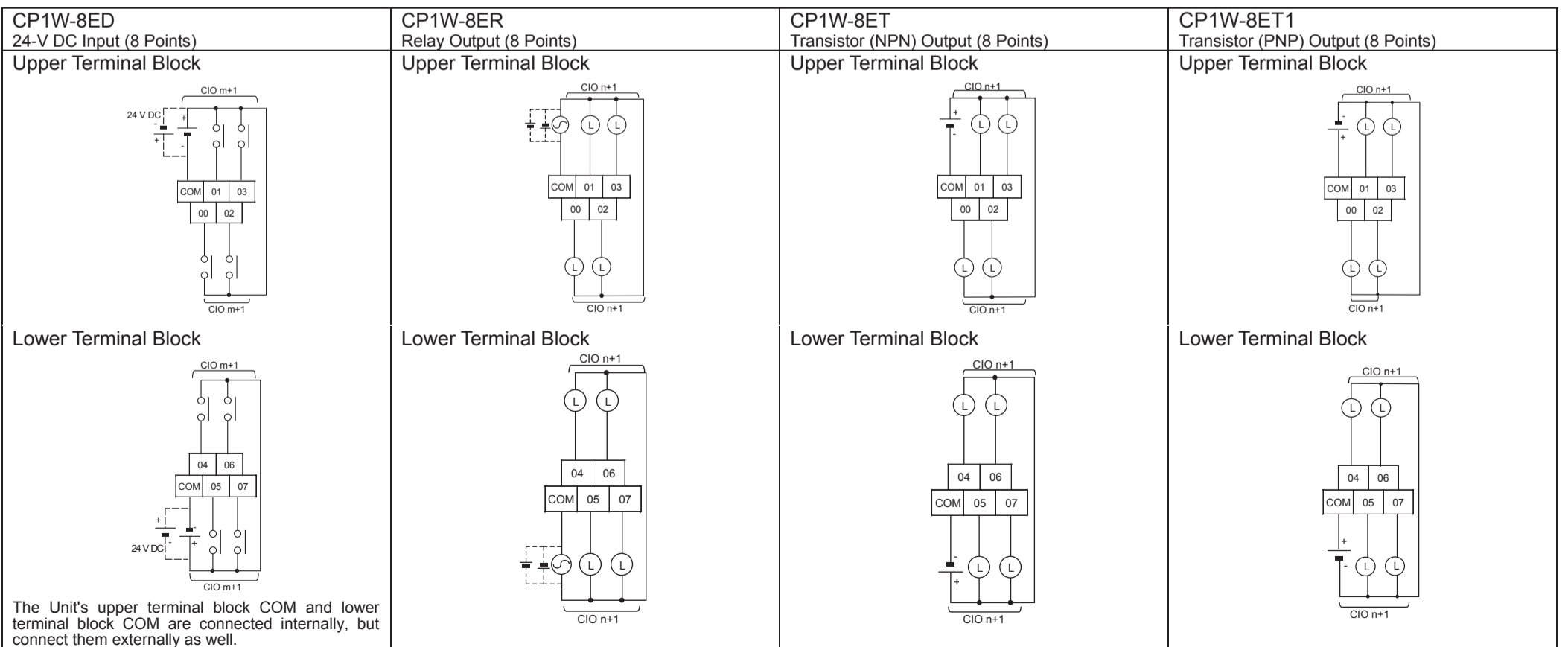
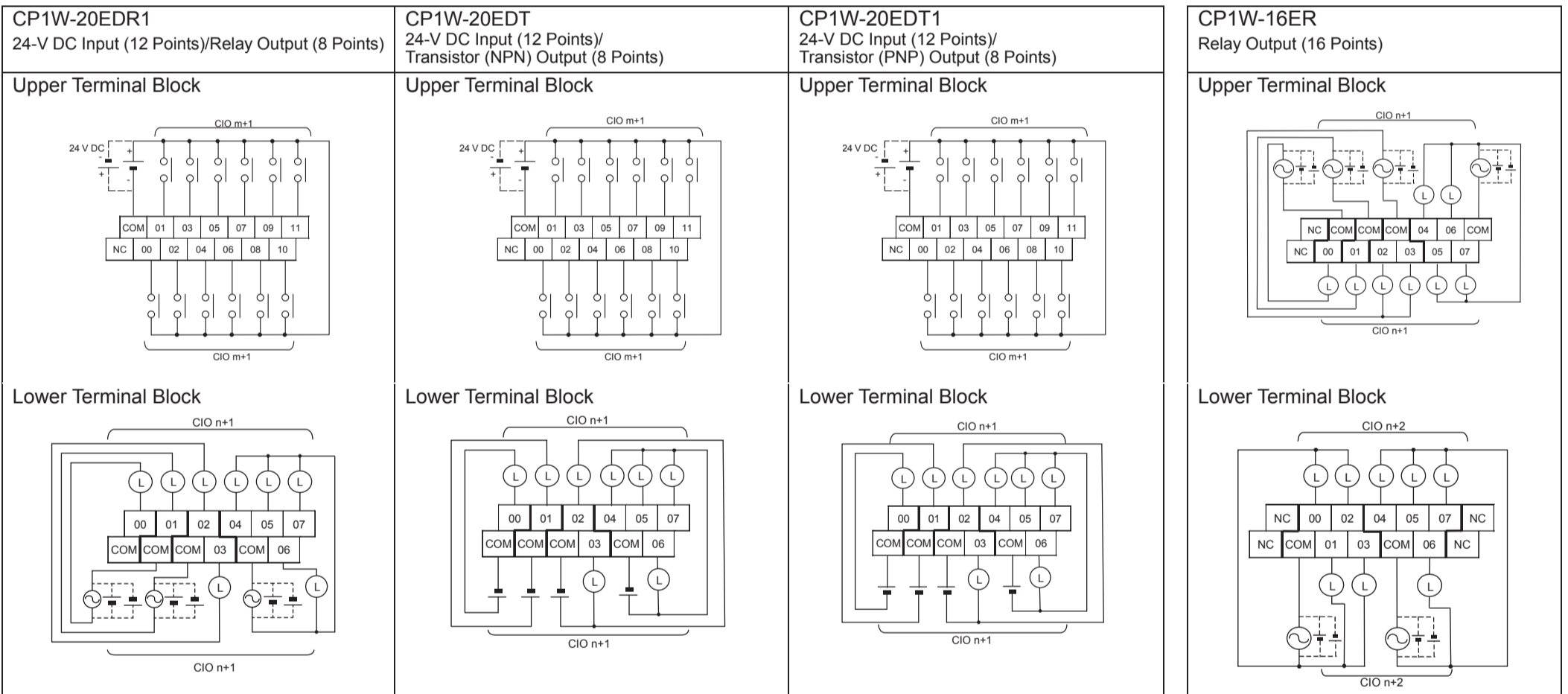
