Translation

(1) # EU-Type Examination Certificate

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

(3) **Certificate Number** **TÜV 20 ATEX 248751 X** **Issue:** 00

(4) for the product: Temperature switch type **L1X**-xxxxxx-xx-xx-EXI, **T1X**-xxxxxx-xx-xx-EXI, **T2X**-xxxxxx-xx-xx-EXI, **L2H**-xxxxxx-xx-xx-EXI, **ML1H**-xxxxxx-xx-xx-EXI, **T2H**-xxxxxx-xx-xx-EXI and **MT1H**-xxxxxx-xx-xx-EXI

(5) of the manufacturer: **Barksdale GmbH**

(6) Address: Dorn-Assenheimer Str. 27
61203 Reichelsheim
Germany

Order number: 8003007818
Date of issue: See date of signature

(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. 20 203 248751

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018/AC:2020-02 **EN 60079-11:2012**

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 IIC T6 Ga or
II 1 D Ex ia IIIC T_{200}100°C Da

TÜV NORD CERT GmbH, Am TÜV 1, 45307 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 deputy head of the notified body

Digital unterschrieben von Drews Anke
Datum: 2022.08.18 18:50:49 +02'00'

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(13) **S C H E D U L E**

(14) **EU-Type Examination Certificate No. TÜV 20 ATEX 248751 X Issue 00**

(15) **Description of product:**

The temperature switches **L1X**-xxxxxx-xx-xx-EXI, **T1X**-xxxxxx-xx-xx-EXI, **T2X**-xxxxxx-xx-xx-EXI, **L2H**-xxxxxx-xx-xx-EXI, **ML1H**-xxxxxx-xx-xx-EXI, **T2H**-xxxxxx-xx-xx-EXI and **MT1H**-xxxxxx-xx-xx-EXI are used for monitoring and controlling processes with maximum or minimum temperatures. When minimum or maximum temperatures are reached, an electrical signal is triggered by a microswitch.

Type code:

x	x	x	x	-	xx	xxx	x	-	xx	-	EXI	
												Options
											EXI	ATEX (Ex ia)
											A	302 VA steel protective sleeve for capillary tube, reinforced
											WS	316 VA steel protection tube
											W	Brass protection tube
											RD	Manual Reset (only with G-microswitch)
											Sxxx	Factory default
											FX	NEMA 4X Housing
											FE	Epoxy paint coating
											GL	Shipbuilding Approval
												Sensor length / switch
									( )			6 ft capillary
									12			6 ft capillary
									25			6 ft capillary
												Material of the wetted part
							()					Copper sensor
							S					Stainless steel sensor
												Temperature levels
						154			Remote sensor			-45°C….+66°C
						251						10°C…+121°C
						351						66°C….+177°C
						601						149°C…+227°C
						603						160°C…+316°C
						201			Fixed sensor			-45°C….+66°C
						202						10°C….+60°C
						203						24°C….+93°C
						351						38°C….+107°C
						204						-45°C…+93°C
						354						38°C…+177°C
						454						66°C…+232°C
												Microswitch contact
					H							H-microswitch (see data sheet)
					B							B-microswitch (see data sheet)
					G							G-microswitch (see data sheet)
					J							J-Microswitch (see data sheet)
					L							L-Microswitch (see data sheet)
					M							M-Microswitch (see data sheet)
					GM							GM-Microswitch (see data sheet)
					GH							GH-Microswitch (see data sheet)
					S							S-Microswitch (see data sheet)
					AA							AA-Microswitch (see data sheet)
					CC							CC-Microswitch (see data sheet)
					HH							HH-Microswitch (see data sheet)
												Housing
			H									NEMA 4 housing, Aluminum
			X									NEMA 4,7 &9, EX-d, housing, Aluminum
												Microswitch
		1										1 switching point
		2										2 switching points (only for Txx or Lxx devices)
M	**T**											Temperature switch, 1 setpoint model, remote sensor
	T											Temperature switch, remote sensor
M	**L**											Temperature switch, 1 setpoint model, fixed sensor
	L											Temperature switch, fixed sensor

Electrical data

Power supply	In type of protection intrinsic safety Ex ia IIC/IIIC only for the connection to certified intrinsically safe circuits Maximum values: U_i = 28 V I_i = 50 mA P_i = 0.84 W
Effective internal capacitance	C_i is negligibly small
Effective internal inductance	L_i is negligibly small

Thermal data:

Permissible ambient temperature range during operation: -40 °C $\leq$ Ta $\leq$ +75 °C

(16) Drawings and documents are listed in the ATEX Assessment Report No. 20 203 248751

(17) **Specific Conditions for Use:**

1. The size of the nameplate exceeds the permissible area and can therefore be electrostatically charged:
   For IIC Ga uses the temperature switches have to be installed and used in such a way, that electrostatic charging from operation, maintenance and cleaning is excluded.
   For the use in explosive dust atmospheres process-related electrostatic charges, e.g. due to passing media have to be excluded.

2. All metallic parts of the devices have to be included in the local potential equalization.

3. The intrinsically safe circuit of the device is connected to the earth potential, therefore potential equalization has to exist in the entire area of the installation of the intrinsically safe circuit.

4. The housings of the devices consist of more than 10% aluminum, therefore in EPL Ga applications the installation has to be carried out in such a way, that ignition hazard due to impact or friction can be excluded.

5. Some of the available process connections consist of more than 65% copper, therefore, when these devices are used in acetylene atmospheres, they have to be installed in such a way that the creation of acetylides or a risk due to friction or impact can be excluded.

(18) **Essential Health and Safety Requirements:**

No additional ones.

- End of EU-Type Examination Certificate -