

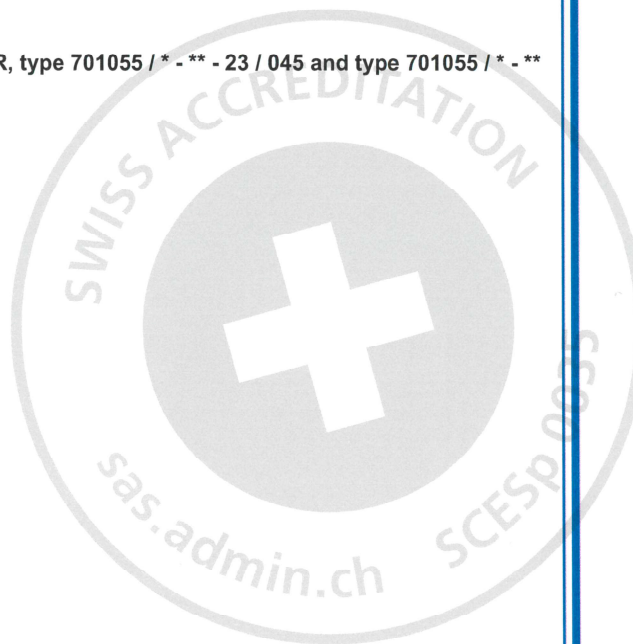


# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX SEV 22.0017X** Page 1 of 5 [Certificate history:](#)  
Status: **Current** Issue No: 1 Issue 0 (2022-11-15)  
Date of Issue: 2023-04-27  
Applicant: **JUMO GmbH & Co. KG**  
Moritz-Juchheim-Strasse 1  
36039 Fulda  
Germany  
Equipment: **Two-State Controller with Ex (eb) Input JUMO exTHERM-DR, type 701055 / \* - \*\* - 23 / 045 and type 701055 / \* - \*\* - 25 / 045**  
Optional accessory: ---  
Type of Protection: **"e", "t"**  
Marking: [Ex eb Gb] IIC  
[Ex tb Db] IIIC



Approved for issue on behalf of the IECEx  
Certification Body:

**Thomas Köhntopp**

Position:

**Manager Product Certification**

Signature:  
(for printed version)

Date:  
(for printed version)

2023-04-27

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Euofins Electric & Electronic Product Testing AG**  
Luppenstrasse 3  
8320 FEHRALTORF .  
Switzerland



E&E



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Issue No: 1

Manufacturer: **JUMO GmbH & Co. KG**  
Moritz-Juchheim-Strasse 1  
36039 Fulda  
Germany

Manufacturing  
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

## STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

**IEC 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-31:2013** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

**IEC 60079-7:2017** Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

## TEST & ASSESSMENT REPORTS:

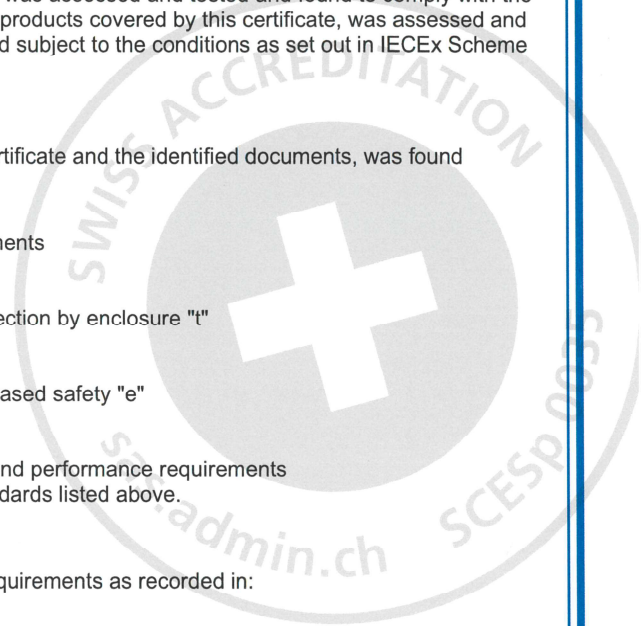
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

**CH/SEV/ExTR22.0018/00**

Quality Assessment Report:

**DE/EPS/QAR23.0003/00**





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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The JUMO exTHERM-DR is a two-state controller for heating or cooling applications. The safe Ex (eb) measuring input allows the direct connection of the corresponding type tested probes. Use of a barrier is no longer required. Other than the relay output "Controller" K1, JUMO exTHERM-DR also has the second relay output K2. It signals when limit values have been exceeded or are not met.

Alternatively, a binary signal of 0/10 V is also available for the controller output or the limit value signaling.

The current measured value or the setpoint value is issued via the standard analog output.

The vibrant display for plain text and with backlight shows information about measured value, setpoint value, limits value, etc. in a clearly arranged manner.

Clear operation enables quick configuration and thereby reduces the startup times.

Alternatively, the configuration and parameterization can also take place via a setup program and the standard USB interface.

## Parameters:

### For types exTHERM-DR 701055 / \* - 23/ 045

Supply circuit only for the connection to a non-intrinsically safe circuit with a (Terminals N and L1) safety-related maximum voltage of

$U_N = 110$  up to 240 V AC +10% / -15%, 48 up to 63 Hz

$U_m = 250$  V

### For types exTHERM-DR 701055 / \* - 25 / 045

Supply circuit only for the connection to a non-intrinsically safe circuit with a (Terminals L- and L+) safety-related maximum voltage of

$U_N = 20$  up to 30 V DC or AC, 48 up to 63 Hz

$U_m = 250$  V

### For all types

Binary connection only for the connection to a non-intrinsically safe circuit with a (Terminals 4 and 5) safety-related maximum voltage of

$U_m = 250$  V

Analogue connection only for the connection to a non-intrinsically safe circuit with a (Terminals 9 and 10) safety-related maximum voltage of

$U_m = 250$  V

Relay connection only for the connection to a non-intrinsically safe circuit with a

(Terminals 11, 12, 13) safety-related maximum voltage and current of

$U_m = 250$  V

$I_{max} = 3$  A

Relay connection only for the connection to a non-intrinsically safe circuit with a

(Terminals 14, 15, 16) safety-related maximum voltage and current of

$U_m = 250$  V

$I_{max} = 3$  A

USB connection only for the connection to a non-intrinsically safe circuit with a

(USB-socket) safety-related maximum voltage of

$U_m = 250$  V

Output circuit in type of protection for increased safety [Ex eb] IIC resp. IIIC with the (Terminals 1, 2, 3 and 6, 7, 8) following maximum values per circuit:

$U_o = 6$  V

$I_o = 41.2$  mA

$P_o = 61.8$  mW

Characteristic line: linear

## SPECIFIC CONDITIONS OF USE: YES as shown below:

- Switching operations may be performed on the electrical circuits (Ex eb) only when the JUMO exTHERM-DR, including all supply lines, is de-energized.
- If it is installed in a separate electrical cabinet, the following warning must be attached to the outside of this electrical cabinet: WARNING: "Caution - This enclosure contains equipment that is part of an ignition protection system according to ISO 80079-37.



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**Equipment (continued):**

Classification of installation and use ..... : Stationary

Ingress protection ..... : IP20

Rated ambient temperature range (°C) ..... : 0 °C ... +55 °C

Rated service temperature range (°C) for Ex Components .... : ----





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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**  
Change of ExCB for quality system. Link to QAR updated.

