



## POINT I/O Protected Sink Output Modules

Catalog Numbers 1734-0V2E, 1734-0V4E, 1734-0V8E, 1734-0V8EK, Series C

Catalog numbers with the suffix 'K' are conformal coated and their specifications are the same as non-conformal coated catalogs.

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## Important User Information

Solid-state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid-state Controls (Publication [SGI-1.1](#) available from your local Rockwell Automation sales office or online at <http://www.rockwellautomation.com/literature/>) describes some important differences between solid-state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid-state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements that are associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

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Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

	<b>WARNING:</b> Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.
	<b>ATTENTION:</b> Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard and recognize the consequences.
	<b>SHOCK HAZARD:</b> Labels may be on or inside the equipment (for example, drive or motor) to alert people that dangerous voltage may be present.
	<b>BURN HAZARD:</b> Labels may be on or inside the equipment (for example, drive or motor) to alert people that surfaces may reach dangerous temperatures.
<b>IMPORTANT</b>	Identifies information that is critical for successful application and understanding of the product.

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## Environment and Enclosure

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**ATTENTION:** This equipment is intended for use in a Pollution Degree 2 industrial environment, in 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 5V A 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 additional installation requirements.
- NEMA Standard 250 and EN/IEC 60529, as applicable, for explanations of the degrees of protection provided by enclosures.





**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.

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.

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## North American Hazardous Location Approval

The following information applies when operating this equipment in hazardous locations.	Informations sur l'utilisation de cet équipement en environnements dangereux.
<p>Products marked "CL I, DIV 2, GP A, B, C, D" are suitable for use in Class I Division 2 Groups A, B, C, D, Hazardous Locations and nonhazardous locations only. Each product is supplied with markings on the rating nameplate indicating the hazardous location temperature code. When combining products within a system, the most adverse temperature code (lowest "T" number) may be used to help determine the overall temperature code of the system. Combinations of equipment in your system are subject to investigation by the local Authority Having Jurisdiction at the time of installation.</p>	<p>Les produits marqués "CL I, DIV 2, GP A, B, C, D" ne conviennent qu'à une utilisation en environnements de Classe I Division 2 Groupes A, B, C, D dangereux et non dangereux. Chaque produit est livré avec des marquages sur sa plaque d'identification qui indiquent le code de température pour les environnements dangereux. Lorsque plusieurs produits sont combinés dans un système, le code de température le plus défavorable (code de température le plus faible) peut être utilisé pour déterminer le code de température global du système. Les combinaisons d'équipements dans le système sont sujettes à inspection par les autorités locales qualifiées au moment de l'installation.</p>
<div style="display: flex; align-items: center;">  <div> <p><b>WARNING:</b> <b>Explosion Hazard –</b></p> <ul style="list-style-type: none"> <li>• Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.</li> <li>• Do not disconnect connections to this equipment unless power has been removed or the area is known to be nonhazardous. Secure any external connections that mate to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.</li> <li>• Substitution of components may impair suitability for Class I, Division 2.</li> </ul> </div> </div>	<div style="display: flex; align-items: center;">  <div> <p><b>AVERTISSEMENT:</b> <b>Risque d'Explosion –</b></p> <ul style="list-style-type: none"> <li>• Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher l'équipement.</li> <li>• Couper le courant ou s'assurer que l'environnement est classé non dangereux avant de débrancher les connecteurs. Fixer tous les connecteurs externes reliés à cet équipement à l'aide de vis, loquets coulissants, connecteurs filetés ou autres moyens fournis avec ce produit.</li> <li>• La substitution de composants peut rendre cet équipement inadapté à une utilisation en environnement de Classe I, Division 2.</li> </ul> </div> </div>



**WARNING:** When used in a Class I, Division 2, hazardous location, this equipment must be mounted in a suitable enclosure with proper wiring method that complies with the governing electrical codes.

