



1734 POINT I/O Protected Output Module

Catalog numbers 1734-OB2E, 1734-OB4E, 1734-OB8E, Series C

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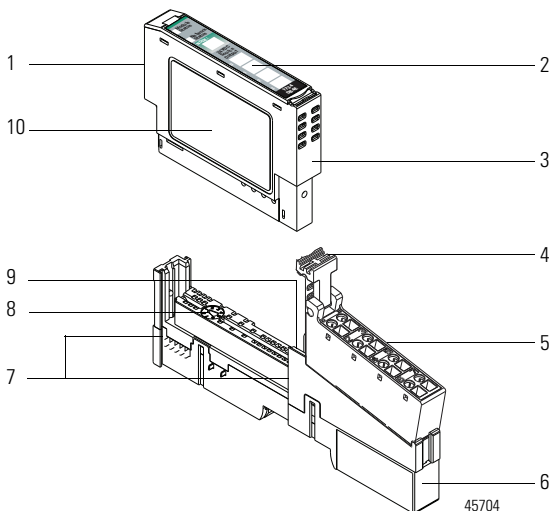
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Before You Begin

You can use these Series C POINT I/O™ Protected Output modules with DeviceNet and PROFIBUS adapters. If you are using RSLogix 5000 software, version 11 or higher, you can also use the Series C modules with ControlNet and Ethernet adapters.

Use this diagram to identify the external features of the module. The 1734-OB4E module is shown here.

POINT I/O Protected Output Module



	Description		Description
1	Module locking mechanism	6	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	10	Module wiring diagram

Note: The wiring base assembly comprises the mounting base, 1734-MB, and the Removable Terminal Block, 1734-RTB or 1734-RTBS.

Communicate with Your Module

I/O messages are sent to (consumed) and received from (produced) the POINT I/O modules. These messages are mapped onto the processor's memory.

The 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 1734-OB2E

	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 1734-OB4E

	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 1734-OB8E

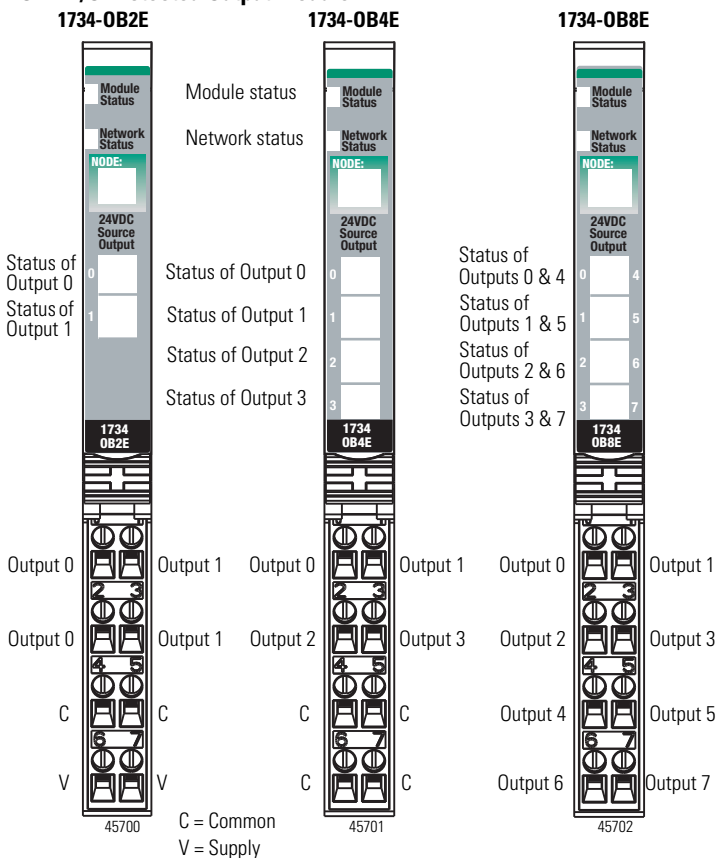
	7	6	5	4	3	2	1	0	
Produces (scanner Rx)	Ch7	Ch6	Ch5	Ch4	Ch3	Ch2	Ch1	Ch0	Channel status
Where: 0 = No error, 1 = Error									

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									

Wire the Module

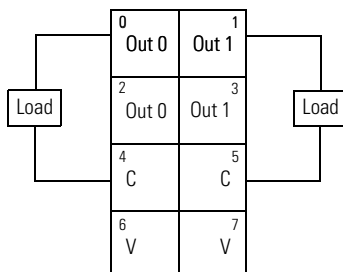
POINT I/O Protected Output Module



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.

Output Module 1734-OB2E

V = 12/24V DC, C = Common
Field power is supplied by the
internal power bus

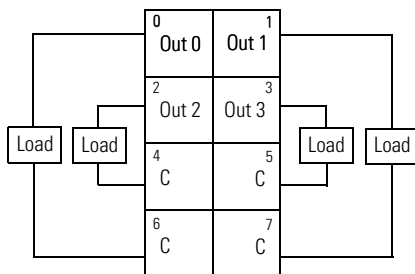


Channel	Output terminal	Common terminal	Power
Channel 0	0, 2	4	6
Channel 1	1, 3	5	7

Module power is supplied by the internal power bus.

