Translation

(1) EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**

(3) **Certificate Number** **TÜV 07 ATEX 347158 X**

(4) for the equipment: CombiTemp
Type: 814xxxx xxxx xx4 xxxx + 22xx xxxx + 8x xx-xxx
(For full type key see manufactures numbering system)

(5) of the manufacturer: Baumer A/S

(6) Address: Jacob Knudsens Vej 14
8230 Aabyhøj
Denmark

Order number: 8000347158

Date of issue: 2007-09-08

(7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, notified body No. 0044 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. 07 203 347158.

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

EN 60079-0:2006 **EN 50020:2002** **EN 60079-26:2004**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. 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 equipment or protective system must include the following:

Ⓔx **II 1G Ex ia IIC T3/T4/T5**

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited 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 certification body

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(13) **SCHEDULE**

(14) **EC-Type Examination Certificate No. TÜV 07 ATEX 347158 X**

(15) Description of equipment

CombiTemp comprises a series of basic ATEX certified elements, which can be combined to various temperature sensors and transmitters as a building block system.

The basic components in the system are:

a) Housing: DIN form B or Ø 80 mm stainless steel
b) Process connection – see datasheet
c) Flex Top transmitters: 2201, 2211, 2221 and 2231
d) FlexView 4..20 mA LC Display
e) BattTemp, Battery operated Pt100 LCD Display

Numbering system:

Valid type numbers are: 814xxxx xxxx xx4 xxxx + 22xx xxxx + 8x xx-xxx

"x" can be any number except "S"

For full type key see manufacturers numbering system.

Valid transmitters and displays covered by this Certificate (type key):

Component	**Valid type number or**	**Valid Type number**
FlexTop 2201	2201 0002	2201 0002C
FlexTop 2211	2211 0002	2211 0002C
FlexTop 2221	2221 0002	2221 0002C
FlexTop 2231	2231 0002	2231 0002C
FlexView	81 46-624	81 46-625
FlexTemp	86 30-611	86 30-611B

Intrinsically safe specifications

For product mounted with FlexTop 2201 / 2211 / 2221 / 2231 / FlexView:

U_i = 28 V
I_i = 0,1 A
P_i = 0,7 W
$L_i \leq$ 11 µH
$C_i \leq$ 36 nF
T4: -20 °C > Ta > +70 °C
T5: -20 °C > Ta > +60 °C

For product mounted with FlexTop 2231:
Zener barrier:
U_i = 20 V
I_i = 0,1 A
P_i = 0,75 W
Coupler/link, FISCO Standard:
U_i = 17,5 V
I_i = 0,215 A
P_i = 2W
$L_i \leq$ 10 µH
$C_i \leq$ 2 nF
T4: -30 °C > Ta > +85 °C
T5: -30 °C > Ta > +60 °C

For product mounted with BattTemp:
Mounted with battery:
Energizer Lithium FR6 L91 Mignon size AA
T4: -10 °C > Ta > + 70 °C
T5: -10 °C > Ta > + 50 °C
or
Duracell Alkaline MN1500-LR6 size AA.
T3: -10 °C > Ta > +70 °C
T4: -10 °C > Ta > +60 °C

(16) Test documents are listed in the test report No. 07203347158.

(17) Special conditions for safe use

The basic components in CombiTemp are already certified to Directive 94/9/EC. The belonging certificates for these components contain some “Special Conditions for Safe use”. The “X” marking in the certificate number refers to this issue.

(18) Essential Health and Safety Requirements

no additional ones

Translation

1. S U P P L E M E N T

to Certificate No.	**TÜV 07 ATEX 347158 X**
Equipment:	CombiTemp Type: 814xxxx xxxx xx4 xxxx + 22xx xxxx + 8x xx-xxx (For full type key see manufactures numbering system)
Manufacturer:	Baumer A/S
Address:	Jacob Knudsens Vej 14 8230 Aabyhøj Denmark
Order number:	8000394176
Date of issue:	2011-05-16

Amendments:

The CombiTemp unit covered by this certificate is build up around the use of several basic components – among these the Flex Top transmitters 2201, 2211, 2221 and 2231.