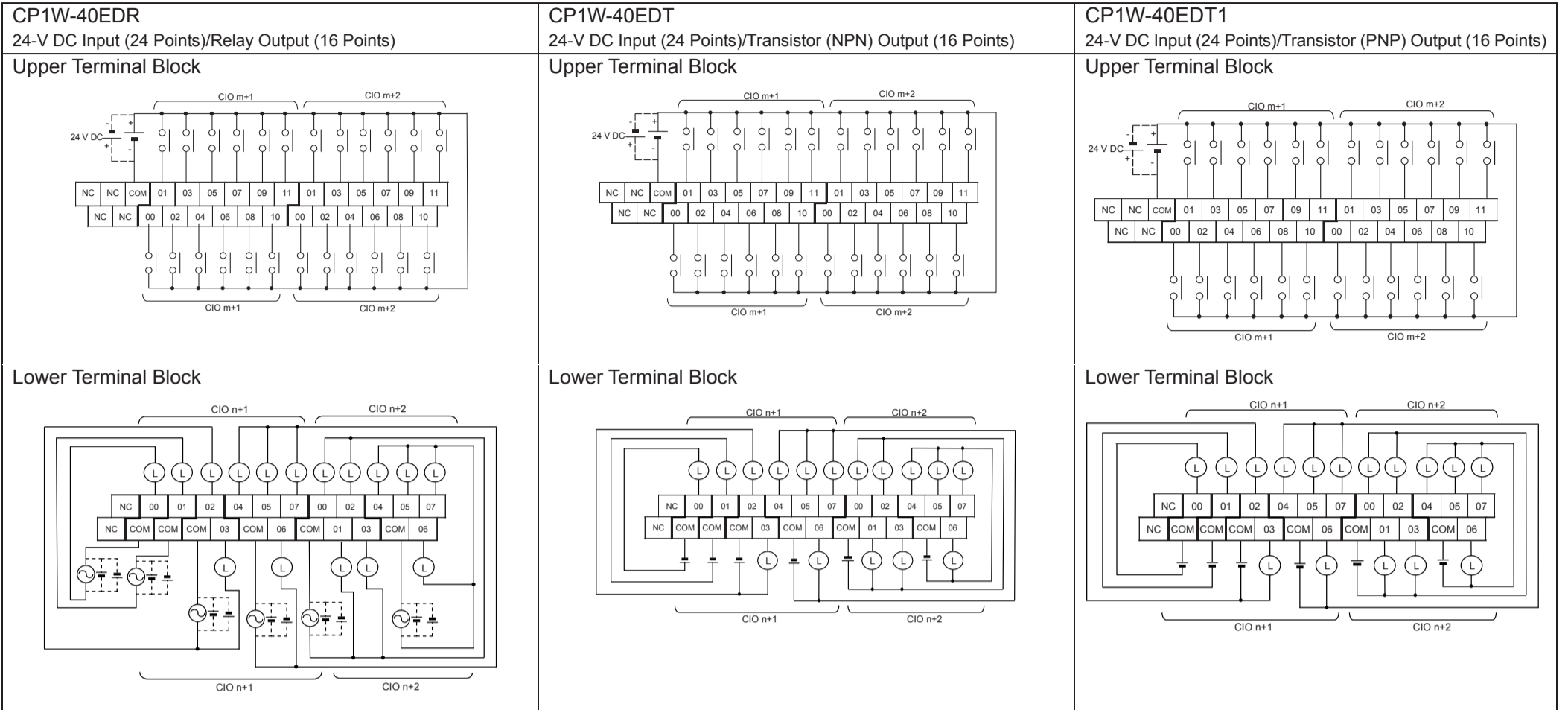


