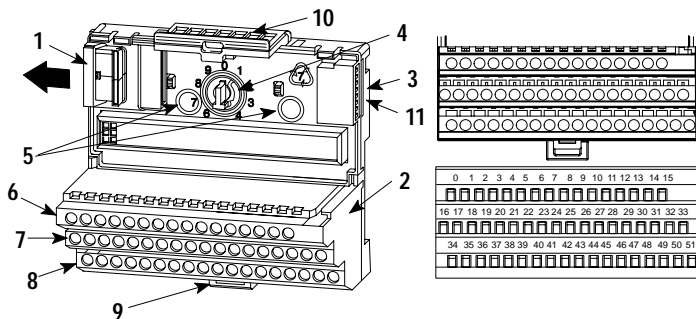




# Installation Instructions

## FLEX I/O Terminal Base (Cat. No. 1794-TB3G)



### Component Identification

1	Female flexbus connector
2	Terminal base unit
3	Male flexbus connector
4	Keyswitch – set to the position required for the installed module
5	Mounting holes for panel mounting
6, 7, 8	Input/output terminal strips for connecting input/output wiring, input/output commons, power connections, customer power supply, chassis grounds
9	Locking tab
10	Module locking latch
11	Cover plug for male flexbus connector

## European Union Directive Compliance

If this product has the CE mark it is approved for installation within the European Union or EEA regions. It has been designed and tested to meet the following directives.

### EMC Directive

This product is tested to meet Council Directive 89/336/EEC Electromagnetic Compatibility (EMC) and the following standards, in whole or in part, documented in a technical construction file:

- EN 50081-2  
EMC – Generic Emission Standard, Part 2 – Industrial Environment
- EN 50082-2  
EMC – Generic Immunity Standard, Part 2 – Industrial Environment

This product is intended for use in an industrial environment.

### Low Voltage Directive

This product is tested to meet Council Directive 73/23/EEC Low Voltage, by applying the safety requirements of EN 61131-2 Programmable Controllers, Part 2 – Equipment Requirements and Tests.

For specific information required by EN 61131-2, see the appropriate sections in this publication, as well as the following Allen-Bradley publications:

- Industrial Automation Wiring and Grounding Guidelines for Noise Immunity, publication 1770-4.1
- Automation Systems Catalog, publication B111

This equipment is classified as open equipment and must be mounted in an enclosure during operation to provide safety protection.

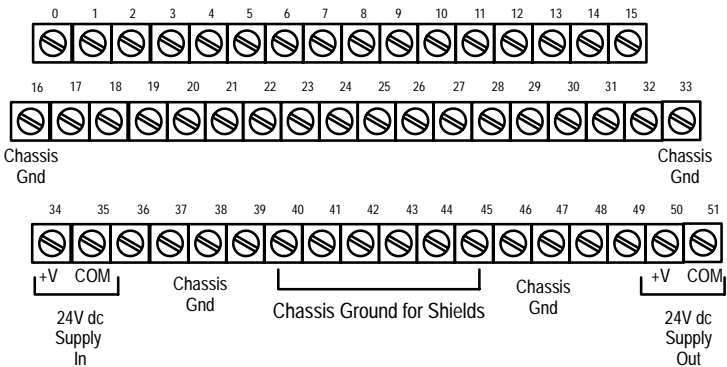
## Description

The 1794-TB3G terminal base has 36 wiring connections to/from a plug-in module. The use of each terminal depends on the module mounted in this base.



**ATTENTION:** The wiring on this base unit is different from other terminal base units in FLEX I/O. Make certain that connections are correct before applying power.