By this 1st. supplement the FlexTop Temperature Transmitters type 2202, 2203 and 2204 are added as temperature transmitters for use in the "CombiTemp" Certification. There are no changes in the intrinsically safe specifications. The Temperature Transmitter FlexTop type: 2202, 2203 and 2204 are certified by EC-Type Examination Certificate TÜV 08 ATEX 364662 X.

(15) Description of equipment

CombiTemp comprises a series of basic ATEX Certified elements, which can be combined to various temperature sensors and transmitters as a building block system.

The basic components in the system are:

a) Housing: DIN form B or Ø80 mm stainless steel
b) Process connection – see datasheet
c) Flex Top transmitters: 2201, 2202, 2203, 2204, 2211, 2221 and 2231
d) FlexView 4..20 mA LC Display
e) BattTemp, Battery operated Pt100 LCD Display

<u>Numbering system:</u>

Valid type numbers are: 814xxxx xxxx xx4 xxxx + 22xx xxxx + 8x xx-xxx

"x" can be any number except "S"

For full type key see manufacturers numbering system.

Valid transmitters and displays covered by this Certificate (type key):

Component	Valid type number	or	Valid Type number
FlexTop 2201	2201 0002		2201 0002C
FlexTop 2202	2202 0002		2202 0002C
FlexTop 2203	2203 0002		2203 0002C
FlexTop 2204	2204 0002		2204 0002C
FlexTop 2211	2211 0002		2211 0002C
FlexTop 2221	2221 0002		2221 0002C
FlexTop 2231	2231 0002		2231 0002C
FlexView	81 46-624		81 46-625
FlexTemp	86 30-611		86 30-611B

Intrinsically safe specifications (unchanged)

For product mounted with FlexTop 2201 / 2202 / 2203 / 2204 / 2211 / 2221 / 2231 / FlexView:

Ui = 28 V
Ii = 0.1 A
Pi = 0.7 W
Li: = 11 µH
Ci = 36 nF
T4: -20 °C < Ta < 70 °C
T5: -20 °C < Ta < 60 °C

The equipment incl. of this supplement meets the requirements of these standards:

EN 60079-0:2006 **EN 60079-11:2007** **EN 60079-26:2007**

(16) The test documents are listed in the test report No. 11203394176.

(17) Special conditions for safe use

no additional ones

(18) Essential Health and Safety Requirements

no additional ones

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The head of the certification body

Schwedt

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Translation

2. SUPPLEMENT

to Certificate No.	**TÜV 07 ATEX 347158 X**
Equipment:	CombiTemp series TFRH and TFRN
Manufacturer:	Baumer A/S
Address:	Runetoften 19 8210 Aarhus V Denmark
Order number:	8000421691
Date of issue:	2013-08-20

Amendments:

By this "2nd. Supplement" to EC Type Examination Certificate TÜV 07 ATEX 347158 X– the following modifications has been incorporated in the certification:

1. Manufacturer has moved to new address at: Runetoften 19, 8210 Aarhus V, Denmark.
2. The mechanical design of the stainless steel enclosure has been re-designed.
3. The CombiTemp type number system has been revised, resulting in new type numbers for Combi Temp series: CombiTemp TFRN-series and CombiTemp TFRH-series.
4. The new display module – the CombiView DFON is included as an option in the configuration. This new display is certified separately under certificate TÜV 13 ATEX 113124 X.
5. Drawings and marking plates has been updated to mirror the new type numbers.

(15) Description of equipment

CombiTemp Series TFRH and TFRN comprises a series of basic ATEX Certified elements, which can be combined to various temperature sensors and transmitters as a building block system.