# I/O Wiring Diagrams



"m" and "n": "m" is the last input word and "n" is the last output word allocated to the CPU Unit, Expansion I/O Unit, or Expansion Unit on the left of the Unit being described.

# I/O Wiring Diagram

<p><b>CP1W-AD041</b> Analog Input Unit (4 Points)</p> <p><b>Input Terminal Arrangement</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>I IN1</td><td>V IN2</td><td>COM2</td><td>I IN3</td><td>V IN4</td><td>COM4</td><td>AG</td></tr> <tr><td>V IN1</td><td>COM1</td><td>I IN2</td><td>V IN3</td><td>COM3</td><td>I IN4</td><td>NC</td></tr> </table> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>V IN1</td><td>Voltage input 1</td></tr> <tr><td>I IN1</td><td>Current input 1</td></tr> <tr><td>COM1</td><td>Input common 1</td></tr> <tr><td>V IN2</td><td>Voltage input 2</td></tr> <tr><td>I IN2</td><td>Current input 2</td></tr> <tr><td>COM2</td><td>Input common 2</td></tr> <tr><td>V IN3</td><td>Voltage input 3</td></tr> <tr><td>I IN3</td><td>Current input 3</td></tr> <tr><td>COM3</td><td>Input common 3</td></tr> <tr><td>V IN4</td><td>Voltage input 4</td></tr> <tr><td>I IN4</td><td>Current input 4</td></tr> <tr><td>COM4</td><td>Input common 4</td></tr> </table> <p><b>Note 1</b> Wiring for other inputs is the same as that for input 1.</p> <p><b>Note 2</b> When using current inputs, voltage input terminals must be short-circuited with current input terminals.</p>	I IN1	V IN2	COM2	I IN3	V IN4	COM4	AG	V IN1	COM1	I IN2	V IN3	COM3	I IN4	NC	V IN1	Voltage input 1	I IN1	Current input 1	COM1	Input common 1	V IN2	Voltage input 2	I IN2	Current input 2	COM2	Input common 2	V IN3	Voltage input 3	I IN3	Current input 3	COM3	Input common 3	V IN4	Voltage input 4	I IN4	Current input 4	COM4	Input common 4	<p><b>CP1W-DA041</b> Analog Output Unit (4 Points)</p> <p><b>Output Terminal Arrangement</b></p> <table border="1" style="width:100%; 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border-collapse: collapse;"> <tr><td>I OUT</td><td>V IN1</td><td>COM1</td><td>I IN2</td></tr> <tr><td>V OUT</td><td>COM</td><td>I IN1</td><td>V IN2</td><td>COM2</td></tr> </table> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>V OUT</td><td>Voltage output</td></tr> <tr><td>I OUT</td><td>Current output</td></tr> <tr><td>COM</td><td>Output common</td></tr> <tr><td>V IN1</td><td>Voltage input 1</td></tr> <tr><td>I IN1</td><td>Current input 1</td></tr> <tr><td>COM1</td><td>Input common 1</td></tr> <tr><td>V IN2</td><td>Voltage input 2</td></tr> <tr><td>I IN2</td><td>Current input 2</td></tr> <tr><td>COM2</td><td>Input common 2</td></tr> </table> <p><b>Note 1</b> Wiring for input 2 is the same as that for input 1.</p> <p><b>Note 2</b> When using current inputs, voltage input terminals must be short-circuited with current input terminals.</p>	I OUT	V IN1	COM1	I IN2	V OUT	COM	I IN1	V IN2	COM2	V OUT	Voltage output	I OUT	Current output	COM	Output common	V IN1	Voltage input 1	I IN1	Current input 1	COM1	Input common 1	V IN2	Voltage input 2	I IN2	Current input 2	COM2	Input common 2
