

# Allen-Bradley 1734-IB2 POINT I/O Input Modules Instruction Manual

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### **Product Information**

The POINT I/O Input Modules are a series of modules designed for industrial applications. They come in different configurations, including two-input, four-input, and eight-input options. These modules are compatible with mounting bases that can be easily mounted on a DIN rail. All wiring is connected to a Removable Terminal Block (RTB) that is attached to the mounting base. The product is part of Series D and has the following catalog numbers:

- 1734-IB2
- 1734-IB4
- 1734-IB4K
- 1734-IB8
- 1734-IB8K

# **Product Usage Instructions**

Before you begin using the POINT I/O Input Modules, please follow these installation instructions:

- 1. Install the Mounting Base: Attach the mounting base to a DIN rail following the provided instructions.
- 2. Install the Module: Slide the I/O module into the mounting base until it locks securely in place.
- 3. **Install the Removable Terminal Block:** Attach the Removable Terminal Block (RTB) handle to the module and connect the wiring to the RTB using screws or spring clamps.
- 4. Remove a Mounting Base: If needed, follow the instructions to safely remove a mounting base.
- 5. Wire the Module: Connect the appropriate wires to the Removable Terminal Block (RTB) according to your application requirements.
- 6. **Communicate with the Module:** Follow the provided instructions to establish communication with the module for data transfer and control.
- 7. **Interpret Status Indicators:** Refer to the documentation to understand the meaning of the status indicators on the module.

Ensure to read and understand all the installation, configuration, and operation instructions provided in the user manual before using the product. It is important to comply with applicable laws, codes, and standards during installation, wiring, and maintenance procedures.

# **POINT I/O Input Modules**

Catalog Numbers 1734-IB2, 1734-IB4, 1734-IB4K, 1734-IB8K, Series D

# **Summary of Changes**

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes.

Topic	Page
Updated UK and European Hazardous Location Approval	3
Updated IEC Hazardous Location Approval	4
Updated Special Conditions for Safe Use	4
Updated General Specifications	14
Updated Environmental Specifications	14, 15
Updated Certifications	<u>15</u>

### **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.
- Activities including 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. If this equipment is used in a manner not specified by the manufacturer, the protection provided by the
  equipment may be impaired.

#### **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 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

5VA 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 enclosures.

# **Prevent Electrostatic Discharge**

**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. See Industrial Automation Wiring and Grounding Guidelines, Rockwell Automation publication 1770-4.1, for more information.

# **North American Hazardous Location Approval**

# The following information applies when operating this equipment in hazardous locations.

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.

#### **WARNING: Explosion Hazard –**

- Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.
- 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.
- Substitution of components may impair suitability for Class I, Division 2.

# **UK and European Hazardous Location Approval**

#### The following applies to products marked II 3 G:

- Are intended for use in potentially explosive atmospheres as defined by UKEX regulation 2016 No. 1107 and 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 3 equipment intended for use in Zone 2 potentially explosive atmospheres, given in Schedule 1 of UKEX and Annex II of this Directive.
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-7, and EN IEC 60079-0.
- 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 Schedule 1 of UKEX and

Annex II of EU Directive 2014/34/EU. See the UKEx and EU Declaration of Conformity at rok.auto/certifications for details.

- The type of protection is Ex ec IIC T4 Gc according to EN IEC 60079-0:2018, EXPLOSIVE ATMOSPHERES –
  PART 0: EQUIPMENT GENERAL REQUIREMENTS, Issue Date 07/2018, and CENELEC EN IEC 600797:2015+A1:2018, Explosive atmospheres. Equipment protection by increased safety "e".
- Comply to Standard EN IEC 60079-0:2018, EXPLOSIVE ATMOSPHERES PART 0: EQUIPMENT –
  GENERAL REQUIREMENTS, Issue Date 07/2018, and CENELEC EN IEC 600797:2015+A1:2018 Explosive atmospheres. Equipment protection by increased safety "e", reference certificate number DEMKO 04 ATEX 0330347X and UL22UKEX2478X.
- 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 UKEX regulation 2016 No. 1107 and ATEX directive 2014/34/EU.May have
  catalog numbers followed by a "K" to indicate a conformal coating option.

