# UL Type Examination Certificate

**ATEX Directive 2014/34/EU**

## Certificate

**DEMKO 04 ATEX 0330347X**
**Rev. 28**

**Issue date**
2004-02-17

**Re-issued**
2026-04-09

This is to acknowledge that

## Rockwell Automation

**1201 S. 2nd St., Milwaukee, WI 53204 USA**

has had

## Programmable Industrial Controllers I/O Modules – 1734 Series

evaluated and meets the requirements of the standards

**EN IEC 60079-0:2018**
**EN IEC 60079-0:2018/A11:2024**
**EN 60079-7:2015**
**EN IEC 60079-7:2015/A1:2018**
**EN 60079-7:2015/A11:2024**
**EN IEC 60079-15:2019**

Test Report No. **US/UL/ExTR20.0074/12**

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This is to certify that the sample(s) of the product described herein ("Certified Product") has been investigated and found in compliance with the above mentioned harmonized Standard(s) per Article 12 of Directive 2014/34/EU of the European Parliament and of the Council relating to equipment and protective systems for use in potentially explosive atmospheres indicated on this Certificate, in accordance with the UL Type Examination Certificate Scheme Requirements.
The responsibilities of manufacturers, their authorized representatives are provided in Articles 6 and 7 of the Directive 2014/34/EU. This remains the responsibility of the manufacturer and authorized representative and is not covered as part of this certificate.
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## Description of product

These devices are open-type programmable controllers for use in industrial applications. Model 1734-IA2 is a two-channel point input module, while Model 1734-IA4 is a four-channel point input module. Model 1734-OA2 is a two-channel point output module, while Model 1734-OA4 is a four-channel point output module. Model 1734-OW2 is a two-point relay output module. Model 1734-AENTR is an Ethernet adapter that provides connectivity to an Ethernet/IP network with two RJ45 connectors. Model 1734-IE4C is a four-channel analog current input module. Model 1734-IE8C is an eight-channel analog current input module.

Model 1734-OE4C is a four-channel current output module.

Model 1734-IB8 is an eight-channel point sink input module. Model 1734-OB8 is an eight-channel point output module. Model 1734-OB8E is an eight-channel point output module with diagnostic capability. Model 1734-OB2 is similar to 1734-OB8 but has two outputs while models 1734-OB4 and 1734-OB4K have four outputs. Model 1734-OB4K is identical to the 1734-OB4 model but with conformal coating.

Model 1734-OW4 is a four-point relay output module. Model 1734-AENT is a communications adapter that provides an interface for controlling and communicating with point input/output modules from an Ethernet network. Model 1734-IJ is an encoder/counter with three 5 VDC inputs. Model 1734-IK is an encoder/counter with three 24 VDC inputs.

Model 1734-SSI is a 24 VDC 8-point thermocouple/RTD module. Model 1734-VHSC5 is a high-speed counter module with three 5 VDC inputs and two outputs. Model 1734-VHSC24 is a high-speed counter module with three 24 VDC inputs and two outputs.

Model 1734-4IOL is a four-channel IO-Link Master Module that provides four channels that can be individually configured as IO-Link master or as a standard digital I/O module.

Most of these devices plug into terminal blocks for electrical connection. The Terminal blocks are 1734-RTB, 1734-RTBS, 1734-RTB3, 1734-RTB3S, 1734-RTBCJC, 1734-TB, 1734-TBS, 1734-TB3, 1734-TB3S, 1734-TBCJC, 1734-MB, 1734-TOP, 1734-TOPS, 1734-TOP3, 1734-TOP3S.

The optical radiation output of the indicator LEDs of the devices with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015.

The devices consist of the following modules:

