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 07 ATEX 347158 X** **Issue:** 00

(4) for the product: CombiTemp Series TCR6, TFRx and TFR5

(5) of the manufacturer: **Baumer A/S**

(6) Address: Runetoften 19
8210 Aarhus V
Denmark

Order number: 8003031034

Date of issue: 2022-04-22

(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. 22 203 293953.

(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:

Ex II 1 G Ex ia IIC T6...T4

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 head of the notified body

Roder

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(13) SCHEDULE

(14) **EU-Type Examination Certificate TÜV 07 ATEX 347158 X Issue 00**

(15) Description of product

The CombiTemp Series comprises a series of several elements, which can be combined to various temperature sensors and transmitters as a building block system.

The components in the system are:

a) Enclosure: DIN form B, Ø80 mm or Ø55 mm stainless steel
b) Process connection – back or side mounted – see datasheet
c) Flex Top transmitters: 2202, 2203, 2204, 2212 or 2222
d) CombiView – (display)
e) Resistance Temperature Detector

Type key:

Valid type numbers for the types are:

TCR6 housing (DIN B enclosure):	**TCR6-xxxx.x1xx.xxxx.xxxx.xxxx**
TFR5 housing (Ø80 mm enclosure):	**TFR5-xxxx.x1xx.xxxx**
TFRx housing (Ø80 or Ø55 mm enclosure):	**TFRx-xxxx.x1xx.xxxx.xxxx.xxxx**

For full type key see manufacturers numbering system.

TFR5:
CombiTemp™ TFR5 is a temperature sensor, based on RTD technology, which is designed for wall mounting or pipe mounting outdoor or indoor use, e.g. cold stores, freezing rooms or production facilities.

CombiTemp™ TFR5 comprises a series of basic elements which can be combined in various ways to a CombiTemp TFR5 temperature sensor. The product offers great flexibility in respect to modification, service and maintenance.

The sensor can be made to feature a RTD output signal or with a built in FlexTop™ temperature transmitter types 2202, 2203, 2204, 2212, 2222 with 4-20mA or HART output. Available with or without display.

TCR6:
CombiTemp™ TCR6 is a temperature sensor, based on RTD technology, which is designed and produced to meet the requirements in general industry where threaded connections are used.

CombiTemp™ TCR6 comprises a series of basic elements which can be combined in various ways to a CombiTemp TCR6 temperature sensor. The product offers great flexibility in respect to modification, service and maintenance.
The sensor can be made to feature a RTD output signal or with a built in FlexTop™ temperature transmitter types 2202, 2203, 2204, 2212, 2222 with 4-20mA or HART output.

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–This temperature transmitter is complementary to the CombiTemp product program with DIN B head (housing) in combination with mainly industrial process connections.

TFRx:
CombiTemp™ TFRx is a temperature sensor, based on RTD technology, which is designed and produced to meet the requirements for hygienic use and for general industry where threaded connections are used.

CombiTemp™ TFRx comprises a series of basic elements which can be combined in various ways to a CombiTemp TFRx temperature sensor. The product offers great flexibility in respect to modification, service and maintenance.

The sensor can be made to feature a RTD output signal or with a built in FlexTop™ temperature transmitter types 2202, 2203, 2204, 2212, 2222 with 4-20mA or HART output. Available with or without display.

Technical data:

For FlexTop™ 2202, 2203 and 2204:

Supply- and Signalcircuit: in type of protection Intrinsic Safety Ex ia IIC
only for connection to a certified intrinsically safe circuit with the following maxim values:

	U_i	=	28	V
	I_i	=	100	mA
	P_i	=	700	mW
effective internal Capacitance	C_i	=	10	nF
with DFON display	C_i	=	25	nF
effective internal Inductance	L_i	=	10	µH
with DFON display	L_i	=	20	nF

For FlexTop™ 2212 and 2222:

Supply- and Signalcircuit: in type of protection Intrinsic Safety Ex ia IIC
only for connection to a certified intrinsically safe circuit with the following maxim values:

	U_i	=	30	V
	I_i	=	95	mA
	P_i	=	750	mW
effective internal Capacitance	C_i	=	11	nF
with DFON display	C_i	=	26	nF
effective internal Inductance	L_i	=	24	µH
with DFON display	L_i	=	34	nF

Relay output: in type of protection Intrinsic Safety Ex ia IIC
only for connection to a certified intrinsically safe circuit with the following maxim values:

	U_i	=	30	V
	I_i	=	75	mA
	P_i	=	750	mW
effective internal Capacitance	C_i	=	10	nF
effective internal Inductance	L_i	=	10	µH

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The ambient temperature range for the devices depends on the temperature class and is as follows:

Equipment	temperature class	ambient temperature range	
		With DFON display	Without display
Flextop 2202, 2203, 2204	T6		$-40°C \leq T_{amb} \leq +50°C$
	T5	$-20°C \leq T_{amb} \leq +60°C$	$-40°C \leq T_{amb} \leq +85°C$
	T4	$-20°C \leq T_{amb} \leq +65°C$	
Flextop 2212,2222	T6		$-40°C \leq T_{amb} \leq +56°C$
	T5	$-20°C \leq T_{amb} \leq +60°C$	$-40°C \leq T_{amb} \leq +71°C$
	T4	$-20°C \leq T_{amb} \leq +65°C$	$-40°C \leq T_{amb} \leq +80°C$
Relay outputs	T5	$-20°C \leq T_{amb} \leq +60°C$	
	T4	$-20°C \leq T_{amb} \leq +65°C$	

(16) Drawings and documents are listed in the ATEX Assessment Report No. 22 203 293952

(17) Specific Conditions for Use

1. The CombiView DFON is equipped with a specific foil, to reduce potential electrostatic hazards. If the foil is damaged, the CombiTemp device has to be disassembled from EPL Ga enviroments.
2. The enclosures for the CombiTemp devices were tested with a low risk of impact. Hence the installation of the devices has to be done, in such a way that only a low risk of mechanical impact can occur.
3. The enclosure material of the DIN B housing is made of aluminium, hence the installation in EPL Ga areas has to ensure that mechanical sparks or friction is excluded.
4. The "FlexProgrammer" configuring unit shall only be connected to the transmitter outside of the hazardous area. The manual shall be followed for the programming.

(18) Essential Health and Safety Requirements

no additional ones

- End of EU-Type Examination Certificate -