# **IEC Hazardous Location Approval**

### The following applies to products with IECEx certification:

- 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 to IEC 60079-0.
- The type of protection is Ex eC IIC T4 Gc according to IEC 60079-0 and IEC 60079-7.
- Comply to Standards IEC 60079-0, Explosive atmospheres Part 0: Equipment General requirements,
   Edition 7, Revision Date 2017 and IEC 60079-7, 5.1 Edition revision date 2017, Explosive atmospheres Part
   7: Equipment protection by increased safety "e", reference IECEx certificate number IECEx UL 20.0072X.
- May have catalog numbers followed by a "K" to indicate a conformal coating option.

### • WARNING: Special Conditions for Safe Use:

- This equipment shall be mounted in an UKEX/ATEX/IECEx Zone 2 certified enclosure with a minimum ingress protection rating of at least IP54 (in accordance with EN/IEC 60079-0) and used in an environment of not more than Pollution Degree 2 (as defined in EN/IEC 60664-1) when applied in Zone 2 environments. The enclosure must be accessible only by the use of a tool.
- Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage at the supply terminals to the equipment.
- This equipment must be used only with UKEX/ATEX/IECEx certified Rockwell Automation backplanes.
- · Earthing is accomplished through mounting of modules on rail.

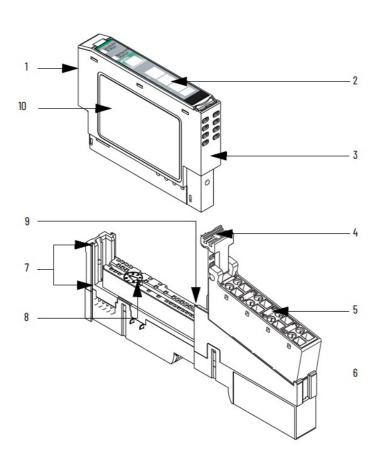
### ATTENTION:

- If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- 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.
- 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.
- **WARNING:** Secure any external connections that mate to this equipment by using screws, sliding latches, threaded connectors, or other means provided with this product.
- WARNING: Do not disconnect equipment unless power has been removed or the area is known to be nonhazardous.

# **Before You Begin**

- The POINT I/O™ sink input modules are available in two-input, four-input, and eight-input options. They install
  on mounting bases that mount on a DIN rail. All wiring is made to a Removable Terminal Block (RTB) mounted
  on the mounting base.
- This series D product can be used with the following:
  - DeviceNet® and PROFIBUS adapters
  - ControlNet® and EtherNet/IP™ adapters, using RSLogix 5000® software version 11 or later or Studio 5000(a) Logix Designer® application version 20 or later
- See Figure 1 to familiarize yourself with major parts of the module, noting that the wiring base assembly is the 1734-TB or 1734-TBS POINT I/O two-piece terminal base, which includes the 1734-RTB or 1734-RTBS removable terminal block, and 1734-MB mounting base.



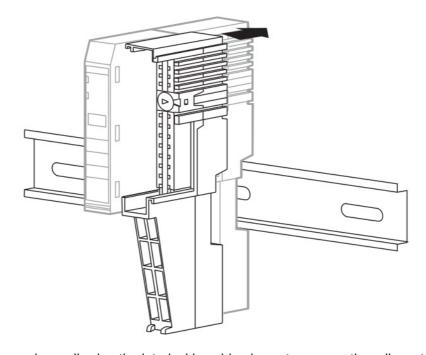
	Description		Description
1	Module locking mechanism	6	1734-TB or 1734-TBS mounting base
2	Slide-in writable label	7	Interlocking side pieces
3	Insertable I/O module	8	Mechanical keying (orange)
4	Removable terminal block (RTB) handle	9	DIN rail locking screw (orange)
5	Removable terminal block with screw (1734-RT B) or spring clamp (1734-RTBS)	10	Module wiring diagram

### **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:

**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.

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 snaps into place.