## Prevent Electrostatic Discharge

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**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 connectors or pins on component boards.
  - Do not touch circuit components inside the equipment.
  - Use a static-safe workstation, if available.
  - Store the equipment in appropriate static-safe packaging when not in use.
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## Special Conditions for Safe Use

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**ATTENTION:**

- This product is grounded through the DIN rail to chassis ground. Use zinc plated chromate-passivated steel DIN rail to assure proper grounding. The use of other DIN rail materials (for example, aluminum or plastic) that can corrode, oxidize, or are poor conductors, can result in improper or intermittent grounding. Secure DIN rail to mounting surface approximately every 200 mm (7.8 in.) and use end-anchors appropriately. Be sure to ground the DIN rail properly. Refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#), for more information.
  - Do not remove or replace an Adapter Module while power is applied. Interruption of the backplane can result in unintentional operation or machine motion.
  - Do not discard the end cap. Use this end cap to cover the exposed interconnections on the last mounting base on the DIN rail. Failure to do so could result in equipment damage or injury from electric shock.
  - If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
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## Electrical Safety Considerations

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**ATTENTION:**

- This equipment is certified for use only within the surrounding air temperature range of -20...+55 °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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## About the Module

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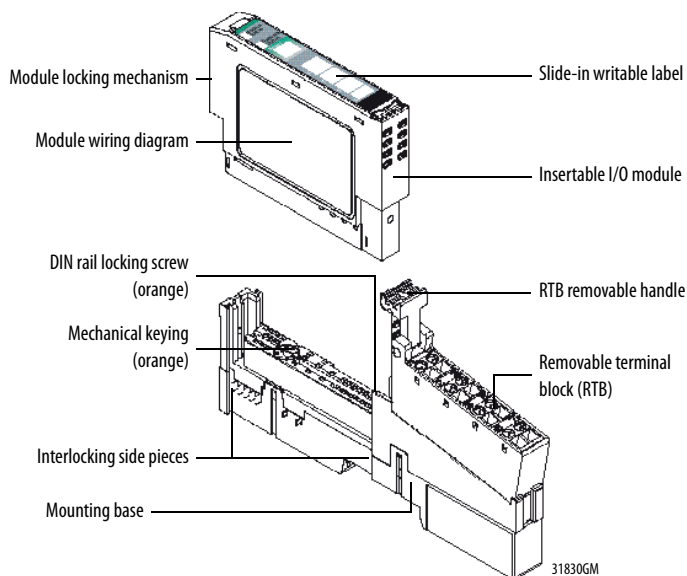
At the end of its life, this equipment should be collected separately from any unsorted municipal waste.

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Use this series C module with the following:

- ControlNet adapters  
with RSLogix 5000® software, version 11 or higher
- DeviceNet adapters
- EtherNet/IP adapters  
with RSLogix 5000® software, version 11 or higher
- PROFIBUS adapters

See the figure to identify external features of the module.



## Install the Mounting Base

To install the mounting base on the DIN rail, proceed as follows.

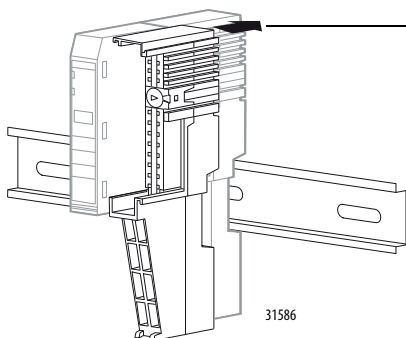
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**ATTENTION:** POINT I/O™ is grounded through the DIN rail to chassis ground. Use zinc-plated yellow-chromate steel DIN rail to assure proper grounding. The use of other DIN rail material (for example, aluminum and plastic) that can corrode, oxidize, or are poor conductors, can result in improper or intermittent grounding. Secure DIN rail to mounting surface approximately every 200 mm (7.8 in.).

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1. Position the mounting base vertically above the installed units (adapter, power supply, or existing module).
2. Slide the mounting base down to make the interlocking side pieces engage the adjacent module or adapter.



Slide the mounting base to allow 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 snaps into place.



## Install the Module



**ATTENTION:** When you insert or remove the module while backplane power is on, an electrical arc can occur. This could cause an explosion in hazardous location installations.

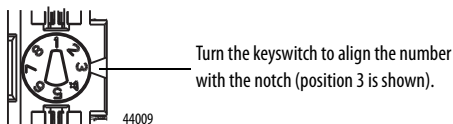
Be sure that power is removed or the area is nonhazardous before proceeding. Repeated electrical arcing causes excessive wear to contacts on both the module and its mating connector. Worn contacts may create electrical resistance that can affect module operation.