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<p><b>CP1W-TS001</b> Temperature Sensor Unit Thermocouples (2 Points)</p> <p><b>Input Terminal Arrangement</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Loop 0 +</td><td>Loop 1 +</td><td>Cold junction compensator</td><td>NC</td><td>NC</td><td>NC</td></tr> <tr><td>Loop 0 -</td><td>Loop 1 -</td><td>NC</td><td>NC</td><td>NC</td><td>NC</td></tr> </table> <p><b>Thermocouple K or J</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Loop 0 +</td><td>Temperature input 0</td></tr> <tr><td>Loop 0 -</td><td>Temperature input 0</td></tr> <tr><td>Loop 1 +</td><td>Temperature input 1</td></tr> <tr><td>Loop 1 -</td><td>Temperature input 1</td></tr> <tr><td>NC</td><td></td></tr> <tr><td>Cold junction compensator</td><td></td></tr> <tr><td>NC</td><td></td></tr> <tr><td>Cold junction compensator</td><td></td></tr> <tr><td>NC</td><td></td></tr> <tr><td>NC</td><td></td></tr> <tr><td>NC</td><td></td></tr> <tr><td>NC</td><td></td></tr> </table>	Loop 0 +	Loop 1 +	Cold junction compensator	NC	NC	NC	Loop 0 -	Loop 1 -	NC	NC	NC	NC	Loop 0 +	Temperature input 0	Loop 0 -	Temperature input 0	Loop 1 +	Temperature input 1	Loop 1 -	Temperature input 1	NC		Cold junction compensator		NC		Cold junction compensator		NC		NC		NC		NC		<p><b>CP1W-TS002</b> Temperature Sensor Unit Thermocouples (4 Points)</p> <p><b>Input Terminal Arrangement</b></p> <table border="1" style="width:100%; 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**CP1W-SRT21**  
CompoBus/S I/O Link Unit

Terminal Arrangement

BD H	NC(BS+)	
BD L	NC(BS-)	NC

Connect the CompoBus/S Communications Cable.

### Precautions for Compliance with UL Standards and CSA Standards

**Notice to Users of the SYSMAC CP1 I/O Units in the USA and Canada**

Please observe the following installation information instead of the general information in the instruction manuals in order to use the product under the certified conditions of UL and CSA when the products are installed in the USA and Canada. These conditions are according to the National Electrical Code in the USA and the Canadian Electrical Code and may vary from information given in the product manuals or safety precautions.

- I/O Wiring
- Do not use crimp terminal for I/O wiring. Tighten the screw directly on the solid wire.
- Do not insert more than one wire in one terminal.
- Tightening torque: 4.4 Lb In. (0.5 N·m)
- Wire range: AWG 26 to 18 (Solid wire only)
- Surrounding Air Temperature
- Rated temperature: 55°C