### 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 horizontal referenced to the base.

**WARNING:** 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.

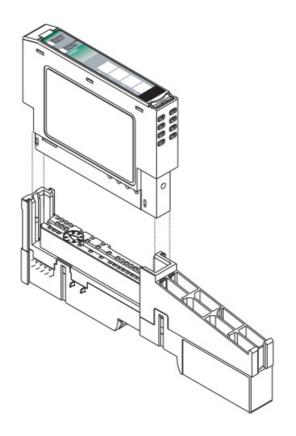
- To install the module, proceed as follows:
  - 1. Use a bladed screwdriver to rotate the keyswitch on the mounting base clockwise until the number required for the type of module you are installing aligns with the notch in the base.
  - Verify that the DIN rail locking screw is in the horizontal position.You cannot insert the module if the locking mechanism is unlocked.

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

Verify the DIN rail locking screw is in the horizontal position.

Rockwell Automation Publication 1734-IN051L-EN-E - September 2022

3. Insert the module straight down into the mounting base and press to secure. The module locks into place.

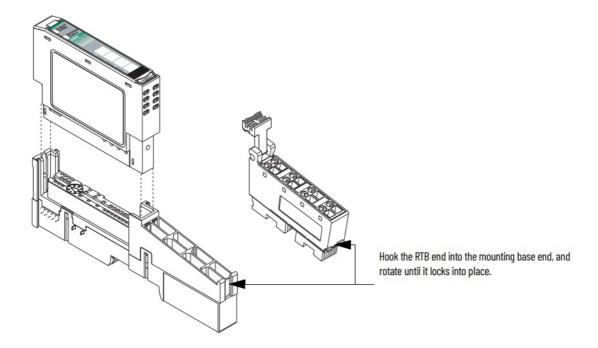


#### **Install the Removable Terminal Block**

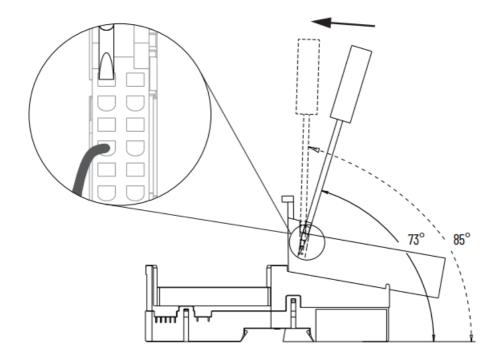
A Removable Terminal Block (RTB) is supplied with your wiring base assembly. To remove, pull up on the RTB handle. This allows the mounting base to be removed and replaced as necessary without removing any of the wirings. To reinsert the Removable Terminal Block, proceed as follows:

**WARNING:** When you connect or disconnect the Removable Terminal Block (RTB) with field side power applied, an electrical arc can occur. This could 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° (blade surface is parallel with top surface of the opening) and push up gently.



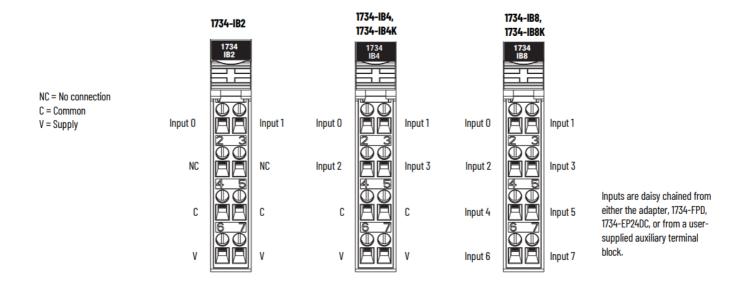
# **Remove a Mounting Base**

- To remove a mounting base, you must remove any installed module, and the module that is installed in the base to the right. Remove the Removable Terminal Block, if wired.
  - **WARNING:** 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.
  - **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. 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.
  - 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. Lift straight up to remove.

