

Translation

(1) **EU-Type Examination Certificate**

TÜV NORD

- (2) Equipment and protective systems
intended for use in potentially
explosive atmospheres, **Directive 2014/34/EU**



- (3) **Certificate Number** **TÜV 19 ATEX 244073 X** **issue:** 00

- (4) for the product: Temperature transmitter JUMO dTRANS T06 Ex type 707075 / a-bb-ccc

- (5) of the manufacturer: **JUMO GmbH & Co KG**

- (6) Address: Moritz-Juchheim-Straße 1, 36039 Fulda, Germany

Order number: 8003005500

Date of issue: 2020-05-07

- (7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.

- (8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential ATEX Assessment Report No. 19 203 244073.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018
EN 60079-11:2012

EN ISO 80079-36:2016
EN ISO 80079-37:2016

EN 50495:2010

except in respect of those requirements listed at item 18 of the schedule.

- (10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for Use specified in the schedule to this certificate.

- (11) This EU-Type Examination Certificate relates only to the design, and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

- (12) The marking of the product shall include the following:



II (1) G [Ex ia Ga] IIC or II (1) D [Ex ia Da] IIIC or

II (1) G [Ex h Ga] IIC or II (1) D [Ex h Da] IIIC or

II (2) G [Ex eb Gb] IIC or II (1) D [Ex ta Da] IIIC or II (2) D [Ex tb Db] IIIC

See Specific Conditions for Use

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body

Roder

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(13) SCHEDULE

(14) EU-Type Examination Certificate No. TÜV 19 ATEX 244073 X issue 00

(15) Description of product:

The temperature transmitter JUMO dTRANS T06 Ex, type 707075 / a-bb-ccc is used for temperature measurement and temperature monitoring by means of resistance thermometers or thermocouples. It is designed for mounting on a carrier rail outside the hazardous area.

The temperature limiter and the monitoring unit are used for equipment in hazardous area in protection type Increased Safety Ex "e" [Ex eb] or for Equipment dust ignition protection by enclosure "t" [Ex tb].

The intrinsically safe sensor circuit is safely galvanically isolated from the non-intrinsically safe circuits up to a voltage of 375 V.

Type code:

707075 / a - bb - ccc

Extra codes

000: Without extra code

053: RS485-interface Modbus RTU

Power supply

29: 24 V d.c +10 / -15% SELV or PELV

Version

8: Standard with factory settings

9: Customized configuration

Basic type

Electrical data:

Power supply

(Terminals X401: L1_N_L+_L-)

Only for the connection to a non-intrinsically safe circuit with a safety-related maximum voltage of:

$U_N = 24 \text{ V DC } +10 / -15\% \text{ SELV oder PELV}$

$U_m = 250 \text{ V}$

Analogue output

(Terminals X201: 41_42_43_44)

Only for the connection to a non-intrinsically safe circuit with a safety-related maximum voltage of:

$U_m = 250 \text{ V}$

RS485 circuit

(Terminals X601: 31_32_33_34)

Only for the connection to a non-intrinsically safe circuit with a safety-related maximum voltage of:

$U_m = 250 \text{ V}$

USB Stromkreis

(Terminals X303: 1_2_3_4_5)

Only for the connection to a non-intrinsically safe circuit with a safety-related maximum voltage of:

$U_m = 250 \text{ V}$

Schedule to EU-Type Examination Certificate No. TÜV 19 ATEX 244073 X

issue 00

Sensor circuit
(Terminals X101: 51_52_53_54)

In type of protection intrinsic safety Ex ia IIC resp. Ex ia IIIC
Maximum values:

$U_o = 6 \text{ V}$
 $I_o = 13.3 \text{ mA}$
 $P_o = 19.9 \text{ mW}$
 Characteristic line: linear
 The effective internal capacitance $C_i = 72.6 \text{ nF}$
 The effective internal inductance L_i is negligibly small.

The maximum permissible values for the external inductance L_o and the external capacitance C_o have to be taken from the following table:

Ex ia IIC	$L_o [\text{mH}]$	100	50	20	10	0.2	0.02
	$C_o [\mu\text{F}]$	0.62	0.82	1.12	1.22	3.32	7.32
Ex ia IIIC	$L_o [\text{mH}]$	100	50	20	10	0.2	0.02
	$C_o [\mu\text{F}]$	9.32	10.32	11.32	12.32	30.32	79.32

The values of the table below are only applicable, if the internal inductance L_i (without the cable) or the internal capacitance C_i (without the cable) of the connected device is $\leq 1 \%$ of the below specified values.

If L_i (without the cable) and C_i (without the cable) of the connected device are $> 1 \%$ of the specified values, the specified values of L_o shall be reduced to 50 %.

The reduced capacitance of the external circuit (including cable) shall not exceed 1 μF for group IIIC and 600 nF for group IIC.

Ex ia	IIC	IIIC
Maximum permissible external inductance	0.2 H	0.8 H
Maximum permissible external capacitance	39.32 μF	999.32 μF

Thermal data:

Permissible ambient temperature range

$$-10 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$$

(16) Drawings and documents are listed in the ATEX Assessment Report No. 19 203 244073

(17) Specific Conditions for Use

For applications that require EPL Ga or EPL Da devices, the measurement signal transmitter must be used redundantly ($HFT > 0$).

Only for applications that require EPL Gb or EPL Db devices, the measurement signal transmitter is used as single-channel ($HFT = 0$).

This refers to equipment which does not provide an ignition source in fault-free operation, but has no fault tolerance with regard to ignition protection.

For alternative concepts / applications, the requirements / options according to EN ISO 80079-37 resp. EN 50495 have to be taken into account.

(18) Essential Health and Safety Requirements

No additional ones

- End of Certificate -