### Wiring Connections for Terminal Base 1794-TB3G



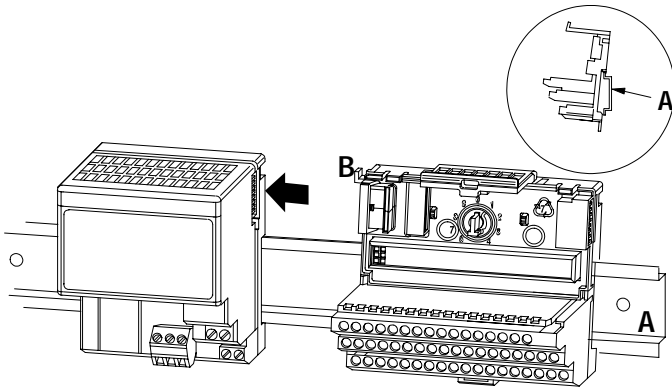
## Mounting on a DIN Rail



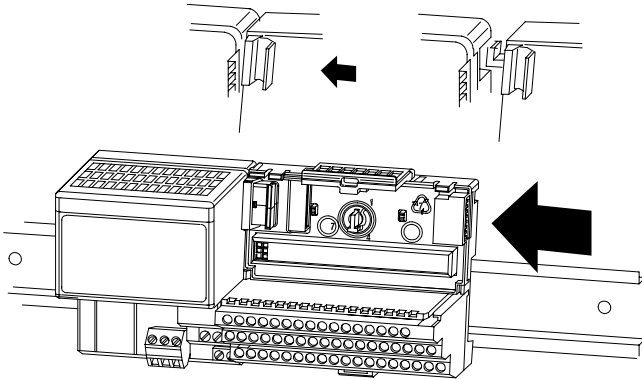
**ATTENTION:** Do not remove or replace a terminal base unit when power is applied. Interruption of the flexbus can result in unintended operation or machine motion.

1. Remove the cover plug (if used) in the male connector of the unit to which you are connecting this terminal base unit.
2. Check to make sure that the 16 pins in the male connector on the adjacent device are straight and in line so that the mating female connector on this terminal base unit will mate correctly.
3. Make certain that the female flexbus connector **C** is **fully retracted** into the base unit.

4. Position the terminal base on the 35 x 7.5mm DIN rail **A** (A-B pt. no. 199-DR1).



Position terminal base at a slight angle and hooked over the top of the DIN rail A.



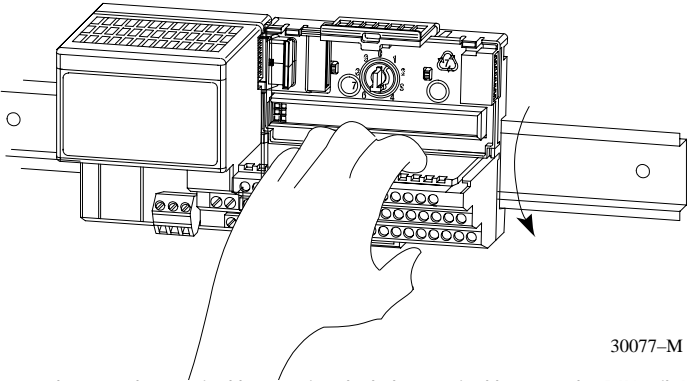
Slide the terminal base unit over tight against the adapter. Make sure the hook on the terminal base slides under the edge of the adapter and the flexbus connector is fully retracted.



**ATTENTION:** Do not force the terminal base into the adjacent base/adapter. Forcing the units together can bend or break the hook and allow the units to separate and break communication over the backplane.

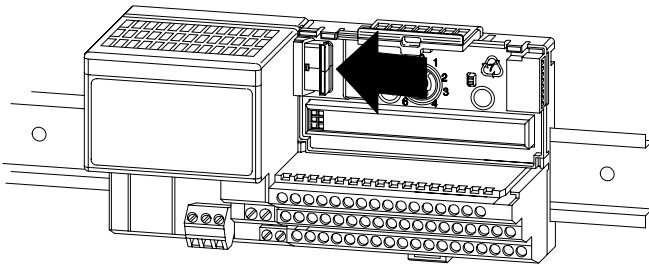
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5. Rotate the terminal base onto the DIN rail with the top of the rail hooked under the lip on the rear of the terminal base. **Use caution to make sure that the female flexbus connector does not strike any of the pins in the mating male connector.**



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Press down on the terminal base unit to lock the terminal base on the DIN rail. If the terminal base does not lock into place, use a screwdriver or similar device to open the locking tab, press down on the terminal base until flush with the DIN rail and release the locking tab to lock the base in place.



**Gently** push the flexbus connector into the side of the adapter to complete the backplane connection.

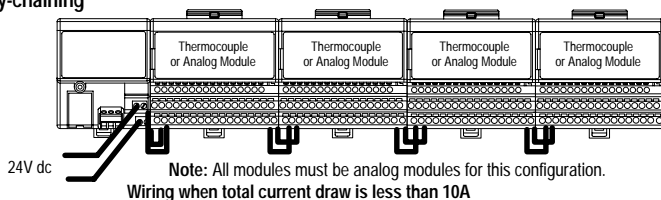
6. For specific wiring information, refer to the installation instructions for the module you are installing in this terminal base unit.
7. Repeat the above steps to install the next terminal base.

## Wiring

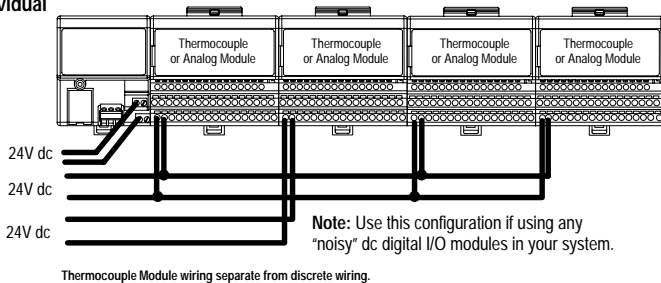


**ATTENTION:** Total current draw through the terminal base unit is limited to 10A. Separate power connections may be necessary.