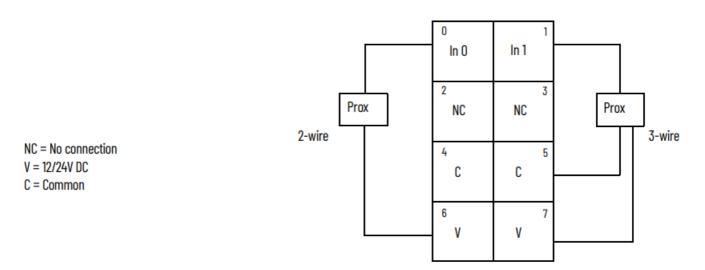
# Wire the Module

- 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.
- WARNING: To comply with the CE Low Voltage Directive (LVD), this equipment must be powered from a source compliant with the following: Safety Extra Low Voltage (SELV) or Protected Extra Low Voltage (PELV).

#### **POINT I/O Module**



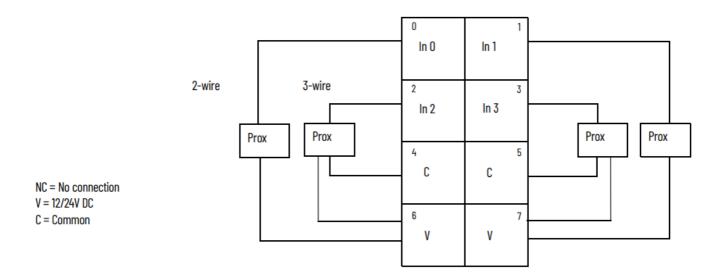
# Wiring for 1734-IB2 - Sink Input



Channel	Input	Common	Voltage
0	0	4	6
1	1	5	7

Connect common on 3-wire proximity switches. 12/24V DC is supplied through the internal power bus.

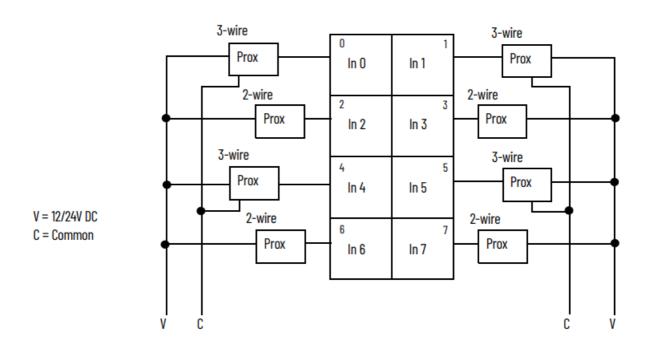
Wiring for 1734-IB4, 1734-IB4K - Sink Input



Channel	Input	Common	Voltage
0	0	4	6
1	1	5	7
2	2	4	6
3	3	5	7

Connect common on 3-wire proximity switches. 12/24V DC is supplied through the internal power bus.