Output Module 1734-OB4E

V = 12/24V DC, C = Common
Field power is supplied by the
internal power bus



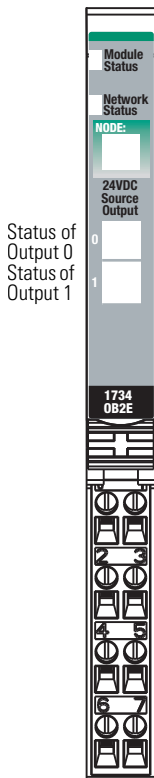
Channel	Output terminal	Common terminal
Channel 0	0	6
Channel 1	1	7
Channel 2	2	4
Channel 3	3	5

Module power is supplied by the internal power bus.

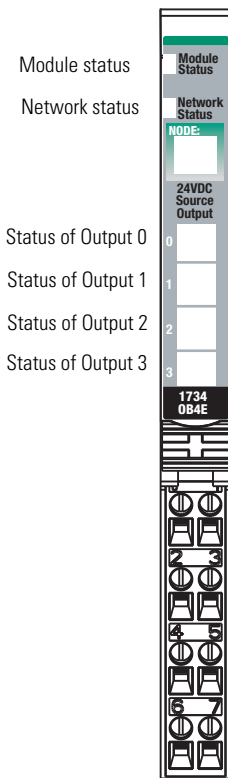
Interpret Status Indicators

Refer to the following diagram and table for information on how to interpret the status indicators.

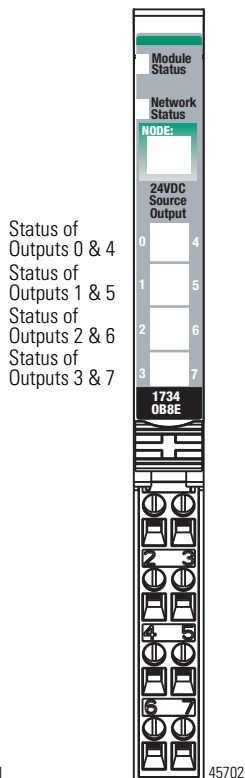
1734-0B2E



1734-0B4E



1734-0B8E



Specifications

POINT I/O Protected Output Module – 1734-OB2E, 1734-OB4E, 1734-OB8E

Attribute	Value		
Number of outputs, non-isolated, sourcing	1734-OB2E – 2 (1 group of 2) 1734-OB4E – 4 (1 group of 4) 1734-OB8E – 8 (1 group of 8)		
On-state voltage, min	10V DC		
On-state voltage, nom	24V DC		
On-state voltage, max	28.8V DC		
On-state voltage drop, max	0.2V DC		
On-state current, min, per channel	1.0 mA		
Off-state voltage, max	28.8V DC		
Off-state leakage, max	0.5 mA		
Output signal delay ⁽¹⁾ , max Off to On On to Off	0.1 ms 0.1 ms		
Output current rating	1734-OB2E – 1.0 A per output, 2.0 A max per module 1734-OB4E, 1734-OB8E – 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)	1734-OB2E 2 yellow – output status 2 red – output fault 2 green/red – module/network status	1734-OB4E 4 yellow – output status 4 red – output fault 2 green/red – module/network status	1734-OB8E 8 yellow – output status 8 red – output fault 2 green/red – module/network status
Keyswitch position	1		
Field wiring terminations	1734-OB2E 0 – Output 0 1 – Output 1 2 – Output 0 3 – Output 1 4 – Common 5 – Common 6 – Supply 7 – Supply	1734-OB4E 0 – Output 0 1 – Output 1 2 – Output 2 3 – Output 3 4 – Common 5 – Common 6 – Common 7 – Common	1734-OB8E 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 deenergization.

General Specifications

Attribute	Value
Terminal base screw torque	0.8 Nm (7 lb-in.)
Module location	1734-TB or 1734-TBS wiring base assembly
POINTBus current, max	75 mA @ 5V DC
Power dissipation @ 28.8V DC, max	1734-OB2E – 0.8 W 1734-OB4E – 1.2 W 1734-OB8E – 2.0 W
Thermal dissipation @ 28.8V DC, max	1734-OB2E – 2.7 BTU/hr 1734-OB4E – 4.1 BTU/hr 1734-OB8E – 6.8 BTU/hr
Isolation voltage	50V (continuous), Reinforced Insulation Type Tested @ 2500V DC for 60 s, field-side to system
External DC power supply voltage, nom	24V DC
External DC power voltage range	10...28.8V DC
External DC power supply current	1734-OB2E – 8 mA 1734-OB4E – 16 mA 1734-OB8E – 32 mA
Dimensions, HxWxD	56.0 x 12.0 x 75.5 mm (2.21 x 0.47 x 2.97 in.)
Wiring category ⁽¹⁾	1 – on signal ports
Wire size	Determined by installed terminal block
Weight (approx.)	1734-OB2E – 32.60 g (1.15 oz) 1734-OB4E – 33.17 g (1.17 oz) 1734-OB8E – 35.4 g (1.25 oz)
Enclosure type rating	None (open-style)
North American temp code	1734-OB2E – T4A 1734-OB4E – T4A 1734-OB8E – T4
IEC temp code	T4

⁽¹⁾ Use this conductor category information for planning conductor routing as described in Industrial Automation Wiring and Grounding Guidelines, publication [1770-IN041](#).