The basic components in the system are:

a) Housing: DIN form B or Ø80 mm stainless steel
b) Process connection – back or side mounted – see datasheet
c) Flex Top transmitters: 2201, 2202, 2203, 2204, 2211, 2221 and 2231
d) FlexView 4..20 mA LCD Display
e) BattTemp, Battery operated Pt100 LCD Display
f) CombiView – (display)

Revised type Number system:

Valid type numbers are:
CombiTemp: **TFRH xxxxx 1 xxxxxxxxxx xxxx**
CombiTemp: **TFRN xxxxx 1 xxxxxxxxxx xxxx**

For full type key see manufacturers numbering system.

There are no changes in the intrinsically safe specifications.

Intrinsically safe specifications added for type: TFRx xxxxx 1 xxxxxxxxxx xxxx, except for type: TFRx xxxx5 1 xxxxxxxxx xxxx :

Ui = 28 V
Ii = 0.1 A
Pi = 0.7 W
Li: = 11 µH
Ci = 36 nF
T4: -20 °C < T_a < 65 °C
T5: -20 °C < T_a < 60 °C

Intrinsically safe speciation for type TFRx xxxx5 1 xxxxxxxxx xxxx: CombiTemp TFRx with FlexTop 2231 – see Appendix to existing EC Type Examination Certificate.

The equipment incl. of this supplement meets the requirements of these standards:
EN 60079-0: 2006 **EN 60079-11:2007** **EN 60079-26: 2007**

(16) The test documents are listed in the test report No. 13 203 122685.

(17) Special conditions for safe use

no additional ones

(18) Essential Health and Safety Requirements

no additional ones

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The head of the notified body

Schwedt

3. SUPPLEMENT

to Certificate No.	**TÜV 07 ATEX 347158 X**
Equipment:	CombiTemp Series TCR6 and TFR5
Manufacturer:	Baumer A/S
Address:	Runetoften 19 8210 Aarhus V Denmark
Order number:	8000440799
Date of issue:	2015-09-04

Amendments:

By this "3rd Supplement" to EC Type Examination Certificate no. TÜV 07 ATEX 347158 X – the following modifications has been incorporated in the certification:

1. Two new type variants have been introduced. These type variants are called "TCR6" and "TFR5".
2. Drawings, marking plates and operator's instructions have been updated to mirror the 2 new type numbers.

Description of equipment

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

The basic components in the system are:

a) Housing: DIN form B or Ø80 mm stainless steel
b) Process connection – back or side mounted – see datasheet
c) Flex Top transmitters: 2201, 2202, 2203, 2204, 2211, 2221 and 2231
d) FlexView 4..20 mA LCD Display
e) BattTemp, Battery operated Pt100 LCD Display
f) CombiView – (display)

Revised type Number system:

Valid type numbers for the new types are:

Marking with TCR6 housing: **TCR6 xxxx x1xx xxxx xxxx xxxx**
Marking with TFR5 housing: **TFR5 xxxx x1xx xxxx**

For full type key see manufacturers numbering system.

There are no changes in the intrinsically safe specifications. The TFR5 xxxx x1xx xxxx and TCR6 xxxx x1xx xxxx xxxx xxxx got the following entity parameters:

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 =	0,1	A
		P_i =	0,7	W
	wirksame innere Kapazität	$C_i^{*)}$ =	36	nF
	wirksame innere Induktivität	$L_i^{*)}$ =	11	µH

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

temperature class	ambient temperature range
T5	-20°C ≤ Ta ≤ +60°C
T4	-20°C ≤ Ta ≤ +65°C

The equipment incl. of this supplement meets the requirements of these standards:

EN 60079-0: 2012 **EN 60079-11:2012** **EN 60079-26: 2007**

(16) The test documents are listed in the test report no. 15 203 150763.

(17) Special conditions for safe use

For the TCR5 the following additional Special condition for safe use applies:

If the TCR5 is used with the Battemp display inside zone 0 environments, the installation of the device shall be done in such a way that no effective charging of the surface can occur.

(18) Essential Health and Safety Requirements

no additional ones

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The head of the certification body

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