# Wiring for 1734-IB8, 1734-IB8K - Sink Input

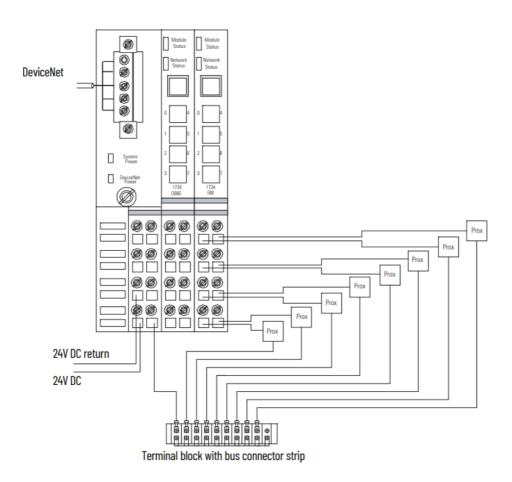


Channel	Input	Channel	Input
0	0	4	4
1	1	5	5
2	2	6	6
3	3	7	7

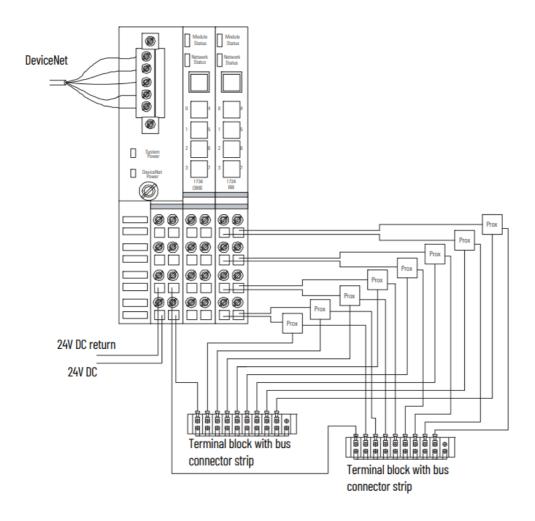
Daisy chain common and power connections from 1734 adapter, 1734-FPD, 1734-EP24DC, or from user-supplied external auxiliary terminal block.

**Note:** When connecting multiple wires in a termination point, make sure that both wires are the same gauge and type.

# Wiring Example for 1734-IB8, 1734-IB8K Using 2-Wire Proximity Switches



Wiring Example for 1734-IB8, 1734-IB8K Using 3-Wire Proximity Switches



# Communicate with the Module

POINT I/O modules send (consume) and receive (produce) I/O data (messages). You map this data onto the processor memory. These modules produce 1 byte of input data (scanner Rx). It does not consume I/O data (scanner Tx).

# Default Data Map for 1734-IB2

Message size: 1 Byte

	7	6	5	4	3	2	1	0
Produces (Rx)							l1	10
Consumes (Tx)	No consumed data							

#### Where:

- I1 = Channel 1,
- 10 = Channel 0,
- 0 = Off, 1 = On

# Default Data Map for 1734-IB4, 1734-IB4K

Message size: 1 Byte

	7	6	5	4	3	2	1	0
Produces (Rx)					13	12	l1	10
Consumes (Tx)	No consumed data							

#### Where:

- I3 = Channel 3,
- I2 = Channel 2,
- I1 = Channel 1,
- 10 = Channel 0,
- 0 = Off, 1 = On

# Default Data Map for 1734-IB8, 1734-IB8K

Message size: 1 Byte

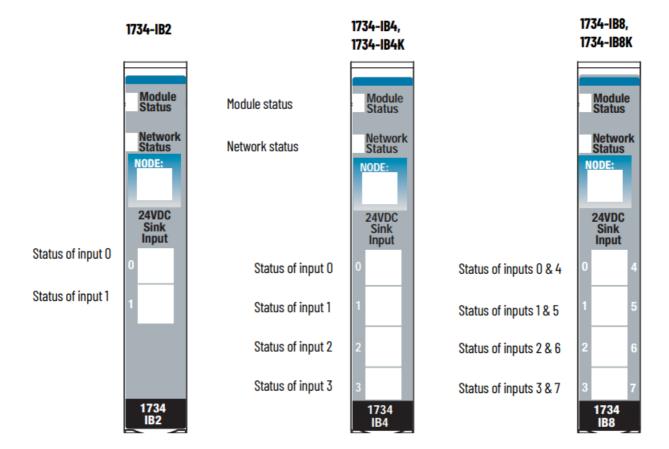
	7	6	5	4	3	2	1	0
Produces (Rx)	17	16	15	14	13	12	I1	10
Consumes (Tx)	No consumed data							

#### Where:

- I7 = Channel 7,
- 16 = Channel 6,
- I5 = Channel 5,
- I4 = Channel 4,
- I3 = Channel 3,
- I2 = Channel 2,
- I1 = Channel 1,
- 10 = Channel 0,
- 0 = Off, 1 = On

# **Interpret Status Indicators**

See the following diagram and table for information on how to interpret the status indicators:



**Indicator Status for Modules** 

	Status	Description
	Off	No power applied to device.
	Green	Device operating normally.
	Flashing green	Device needs commissioning due to missing, incomplete, or incorrect configuration.
Module status	Flashing red	Recoverable fault.
	Red	Unrecoverable fault – may require device replacement.
	Flashing red/green	Device is in self-test mode.
		Device is not online:
	Off	- Device has not completed dup_MAC-id test.
		Device not powered – check module status indicator.
	Flashing green	Device is online but has no connections in the established state.
	Green	Device is online and has connections in the established state.
	Flashing red	One or more I/O connections are in timed-out state.
Network status	Red	Critical link failure – failed communication device. Device detected err or that prevents it from communicating on the network.
	Flashing red/green	Communication faulted device – the device has detected a network ac cess error and is in communication faulted state. Device has received and accepted an Identity Communication Faulted Request – long proto col message.
I/O status	Off	Input is in the off state.
i/O status	Yellow	Input is in the on state.