Install the module before or after base installation. Be sure that you complete the following.

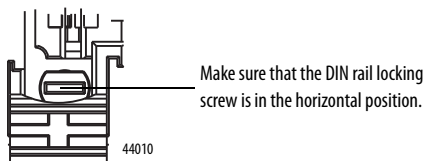
- Correctly key the mounting base before installing the module into the mounting base.
- Position the mounting base locking screw horizontal referenced to the base.

To install the module on the DIN rail, proceed as follows.

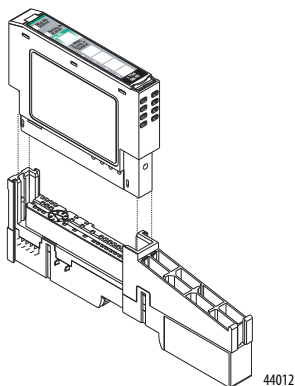
1. Use a bladed screwdriver to rotate the keyswitch on the mounting base clockwise until the number required for the type of module you are installing aligns with the notch in the base.



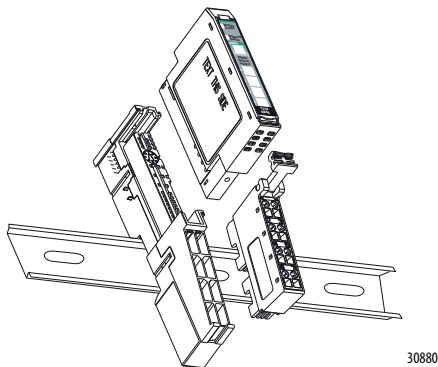
2. Verify that the DIN rail locking screw is in the horizontal position. You cannot insert the module if the locking mechanism is unlocked.



3. Insert the module straight down into the mounting base.



4. Press to secure. The module locks into place.



### Install the Removable Terminal Block

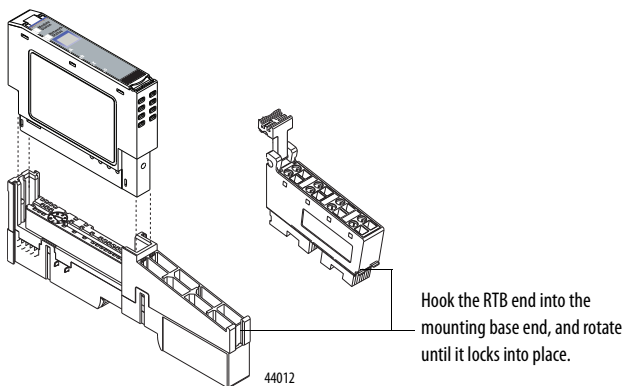
A Removable Terminal Block (RTB) is supplied with your wiring base assembly. To remove, pull up on the RTB handle. This allows the mounting base to be

removed and replaced as necessary without removing any of the wirings. To reinsert the Removable Terminal Block, proceed as follows.



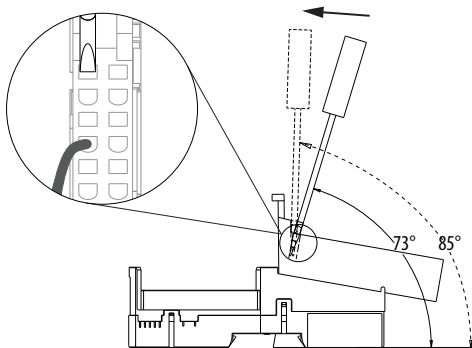
**WARNING:** When you connect or disconnect the Removable Terminal Block (RTB) with field-side power applied, an electrical arc can occur. This can cause an explosion in hazardous location installations. Be sure that power is removed or the area is nonhazardous before proceeding.

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.

