**Installation Instructions**

**Original Instructions**

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**POINT I/O Wiring Base Assembly**

**Catalog Numbers 1734-TB, 1734-TBS**

**Environment and Enclosure**

**ATTENTION:** This equipment is intended for use in a Pollution Degree 2 industrial environment, overvoltage Category II applications (as defined in EN/IEC 60664-1), at altitudes up to 2000 m (6562 ft) without derating. This equipment is not intended for use in residential environments and may not provide adequate protection to radio communication services in such environments. This equipment is supplied as open-type equipment for indoor use. It must be mounted within an enclosure that is suitably designed for those specific environmental conditions that will be present and appropriately designed to prevent personal injury resulting from accessibility to live parts. The enclosure must have suitable flame-retardant properties to prevent or minimize the spread of flame, complying with a flame spread rating of UL or be approved for the application if nonmetallic. The interior of the enclosure must be accessible only by the use of a tool. Subsequent sections of this publication may contain more information regarding specific enclosure type ratings that are required to comply with certain product safety certifications.

In addition to this publication, see the following:
- Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1, for more installation requirements.
- NEMA Standard 250 and EN/IEC 60529, as applicable, for explanations of the degrees of protection provided by different types of enclosure.

**Prevent Electrostatic Discharge**

**ATTENTION:** This equipment is sensitive to electrostatic discharge, which can cause internal damage and affect normal operation. Follow these guidelines when you handle this equipment:
- Touch a grounded object to discharge potential static.
- Wear an approved grounding wriststrap.
- Do not touch connector pins or printed circuit boards.
- Do not touch circuit components inside the equipment.
- Use a static-safe worktable if available.
- Use the equipment in appropriate static-safe packaging when not in use.

**European Hazardous Location Approval**

The following applies to products marked **(P E)**:

- Are intended for use in potentially explosive atmospheres as defined by European Union Directive 2014/34/EU and has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of Category I equipment intended for use in Zone 2 potentially explosive atmospheres, given in Annex E to this Directive.
- Compliance with the Essential Health and Safety Requirements has been assured by application with EN 60079-15 and EN 60079-10.
- Are Equipment Group II, Equipment Category 3, and comply with the Essential Health and Safety Requirements relating to the design and construction of such equipment given in Annex II to Directive 2014/34/EU. See the EC Declaration of Conformity at rok.auto/certifications for details.
- The type of protection is “Ex e IIC T4 Ga” according to EN 60079-15.
- Are intended for use in areas in which explosive atmospheres caused by gases, vapors, mists, or air are unlikely to occur, or are likely to occur only infrequently and for short periods. Such locations correspond to Zone 2 classification according to ATEx directive 2010/40/EG.

**WARNING: Special Conditions for Safe Use:**

- This equipment is not resistant to sunlight or other sources of UV radiation.
- This equipment shall be mounted on an EEx(e)IIC/Ex Zone 2 certified enclosure with a minimum ingress protection rating of at least IP65 (in accordance with EN/IEC 60079-10) and used in an environment of not more than Pollution Degree 2 (as defined in Pollution Degree 2 Section 12 of EN/IEC 60664-1) when applied in Zone 2 environments. The enclosure must be accessible only by the use of a tool.
- This equipment shall be used within its specified ratings defined by Rockwell Automation.
- Provision shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 140% of the peak rated voltage when applied in Zone 2 environments.
- The instructions in the user manual shall be observed.
- This equipment must be used only with ATEX certified Rockwell Automation backplanes.
- Earthling is accomplished through mounting of modules on rail.
- Devices shall be used in an environment of not more than Pollution Degree 2.

**ATTENTION:** If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

**ATTENTION:** Read this document and the documents listed in the Additional Resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

**ATTENTION:** Installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice. In case of malfunction or damage, no attempts at repair should be made. The module should be returned to the manufacturer for repair. Do not dismantle the module.