| Module | Protection Method | Description | Electrical Ratings |
|---|---|---|---|
| 1734-ACNR | ec | Control Net Adapter | Input Requirements: 24 Vdc, 425 mA<br>Pointbus Output: 5 Vdc, 1 A<br>User Power: 24 Vdc, 10 A |
| 1734-ADN,<br>1734-ADNK | ec | I/O Adapter | Dnet Power: 24 Vdc, 50 mA<br>Output: 5 Vdc, 1 A<br>User Power: 24 Vdc, 10 A |
| 1734-AENT,<br>1734-AENTK | ec | Ethernet Adapter | Field power supply: 24Vdc, 10A max.<br>Filed Output: 24Vdc, 9A max.<br>Module Input: 24Vdc, 1000mA<br>Pointbus Output: 5Vdc, 1A max. |
| 1734-AENTR,<br>1734-AENTRK | ec | POINT I/O Dual-port EtherNet/IP Adapter Ethernet | Field Power Supply: 10-28.8 Vdc, 10 Amax<br>Field Power Output: 10-28.8 Vdc, 9 Amax<br>Module Input: 10-28.8 Vdc, 1000 mA<br>PointBus Output: 5 Vdc, 0.8 Amax |
| 1734-EP24DC,<br>1734-EP24DCK | ec | Expansion I/O Adapter | Input Requirements: 24 Vdc, 400 mA/12 Vdc, 800 mA<br>Pointbus Output: 5 Vdc, 1.3 A<br>Field Power: 24 Vdc/12 Vdc, 10 A |
| 1734-FPD,<br>1734-FPDK | ec | I/O Adapter | User Power: 10 A, 24 Vdc, 120 Vac 50/60 Hz |
| 1734-IA2 | ec | Two-channel point input | Backplane: 5 Vdc, 75 mA<br>Input: 120 Vac, 10 mA, 50/60 Hz |
| 1734-IA4,<br>1734-IA4K | ec | Four-channel point input | Backplane: 5 Vdc, 75 mA<br>Input: 120 Vac, 10 mA, 50/60 Hz |
| 1734-IB2 | ec | 2 Point Sink Input | Backplane: 5Vdc, 75 mA<br>Input: 24Vdc, 5mA |
| 1734-IB4,<br>1734-IB4K | ec | 4 Point Sink Input | Backplane: 5Vdc, 75 mA<br>Input: 24Vdc, 5mA |
| 1734-IB8,<br>1734-IB8K | ec | Eight Point Sink Input | Backplane: 5 Vdc, 75 mA<br>Input: 24 Vdc, 5 mA |
| 1734-IE2C,<br>1734-IE2CK | ec | 2 Point Analog current input | Input: 0 to 20 mA<br>Supply: 24 Vdc, 10 mA<br>Backplane: 5Vdc, 75 mA |
| 1734-IE2V,<br>1734-IE2VK | ec | 2 Point voltage input | Input: -10 to +10Vdc<br>Supply: 24 Vdc, 15 mA<br>Backplane: 5Vdc, 75 mA |
| 1734-IE4C,<br>1734-IE4CK | ec | Four-channel analog current input module | Field Power Supply: 10-28.8Vdc, 20mA, Class 2<br>Input: 4-20mA or 0-20mA<br>Pointbus Output: 5Vdc, 75mA |
| 1734-IE8C,<br>1734-IE8CK | ec | Eight-channel analog current input module | Field Power Supply: 10-28.8Vdc, 30mA, Class 2<br>Input: 4-20mA or 0-20mA<br>Pointbus Output: 5Vdc, 75mA |