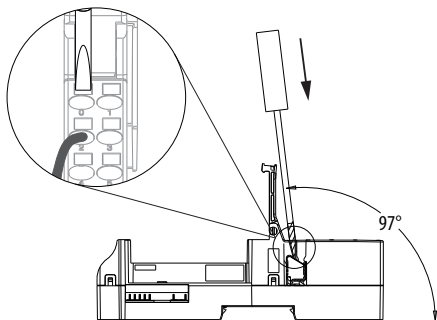




**WARNING:** For 1734-RTBS and 1734-RTB3S, to latch and unlatch the wire, insert a bladed screwdriver (catalog number 1492-N90 – 3 mm diameter blade) into the opening at approximately  $73^\circ$  (blade surface is parallel with top surface of the opening) and push up gently.



**WARNING:** For 1734-TOPS and 1734-TOP3S, to latch and unlatch the wire, insert a bladed screwdriver (catalog number 1492-N90 – 3 mm diameter) into the opening at approximately  $97^\circ$  (blade surface is parallel with top surface of the opening) and press in (do not push up or down).



## Remove a Mounting Base

To remove a mounting base from the DIN rail, remove any installed module and the module that is 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.



**WARNING:** When you connect or disconnect the Removable Terminal Block (RTB) with field-side power applied, an electrical arc can occur. This could cause an explosion in hazardous location installations.

Be sure that power is removed or the area is nonhazardous before proceeding.

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3. Press the module lock on the top of the module.
4. Pull on the I/O module to remove from the base.



**ATTENTION:** When you insert or remove the module while backplane power is on, an electrical arc can occur. This could cause an explosion in hazardous location installations.

Be sure that power is removed or the area is nonhazardous before proceeding. Repeated electrical arcing causes excessive wear to contacts on both the module and its mating connector. Worn contacts may create electrical resistance that can affect module operation.

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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. Lift straight up to remove.

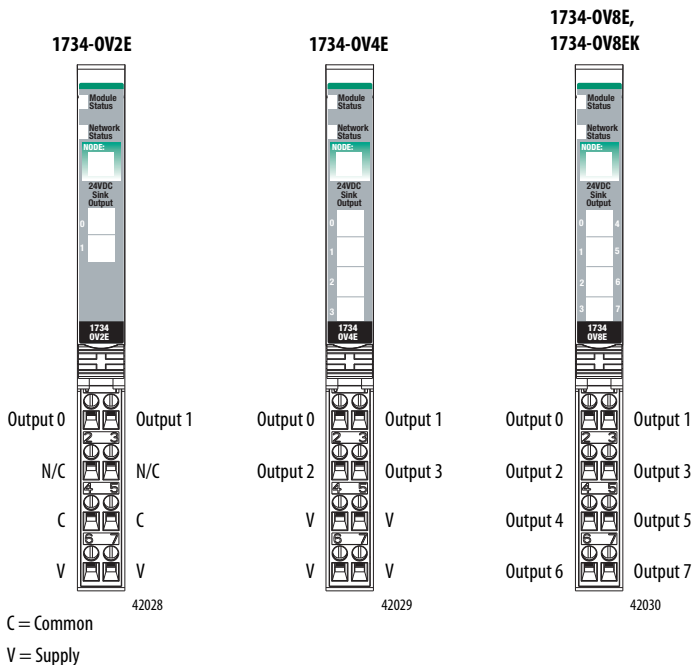
## Wire the Module

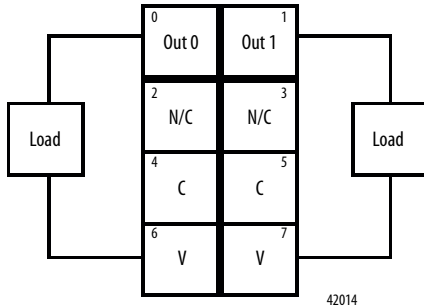
See the figures to wire the module.



**WARNING:** If you connect or disconnect wiring while the field-side power is on, an electrical arc can occur. This could cause an explosion in hazardous location installations. Be sure that power is removed or the area is nonhazardous before proceeding.

**IMPORTANT** To comply with the CE Low Voltage Directive (LVD), I/O must be powered from a source compliant with the following:  
Safety Extra Low Voltage (SELV) or Protected Extra Low Voltage (PELV).