**ATTENTION:** This equipment is certified for use only within the surrounding air temperature range of -20...+70 °C (-4...+131 °F). The equipment must not be used outside of this range. Use only a soft dry anti-static cloth to wipe down equipment. Do not use any cleaning agents.

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**Prepare the Wires**

**Wiring Without Wire End Ferrule**

<table>
<thead>
<tr>
<th>Wire Size Range</th>
<th>Number of Wires</th>
<th>Strip Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.25...2.5 mm²</td>
<td>1</td>
<td>16±1 mm (0.63±0.03 in)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>16±1 mm (0.63±0.03 in)</td>
</tr>
</tbody>
</table>

**Wiring With Wire End Ferrule**

<table>
<thead>
<tr>
<th>Wire Size Range</th>
<th>Number of Wires</th>
<th>Strip Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.75 mm²</td>
<td>1</td>
<td>16±1 mm (0.63±0.03 in)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>16±1 mm (0.63±0.03 in)</td>
</tr>
</tbody>
</table>

**Recommended End Ferrule**

- Ferrule with insulating collar, in accordance with DIN 46228-4 and UL 486F. Sleeve length: 12 mm (0.47 in)

**Install the Mounting Base**

To install the mounting base on the DIN rail (Allen-Bradley part number 199-DR1; 46277-3; EN50022), proceed as follows.

1. Position the mounting base vertically above the installed units (adapter, power supply or existing module).
2. Slide the mounting base down allowing the interlocking side pieces to engage the adjacent module or adapter.
3. Press firmly to seat the mounting base on the DIN rail.

**Install the Module**

The module can be installed before or after base installation. Make sure that the mounting base is correctly keyed before installing the module into the mounting base. In addition, make sure that the mounting base locking screw is positioned horizontally referenced to the base.
Install the Removable Terminal Block
A Removable Terminal Block (RTB) is supplied with your wiring base assembly. To remove, pull up on the RTB handle. This allows the mounting base to be removed and replaced as necessary without removing any wiring. To reinstall the removable terminal block, proceed as follows.

1. Insert the end opposite the handle into the base unit.
2. Rotate the terminal block into the wiring base until it locks itself in place.
3. If an I/O module is installed, snap the RTB handle into place on the module.
4. Repeat steps 1…3 for the module to the right.
5. Use a small bladed screwdriver to rotate the orange base locking screw to a vertical position.
6. Lift the mounting base straight up to remove.
7. If an I/O module is installed, snap the RTB handle into place on the module.
8. Rotate the terminal block into the wiring base until it locks itself in place.
9. Insert the end opposite the handle into the base unit.
10. Rotate the terminal block into the wiring base until it locks itself in place.

WARNING: For 1734-R1B and 1734-R1B33, to latch and unlatch the wire, insert a bladed screwdriver (cabinet number 1M4D-WS2 – 5 mm diameter blade) into the opening at approximately 75° (blade surface is parallel with top surface of the opening) and push up gently.

Remove a Mounting Base
To remove a mounting base, you must remove any installed module, and the module installed in the base to the right. Remove the removable terminal block, if wired.

ATTENTION: Do not remove or replace a Terminal Base unit while power is applied. Interruption of the backplane can result in unintentional operation or machine motion.

WARNING: Do not disconnect or replace component unless power is switched off or area is known to be nonhazardous. Do not pull on the installed wiring to remove a terminal base. A shock hazard exists if power is applied to the terminal base.

1. Unlatch the RTB handle on the I/O module.
2. Pull on the RTB handle to remove the removable terminal block.
3. Press the module lock on the top of the module and pull on the I/O module to remove from the base.
4. Repeat steps 1…3 for the module to the right.
5. Use a small bladed screwdriver to rotate the orange base locking screw to a vertical position.
6. This releases the locking mechanism.
7. Lift the mounting base straight up to remove.

Waste Electrical and Electronic Equipment (WEEE)

At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental compliance information on its website at rok.auto/support.

Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at Rockwell Automation maintains current product environmental compliance information on its website at rok.auto/support.

For technical support, visit rok.auto/support.

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