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|---|---|---|---|
| 1734-IJ | ec | Encoder/<br>Counter with three 5Vdc inputs | Backplane: 5Vdc, 160mA<br>Input: 5Vdc, 19.1mA |
| 1734-IK | ec | Encoder/<br>Counter with three 24Vdc inputs | Backplane: 5Vdc, 160mA<br>Input: 24Vdc, 10.2mA |
| 1734-IR2,<br>1734-IR2K | ec | 2 Point RTD Input | Backplane: 5Vdc, 220mA<br>Input: 0-600 ohms<br>RTD Types: Pt 100 & 200 Ohm<br>Ni 100 & 120 Ohm, Cu 10 Ohm |
| 1734-IT2I,<br>1734-IT2IK | ec | 2 Point Isolated Thermocouple Input module | Backplane: 5Vdc, 175mA<br>Input: ±75mVdc |
| 1734-IV2 | ec | 2 Point Source Input | Backplane: 5Vdc, 75 mA<br>Input: 24Vdc, 5mA |
| 1734-IV4 | ec | 4 Point Source Input | Backplane: 5Vdc, 75 mA<br>Input: 24Vdc, 5mA |
| 1734-OA2 | ec | Two-channel point output | Backplane: 5 Vdc, 75 mA<br>Output: 120 Vac, 50/60 Hz<br>0.75 A maximum per channel, pilot duty<br>1.5 A maximum per Module at 45°C<br>1.3 A maximum per Module at 55°C |
| 1734-OA4,<br>1734-OA4K | ec | Four-channel point output | Backplane: 5 Vdc, 75 mA<br>Output: 120 Vac, 50/60 Hz<br>0.75 A maximum per channel, pilot duty<br>2.0 A maximum per Module at 45°C<br>1.4 A maximum per Module at 55°C |
| 1734-OB2E | ec | 24Vdc, 2 Point Output module | Output: 24 Vdc, 1.0A, Pilot Duty<br>Backplane: 5Vdc, 75mA |
| 1734-OB4E | ec | 24Vdc, 4 Point Output module | Output: 24 Vdc, 1.0A, Pilot Duty<br>Backplane: 5Vdc, 75mA |
| 1734-OB8,<br>1734-OB8K | ec | 24Vdc, Eight Point Output module | Output: 24 Vdc, 1.0 A, Pilot Duty<br>Backplane: 5 Vdc, 75 mA |
| 1734-OB8E,<br>1734-OB8EK | ec | 24Vdc, Eight Point Output module with diagnostic | Output: 24 Vdc, 1.0 A, Pilot Duty<br>Backplane: 5 Vdc, 75 mA |
| 1734-OE2C,<br>1734-OE2CK | ec | 2 Point analog current output | Output: 4-20 mA, 0-20 mA<br>Nominal Supply: 24 Vdc, 70 mA<br>Supply Range: 10-28.8Vdc<br>Backplane: 5Vdc, 75 mA |
| 1734-OE2V,<br>1734-OE2VK | ec | 2 Point analog voltage output | Output: 0 to +10V dc, 3mA<br>Output: -10 to +10Vdc, 3mA<br>Supply: 24 Vdc, 35 mA<br>Backplane: 5Vdc, 75 mA |
| 1734-OE4C,<br>1734-OE4CK | ec | Four channel current output module | Field Power Supply: 10-28.8Vdc, 220mA, Class 2<br>Output: 4-20mA or 0-20mA<br>Pointbus Output: 5Vdc, 75 mA |
| 1734-OW2 | ec nC | Two point relay output | Backplane: 5Vdc, 80mA<br>Contact: 5-30 Vdc, 2 A, Resistive; R150<br>120 Vac, 50/60 Hz, 1800VA make, 180VA break |
| 1734-OW4,<br>1734-OW4K | ec nC | Four point relay output | Backplane: 5 Vdc, 90 mA<br>Contact: 5-30 Vdc, 2 A, Resistive; R150<br>120 Vac, 50/60 Hz, 1800VA make, 180VA break |
| 1734-PDN,<br>1734-PDNK | ec | I/O adapter | DNet Power: 24V dc, 400 mA, Class 2<br>Output: 1.3A, 5 V dc<br>User Power: 24Vdc, 120/240 Vac 50/60Hz, 10A |
| 1734-SSI,<br>1734-SSIK | ec | 24Vdc, 8 Point Thermocouple/RTD Module | Backplane: 110mA, 5Vdc<br>Field: 450mA,10- 28.8Vdc<br>Ssi Sensor Power: 450mA, 10-28.8Vdc |
| 1734-VHSC24,<br>1734-VHSC24K | ec | High speed counter with three 24Vdc inputs and two outputs | Backplane: 5Vdc, 180mA<br>Input: 24Vdc, 10.2mA<br>Output: 24Vdc, 0.5A, Pilot Duty |
| 1734-VHSC5 | ec | High speed counter with three 5Vdc inputs and two outputs | Backplane: 5Vdc, 180mA<br>Input: 5Vdc, 19.1mA<br>Output: 24Vdc, 0.5A, Pilot Duty |
| 1734-4IOL, 1734-4IOLK | ec | Point I/O 4 Channel IO-Link Master Module | Backplane: 5 Vdc, 100 mA<br>Input: 24 Vdc, 12 mA<br>Output: 24 Vdc, 0.15 A/channel, 0.6 A max/module |
| 1734-OB2 | ec | 24Vdc, Two Point Output module | Output: 24 Vdc, 1.0 A, Pilot Duty<br>Backplane: 5 Vdc, 75 mA |
| 1734-OB4,<br>1734-OB4K | ec | 24Vdc, Four Point Output module | Output: 24 Vdc, 1.0 A, Pilot Duty<br>Backplane: 5 Vdc, 75 mA |

Some models may have an additional suffix 'K' to indicate conformal coating, as noted in the table above, all other construction and details are same as models without suffix 'K'.



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## Nomenclature

N/A

## Ex marking

**II 3 G Ex ec IIC T4 Gc (all models except for 1734-OW2, 1734-OW4)**

**II 3 G Ex ec nC IIC T4 Gc (only for 1734-OW2 and 1734-OW4)**

## Temperature range

The relation between ambient temperature and the assigned temperature class is as follows:

| Ambient temperature range | Temperature class |
|---|---|
| -20°C ≤ Ta ≤ +55°C | T4 |

## Trademark

The trademark A-B Allen-Bradley will be used as the company identifier on the marking label.

## Ratings

The modules are provided with the electrical ratings as listed in Description of Product.

## Routine tests

No routine tests are necessary.

## Descriptive documents

The scheduled drawings are listed in the report no. provided under item “Test Report No.” on page 1 of this UL Type Examination Certificate.

## Specific Conditions of Use

- This equipment shall be mounted in an ATEX 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 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 value at the supply terminals to the equipment.

## Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed on page 1.



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