**1734-0V2E**

V=12/24V DC

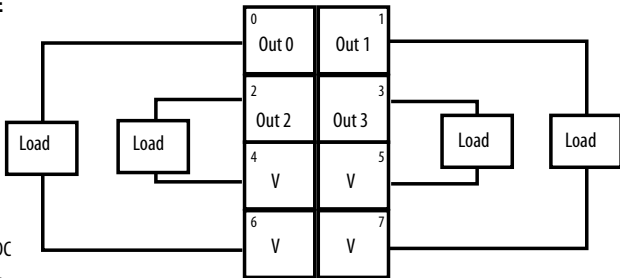
C= Common

Field power is supplied from internal power bus.

42014

	Output Terminal	Power	Common Terminal
Channel 0	0	6	4
Channel 1	1	7	5

Module power is supplied from the internal power bus.

**1734-0V4E**

V=12/24V DC

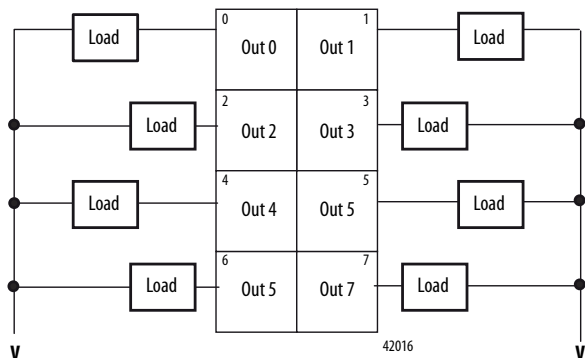
C= Common

Field power is supplied from internal power bus.

42015

	Output Terminal	Power	Common Terminal
Channel 0	0	6	
Channel 1	1	7	
Channel 2	2	4	
Channel 3	3	5	

Module power is supplied from the internal power bus.

**1734-0V8E,  
1734-0V8EK**

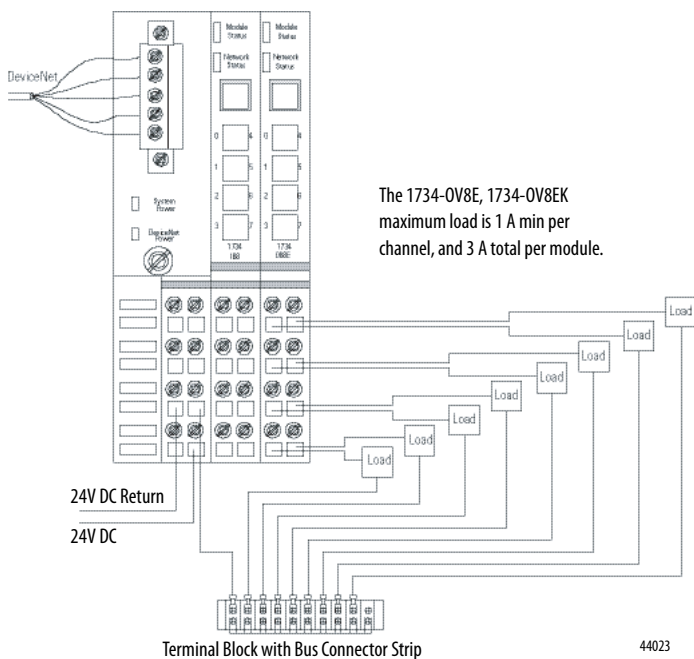
Common must be daisy-chained from a 1734 adapter, 1734-FPD, 1734-EP24DC, or from a user-supplied external terminal block. The 24V DC power to the module is supplied by the internal power bus and comes from the same 1734 adapter, 1734-FPD, or 1734-EP24DC as common.

Channel Number	Output Terminal	Common Terminal	Power
Channel 0	0	Common is daisy chained from either a 1734 adapter, 1734-FPD, 1734-EP24DC, or from a user-supplied external terminal block.	The 24V DC power for the module is supplied by the internal power bus and originates from the same adapter, 1734-FPD, or 1734-EP24DC as common.
Channel 1	1		
Channel 2	2		
Channel 3	3		
Channel 4	4		
Channel 5	5		
Channel 6	6		
Channel 7	7		

Module power is supplied from the internal power bus.