### Daisy-chaining

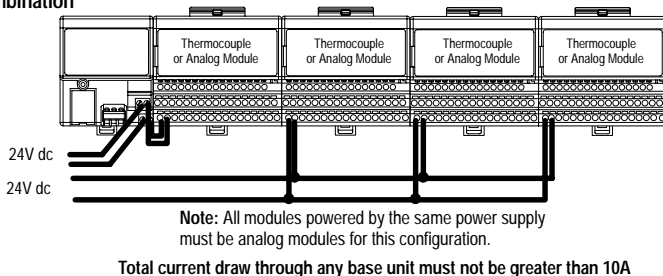


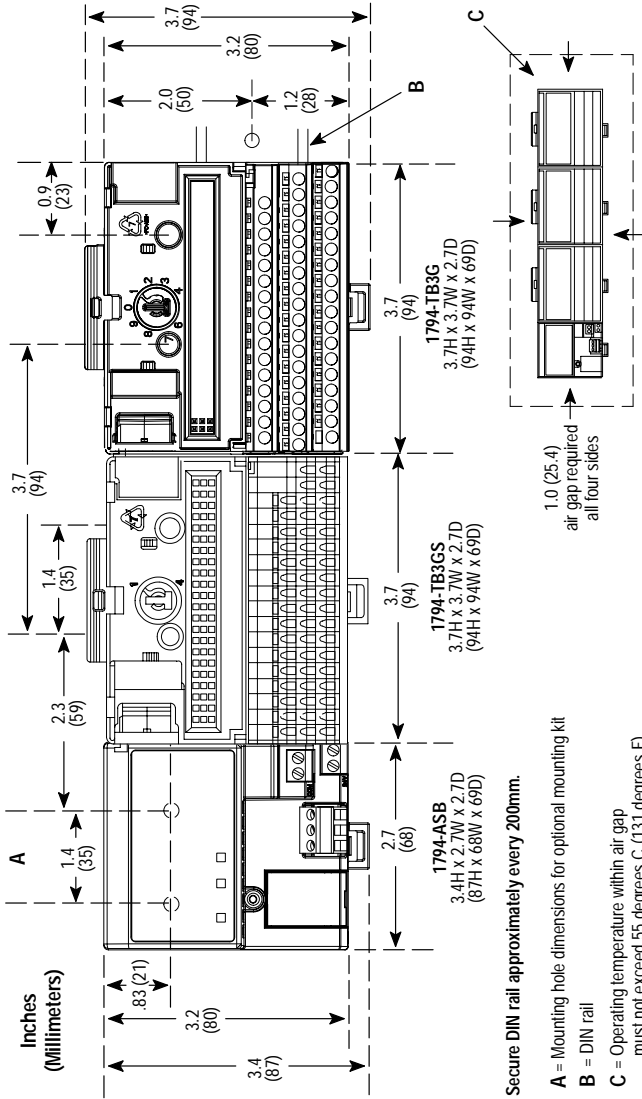
### Individual



Wiring when total current draw is greater than 10A

### Combination





**1794-TB3G Terminal Base Specifications**

Number of Terminals	1 row of 16 2 rows of 18
Terminal Screw Torque	7-9 inch-pounds
Dimensions (with module installed in base)	Inches (Millimeters)
Current Capacity	10A maximum
Voltage Rating	31.2V dc maximum
Isolation Voltage	Channel-to-channel isolation determined by inserted module
Environmental Conditions	
Operational Temperature	0 to 55°C (32 to 131°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Relative Humidity	5 to 95% noncondensing
Shock	Operating
	Non-operating
Vibration	30 g peak acceleration, 11(±1)ms pulse width 50 g peak acceleration, 11(±1)ms pulse width Tested 5 g @ 10-500Hz per IEC 68-2-6
Conductors	Wire Size
	Category <sup>1</sup>
Agency Certification (when product is marked)	<ul style="list-style-type: none"> <li>• 12 gauge (4mm<sup>2</sup>) stranded maximum</li> <li>• 3/64 inch (1.2mm) insulation maximum</li> <li>• Category is dependent upon installed module.</li> <li>• CSA certified</li> <li>• CSA Class I, Division 2, Groups A, B, C, D certified</li> <li>• UL listed</li> <li>• CE marked for all applicable directives</li> </ul>

<sup>1</sup> You use this conductor category information for planning conductor routing. Refer to publication 1770-4.1, "Industrial Automation Wiring and Grounding Guidelines for Noise Immunity."



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