# Specifications

POINT I/O Input Module – 1734-IB2, 1734-IB4, 1734-IB4K, 1734-IB8, 1734-IB8K

Attribute	Value				
	<b>1734-IB2</b> – 2 (1 group	of 2), sinking			
Inputs per module	<b>1734-IB4, 1734-IB4K</b> – 4 (1 group of 4), sinking				
	<b>1734-IB8, 1734-IB8K</b> – 8 (1 group of 8), sinking				
Voltage, on-state, min	10V DC	10V DC			
Voltage, on-state, nom	24V DC				
Voltage, on-state, max	28.8V DC				
Current, on-state, min	2 mA				
Current, on-state, nom	4 mA @ 24V DC				
Current, on-state, max	5 mA				
Voltage, off-state, max	5V DC				
Current, off-state, min	1.5 mA				
Impedance, input, nom	3.6 kΩ				
Impedance, input, max	4.7 kΩ				
Input filter time(1) Off-to-on On-to-off	·	063 ms (user-selectable) 063 ms (user-selectable)			
	1734-IB2 734-IB8K	1734-IB4, 1734-IB4K	1734-IB8, 1		
	0 - Input 0	0 - Input 0	0 - Input 0		
	1- Input 1	1 – Input 1	1 – Input 1		
	2 – No connection	2 – Input 2	2 – Input 2		
	3 – No connection	3 – Input 3	3 – Input 3		
Field wiring terminations	4 – Common	4 – Common	4 – Input 4		
	5 – Common	5 – Common	5 – Input 5		
	6 – User supply	6 – User supply	6 – Input 6		
	7 – User supply	7 – User supply	7 – Input 7		

Input off-to-on filter time is the time from a valid input signal to recognition by the module. Input on-to-off time is the time from a valid input signal to recognition by the module.

# **General Specifications(1)**

Attribute	Value

Terminal base screw torque	0.8 N•m (7 lb•in)
Module location	1734-TB or 1734-TBS wiring base assembly
Indicators, network status	1 green/red, logic side
Indicators, module status	1 green/red, logic side
	1734-IB2 – 2 yellow, logic side
Indicators, input status	<b>1734-IB4</b> , <b>1734-IB4K</b> – 4 yellow, logic side
	<b>1734-IB8, 1734-IB8K</b> – 8 yellow, logic side
POINTBus™ current, max	75 mA @ 5V DC
	<b>1734-IB2</b> – 0.7 W
Power dissipation @ 28.8V DC, m	<b>1734-IB4, 1734-IB4K</b> – 1.0 W
ax	<b>1734-IB8, 1734-IB8K</b> – 1.6 W
	<b>1734-IB2</b> – 2.4 BTU/hr
Thermal dissipation @ 28.8V DC,	<b>1734-IB4, 1734-IB4K</b> – 3.4 BTU/hr
max	<b>1734-IB8, 1734-IB8K</b> – 5.5 BTU/hr
Isolation voltage	50V (continuous), Reinforced Insulation Type Tested @ 2500V DC for 60 s, field-side to system
Field power supply voltage, nom	24V DC
Field power voltage range	10 28.8V DC
	56 x 12 x 75.5 mm
Dimensions, HxWxD, approx.	(2.2 x 0.47 x 2.97 in.)
Wiring category(2) (3)	1 – on signal ports
Wire size	Determined by installed terminal block.
	<b>1734-IB2</b> – 30.9 g (1.09 oz)
Weight, approx.	<b>1734-IB4, 1734-IB4K</b> – 31.8 g (1.12 oz)
	<b>1734-IB8, 1734-IB8K</b> – 32.3 g (1.14 oz)
Enclosure type rating	None (open-style)
Keyswitch position	1
North American temp code	T4A
UKEX/ATEX temp code	T4
IECEx temp code	T4

- 1. IEC 3 24V DC input compliant.
- 2. Use this conductor category information for planning conductor routing as described in Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1.
- 3. Use this conductor category information for planning conductor routing as described in the appropriate System Level Installation Manual.