### Example of Wiring for the 1734-0V8E, 1734-0V8EK Output Module



### Configure the Module

POINT I/O™ modules send (consume) and receive (produce) I/O messages. You map these messages into the memory of the processor.

This POINT I/O output module produces 1 byte of input data (scanner Rx) (status). It consumes 1 byte of I/O data (scanner Tx).

**Default Data Map for the 1734-OV2E Output Module**

Message size: 1 Byte

	7	6	5	4	3	2	1	0	
Produces (scanner Rx)	Not used						Ch1	Ch0	Channel status

Where:

0 = no error, 1 = error

Message size: 1 Byte

	7	6	5	4	3	2	1	0	
Consumes (scanner Tx)	Not used						Ch1	Ch0	Channel state

Where:

0 = off, 1 = on

**Default Data Map for the 1734-OV4E Output Module**

Message size: 1 Byte

	7	6	5	4	3	2	1	0	
Produces (scanner Rx)	Not used				Ch3	Ch2	Ch1	Ch0	Channel status

Where:

0 = no error, 1 = error

Message size: 1 Byte

	7	6	5	4	3	2	1	0	
Consumes (scanner Tx)	Not used				Ch3	Ch2	Ch1	Ch0	Channel state

Where:

0 = off, 1 = on

**Default Data Map for the 1734-OV8E, 1734-OV8EK Output Modules**

Message size: 1 Byte

	7	6	5	4	3	2	1	0	
Produces (scanner Rx)	Ch7	Ch6	Ch5	Ch4	Ch3	Ch2	Ch1	Ch0	Channel status

Where:

0 = no error, 1 = error

Message size: 1 Byte

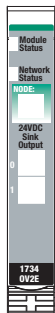
	7	6	5	4	3	2	1	0	
Consumes (scanner Tx)	Ch7	Ch6	Ch5	Ch4	Ch3	Ch2	Ch1	Ch0	Channel state

Where:

0 = off, 1 = on

## Troubleshoot the Module

1734-OV2E



Module status  
Network status

Status of output 0  
Status of output 1  
Status of output 2  
Status of output 3

44028

1734-OV4E



Module status  
Network status

Status of output 0 & 4  
Status of output 1 & 5  
Status of output 2 & 6  
Status of output 3 & 7

44029

1734-OV8E,  
1734-OV8EK

Module status  
Network status

Status of output 0 & 4  
Status of output 1 & 5  
Status of output 2 & 6  
Status of output 3 & 7

44030

### Indicator Status for Modules

Indication	Probable Cause	Recommended Action
<b>Module Status</b>		
Off	No power applied to device.	Apply power applied to device.
Solid green	Device operating normally.	Device is operating normally.
Flashing green	Device needs commissioning due to missing, incomplete, or incorrect configuration.	Configure device properly.
Flashing red	Recoverable fault.	<ol style="list-style-type: none"> <li>1. Cycle power.</li> <li>2. Configure device properly if needed.</li> <li>3. If condition persists, replace device.</li> </ol>
Solid red	Unrecoverable fault – may require device replacement.	Replace device.
Flashing red/green	Device is in self-test mode.	None.

**Indicator Status for Modules**

<b>Indication</b>	<b>Probable Cause</b>	<b>Recommended Action</b>
<b>Network Status</b>		
Off	Device not online. – Device has not completed dup_MAC_id test. – Device not powered. Check Module Status indicator.	Apply power to the device, wait for MAC-id to complete, and correct, if needed.
Flashing green	Device online but has no connections in the established state.	None – device is in Idle or Program mode.
Solid green	Device online and has connections in the established state.	None.
Flashing red	One or more I/O connections are in timed-out state.	Check for I/O module failure, and correct, as needed.
Solid red	Critical link failure – failed communication device is present. Device detected error that prevents it communicating on the network.	1. Reinstall adapter and terminal base, if improperly installed. 2. Correct duplicate MAC_id, if needed.
Flashing red/green	Communication faulted device – the device detected a network access error and is in communication faulted state. Device has received and accepted an Identify Communication Faulted Request – long protocol message.	Verify that adapter is properly installed, and reinstall, as needed.
<b>I/O Status</b>		
Off	All outputs are inactive.	None.
Solid yellow	One or more outputs are active and under control.	None.
Solid red	Overload, short circuit, or over-temperature detected (On-State only).	Remove overload, short circuit, or over-temperature condition.

