

General

Attribute	Value
Signal terminal current, max	1734-RTBS and 1734-RTB3S: 2A
Isolation voltage	250V, Basic Insulation Type, field-side to system Type tested at 1000V AC for 60 s

⁽¹⁾ Use this conductor category information for planning conductor routing as described in Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1.

Environmental

Attribute	Value
Temperature, operating	IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock): -20...55 °C (-4...131 °F)
Temperature, nonoperating	IEC 60068-2-1 (Test Ab, Unpackaged Non-operating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Non-operating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Non-operating Thermal Shock): -40...85 °C (-40...185 °F)
Relative humidity	IEC 60068-2-30 (Test Db, Unpackaged Damp Heat): 5...95% non-condensing
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

Certifications (1734-TB3 and 1734-TB3S only)

Certification (when product is marked) ⁽¹⁾	Value
c-UR-us	UL Recognized Component Industrial Control Equipment, certified for US and Canada. See UL File E195367.
CE	European Union 2004/108/EC EMC Directive, compliant with: EN 61326-1; Meas./Control/Lab., Industrial Requirements EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions EN 61131-2; Programmable Controllers (Clause 8, Zone A & B) European Union 2006/95/EC LVD, compliant with: EN 61131-2; Programmable Controllers (Clause 11)
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR11; Industrial Emissions

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

Additional Resources

You can view or download publications at <http://www.literature.rockwellautomation.com>. To order paper copies of technical documentation, contact your local Rockwell Automation distributor or sales representative.

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Bolevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 1734-IN013B-EN-P - June 2009

PN-49551

Copyright © 2009 Rockwell Automation, Inc. All rights reserved. Printed in Singapore.

POINT I/O Wiring Base Assembly

Catalog Numbers 1734-TBS, 1734-TB3S, 1734-RTBS, 1734-RTB3S

Environment and Enclosure

ATTENTION



This equipment is intended for use in a Pollution Degree 2 industrial environment, in overvoltage Category II applications (as defined in IEC 60664-1), at altitudes up to 2000 m (6562 ft) without derating.

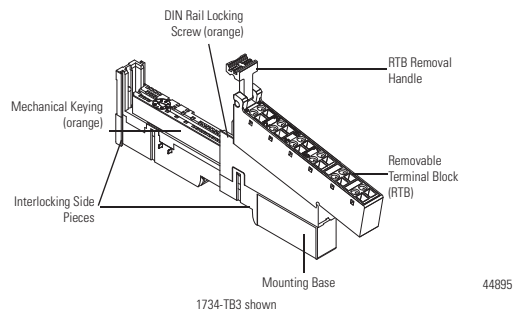
This equipment is considered Group 1, Class A industrial equipment according to IEC/CISPR 11. Without appropriate precautions, there may be difficulties with electromagnetic compatibility in residential and other environments due to conducted and radiated disturbances.

This equipment is supplied as open-type equipment. 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 5VA, V2, V1, V0 (or equivalent) if non-metallic. The interior of the enclosure must be accessible only by the use of a tool. Subsequent sections of this publication may contain additional information regarding specific enclosure type ratings that are required to comply with certain product safety certifications.

In addition to this publication, see:

- Industrial Automation Wiring and Grounding Guidelines, for additional installation requirements, Allen-Bradley publication 1770-4.1.
- NEMA Standards 250 and IEC 60529, as applicable, for explanations of the degrees of protection provided by different types of enclosure.

About the Assembly



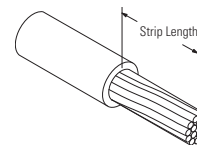
Prepare the wires

The total wire size range for the RTBs is 22...14 AWG. The wire may be stranded or solid.

ATTENTION



Do not use wire ferrules on wires connected to the terminals on the modules.



Wire Size Range, AWG	Number of Wires	Strip Length	
		8-position RTB	12-position RTB
22...14 AWG	1	16±1 mm (0.63±0.03 in)	14±1 mm (0.55±0.03 in)
	2	18±1 mm (0.71±0.03 in)	16±1 mm (0.63±0.03 in)

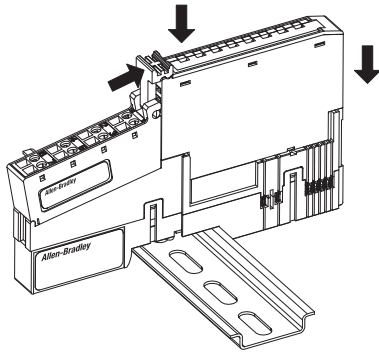
ATTENTION

Do not wire more than 2 conductors on any single terminal.



Install the Mounting Base

To install the mounting base on the DIN rail, 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. The mounting base will snap into place.
4. To remove the mounting base from the DIN rail, remove the module, and use a small bladed screwdriver to rotate the base locking screw to a vertical position. This releases the locking mechanism. Then lift straight up to remove.

Install the I/O Module

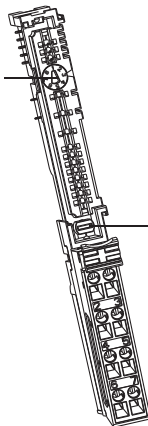
The module can be installed before, or after base installation. Make sure that the mounting base is correctly keyed before installing the module into the mounting base. In addition, make sure the mounting base locking screw is positioned horizontal referenced to the base.

1734-MB

Turn the keyswitch to align the number with the notch. Notch position 3 is shown.



44009



Be sure the DIN-rail locking screw is in the horizontal position.

1. Using a bladed screwdriver, rotate the keyswitch on the mounting base clockwise until the number required for the type of module being installed aligns with the notch in the base.
2. Make certain the DIN rail locking screw is in the horizontal position. (You cannot insert the module if the locking mechanism is unlocked.)
3. Insert the module straight down into the mounting base and press to secure. The module will lock into place.

Install the Removable Terminal Block (RTB)

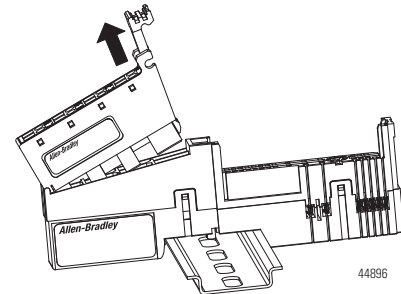
A removable terminal block is supplied with your wiring base assembly. To remove, pull up on the RTB handle. This allows the mounting base to be removed and replaced as necessary without removing any of the wiring. To reinsert the removable terminal block, proceed as follows.

1. Insert the end opposite the handle into the base unit. This end has a curved section that engages with the wiring base.
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.

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).

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



44896

Specifications

General

Attribute	Value
Field power bus supply voltage, max	1734-TBS and 1734-TB3S: 300V
Field power bus supply current, max	1734-TBS and 1734-TB3S: 10A
Dimensions (HxWxD), approx.	65 x 12 x 160 mm (2.56 x 0.472 x 6.25 in.)
Wire size	0.34... 2.1 mm ² (22...14 AWG) solid or stranded copper wire rated at 75 °C (167 °F) or greater, 1.2 mm (3/64 in.) insulation max.
Wiring category ⁽¹⁾	Dependent on installed module
Weight, approx.	1734-TB3 — 97.5 g (3.44 oz) 1734-TB3S — 87.0 g (3.07 oz)
Terminal base screw torque	0.5...0.6 Nm (5...7 lb-in)
Enclosure type rating	None (open-style)
Signal terminal voltage, max	1734-RTBS: 300V 1734-RTB3S: 30V