# **Environmental Specifications**

Attribute	Value		
	IEC 60068-2-1 (Test Ad, Operating Cold),		
Temperature, operating	IEC 60068-2-2 (Test Bd, Operating Dry Heat),		
	IEC 60068-2-14 (Test Nb, Operating Thermal Shock):		
	-20 °C ≤ Ta ≤ +55 °C (-4 °F ≤ Ta ≤ +131 °F)		
Temperature, surrounding air, max	55 °C (131 °F)		
Temperature, nonoperating	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)		
Relative humidity	IEC 60068-2-30 (Test Db, Unpackaged Nonoperating Damp Heat): 595% n oncondensing		
Vibration	IEC 60068-2-6 (Test Fc, Operating): 5 g @ 10500 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		
Emissions	IEC 61000-6-4		

ESD immunity	IEC 61000-4-2: 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 806000 MHz
EFT/B immunity	IEC 61000-4-4: ±4 kV @ 5 kHz on signal ports
Surge transient immunity	±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 kHz80 MHz

# Certifications

Certification (when product i s marked)(1)	Value		
	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584.		
c-UL-us	UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810.		
	UK Statutory Instrument 2016 No. 1091 and European Union 2014/30/EU EM C Directive, compliant with: EN 61326-1; Meas./Control/Lab., Industrial Requirements		
	EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions		
UK and CE	EN 61131-2; Programmable Controllers (Clause 8, Zone A & B)		
	UK Statutory Instrument 2012 No. 3032 and European Union 2011/65/EU Ro HS, compliant with: EN IEC 63000; Technical documentation		
RCM	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Indu strial Emissions		
Ex	UK Statutory Instrument 2016 No. 1107 and European Union 2014/34/EU AT EX Directive, compliant with: EN IEC 60079-0; General Requirements		
	EN IEC 60079-7; Explosive Atmospheres, Protection "e" II 3 G Ex ec IIC T4 G c		
	DEMKO 04 ATEX 0330347X UL22UKEX2478X		
	IECEx System, compliant with:		
	IEC 60079-0; General Requirements		
IECEx	IEC 60079-7; Explosive Atmospheres, Protection "e" II 3 G Ex ec IIC T4 Gc		
	IECEx UL 20.0072X		
КС	Korean Registration of Broadcasting and Communications Equipment, compliant with: Article 58-2 of Radio Waves Act, Clause 3		
EAC	Russian Customs Union TR CU 020/2011 EMC Technical Regulation		
Morocco	Arrêté ministériel n° 6404-15 du 29 ramadan 1436		
	CNCA-C23-01		
ccc	CNCA-C23-01 CCC Implementation Rule Explosion-Proof Electrical Products CCC: 2020122309111607		

See the Product Certification link at <u>rok.auto/certifications</u> for Declaration of Conformity, Certificates, and other certification details.

# **Rockwell Automation Support**

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, Knowl edgebase, and product notification updates.	rok.auto/su pport
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/ph onesupport
Technical Documentation Ce nter	Quickly access and download technical specifications, installat ion instructions, and user manuals.	rok.auto/tec hdocs
Literature Library	Find installation instructions, manuals, brochures, and technic al data publications.	rok.auto/lite rature
Product Compatibility and Do wnload Center (PCDC)	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	rok.auto/pc dc

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Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at rok.auto/docfeedback.

# **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/pec.

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#### **Documents / Resources**



Allen-Bradley 1734-IB2 POINT I/O Input Modules [pdf] Instruction Manual 1734-IB2 POINT I O Input Modules, 1734-IB2, POINT I O Input Modules, Input Modules, Modules

# References

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