## Specifications

### Protected Sink Output Modules – 1734-0V2E, 1734-0V4E, 1734-0V8E, 1734-0V8EK

Attribute	1734-0V2E	1734-0V4E	1734-0V8E, 1734-0V8EK
Number of outputs	2 (1 group of 2) non-isolated, sinking	4 (1 group of 4) non-isolated, sinking	8 (1 group of 8) non-isolated, sinking
ON-state voltage, min	10V DC		
ON-state voltage, nom	24V DC		
ON-state voltage, max	28.8V DC		
ON-state voltage drop, max	0.7V DC (@ 28.8V DC, 55 °C (131 °F), full load condition)		
ON-state current, min	1.0 mA per channel		
ON-state current, max	1.0 A per channel (electronically protected)		
OFF-state voltage, max	28.8V DC		
OFF-state leakage, max	0.5 mA		
Output Signal Delay <sup>(1)</sup> OFF to ON, max ON to OFF, max	0.1 ms 0.1 ms		
Output current rating	1.0 A per output, 2.0 A max per module	1.0 A per output, not to exceed 3.0 A max per module	
Surge current	2 A for 10 ms, repeatable every 3 s		
Indicators (field side indication, logic driven)	2 yellow output status 2 red output fault	4 yellow output status 4 red output fault	8 yellow output status 8 red output fault
	2 green/red module/network status		
Keyswitch position	1		
Module location	1734-TB or 1734-TBS wiring base assembly		
POINTBus™ current, max	75 mA @5V DC		
Power dissipation, max	0.8 W @ 28.8V DC	1.2 W @ 28.8V DC	2.0 W @ 28.8V DC
Thermal dissipation, max	2.7 BTU/hr @ 28.8V DC	4.1 BTU/hr @ 28.8V DC	6.8 BTU/hr @ 28.8V DC
Isolation voltage (continuous-voltage rating)	240V, Basic Insulation Type, tested at 2550V DC for 60 seconds, output to system		

### Protected Sink Output Modules – 1734-0V2E, 1734-0V4E, 1734-0V8E, 1734-0V8EK

Attribute	1734-0V2E	1734-0V4E	1734-0V8E, 1734-0V8EK
External DC power supply voltage, nom	24V DC		
External DC power voltage range	10...28.8V DC		
External DC power supply current	8 mA	16 mA	32 mA
Dimensions (H x W x D), approx.	56 x 12 x 75.5 mm (2.21 x 0.47 x 2.97 in)		
Weight, approx	32.60 g (1.15 oz)	33.17 g (1.17 oz)	35.4 g (1.25 oz)
Terminal base screw torque	0.6 N·m (7 lb-in)		
Wire size	0.25... 2.5 mm <sup>2</sup> (22...14 AWG) solid or stranded copper wire rated @ 75 °C (167 °F) or greater 1.2 mm (3/64 in.) insulation max		
Wire category <sup>(2)</sup>	2 – on signal ports		
Pilot duty rating	24V DC 1.0 A		
North American temp code	T4		
Field wiring terminations	0 – Output 0 1 – Output 1 2 – Output 0 3 – Output 1 4 – Common 5 – Common 6 – Supply 7 – Supply	0 – Output 0 1 – Output 1 2 – Output 2 3 – Output 3 4 – Supply 5 – Supply 6 – Supply 7 – Supply	0 – Output 0 1 – Output 1 2 – Output 2 3 – Output 3 4 – Output 4 5 – Output 5 6 – Output 6 7 – Output 7

- (1) Off/on delay is time from a valid output on signal to output energization. On/off delay is time from a valid output off signal to output de-energization.
- (2) Use this Conductor Category information for planning conductor routing as described in the appropriate System Level Installation Manual. Also refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#), for more information.

## Environmental Specifications

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, storage	IEC 60068-2-1 (Test Ab, unpackaged nonoperating cold), IEC 60068-2-2 (Test Bb, unpackaged nonoperating dry heat), IEC 60068-2-14 (Test Na, unpackaged nonoperating thermal shock): -40...+85 °C (-40...+185 °F)
Temperature, surrounding air, max	55 °C (131 °F)
Relative humidity	IEC 60068-2-30 (Test Db, unpackaged nonoperating damp heat): 5...95% noncondensing
Vibration	IEC 60068-2-6 (Test Fc, operating): 5 g @ 10...500 Hz
Shock Operating Nonoperating	IEC 60068-2-27 (Test Ea, unpackaged shock): 30 g 50 g
Emissions	IEC 61000-6-4
ESD immunity	IEC 6100-4-2: 6 kV contact discharges 8 kV air discharges
Radiated RF immunity	IEC 61000-4-3: 10V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz 10V/m with 200 Hz 50% pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% pulse 100% AM @ 1890 MHz 10V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz
EFT/B immunity	IEC 61000-4-4: ±2 kV at 5 kHz on power ports ±2 kV at 5 kHz on signal ports
Surge transient immunity	IEC 61000-4-5: ±1 kV line-line (DM) and ±2 kV line-earth (CM) on signal ports
Conducted RF immunity	IEC 61000-4-6: 10V rms with 1 kHz sine-wave 80% AM from 150 kHz...80 MHz
Enclosure type rating	None (open-style)



## Certifications

Certification (When Product Is Marked) <sup>(1)</sup>	Value
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810.
CE	European Union 2014/30/EU EMC Directive, compliant with: <ul style="list-style-type: none"> <li>• EN 61326-1; Measurement/Control/Laboratory use, Industrial requirements</li> <li>• EN 61000-6-2; Industrial Immunity</li> <li>• EN 61000-6-4; Industrial Emissions</li> <li>• EN 61131-2; Programmable Controllers (Clause 8, Zone A &amp; B)</li> </ul> European Union 2011/65/EU RoHS, compliant with: <ul style="list-style-type: none"> <li>• EN 50581; Technical documentation</li> </ul> European Union 2014/35/EU LVD, compliant with: <ul style="list-style-type: none"> <li>• EN 61131-2; Programmable Controllers (Clause 11)</li> </ul>
RCM	Australian Radiocommunications Act, compliant with: <ul style="list-style-type: none"> <li>• AS/NZS CISPR 11; Industrial Emissions</li> </ul>
KC	Korean Registration of Broadcasting and Communications Equipment, compliant with: <ul style="list-style-type: none"> <li>• Article 58-2 of Radio Waves Act, Clause 3</li> </ul>
EAC	<ul style="list-style-type: none"> <li>• Russian Customs Union TR CU 020/2011 EMC Technical Regulation</li> <li>• Russian Customs Union TR CU 004/2011 LV Technical Regulation</li> </ul>

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

**Notes:**

## Rockwell Automation Support

Use the following resources to access support information.

<b>Technical Support Center</b>	Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.	<a href="http://www.rockwellautomation.com/knowledgebase">www.rockwellautomation.com/knowledgebase</a>
<b>Local Technical Support Phone Numbers</b>	Locate the phone number for your country.	<a href="http://www.rockwellautomation.com/global/support/get-support-now.page">www.rockwellautomation.com/global/support/get-support-now.page</a>
<b>Direct Dial Codes</b>	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	<a href="http://www.rockwellautomation.com/global/support/direct-dial.page">www.rockwellautomation.com/global/support/direct-dial.page</a>
<b>Literature Library</b>	Installation Instructions, Manuals, Brochures, and Technical Data.	<a href="http://www.rockwellautomation.com/literature">www.rockwellautomation.com/literature</a>
<b>Product Compatibility and Download Center (PCDC)</b>	Get help determining how products interact, check features and capabilities, and find associated firmware.	<a href="http://www.rockwellautomation.com/global/support/pcdc.page">www.rockwellautomation.com/global/support/pcdc.page</a>

## Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete the How Are We Doing? form at [http://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002\\_-en-e.pdf](http://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002_-en-e.pdf).

Rockwell Automation maintains current product environmental information on its website at <http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page>.

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Rockwell Otomasyon Ticaret A.Ş., Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400

[www.rockwellautomation.com](http://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 NV, Pegasus Park, De Kleielaan 12a, 1831 Diegem, 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

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