



Description

The FlexTop universal temperature transmitter type 2211 is suitable for input from RTD sensors, T/C sensors plus potentiometer or resistance signals.

The FlexTop 2211 features a 4 ... 20 mA output signal.

Environment

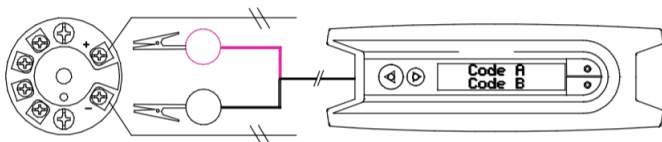
Humidity	<98 % RH, condensing
Ambient temperature	-40 ... 85°C
Storage temperature	-55 ... 90 °C
Protection class	IP10, terminals IP55, housing
Vibrations	GL, test 2

Configuring with FlexProgrammer 9701

The FlexTop 2211 can be configured using the 4...20 mA cable. The maximum distance depends on the cable type, resistance and capacity. We recommend to use shielded cables.

To be able to configure the FlexTop 2211 with the FlexProgrammer 9701 the dedicated software, Flex-program, must be loaded on the PC.

During the configuration the new data are, by means of the FlexProgrammer 9701, transferred from the PC to the FlexTop 2211, where they are stored in the internal memory.



The indication for a correct configuration sequence is:

- 1) The LED on the FlexTop 2211 lights up constantly.

Error indications during configuration:

- 1) The LED on the FlexTop 2211 is not lighting.
- 2) An error message comes up on the PC.

Note: During the first power-up after a configuration the power-on time increases to approx. 10 sec.

Field of application

FlexTop universal temperature transmitter type 2211 is a compact temperature transmitter, designed to be built into the housing of a temperature sensor, like the Baumer CombiTemp.

Safety instruction

This instrument is built and tested according to the current EU-directives and packed in technically safe condition. In order to maintain this condition and to ensure safe operation, the user must follow the hints and warnings given in this instruction.

During the installation the valid national rules have to be observed. Ignoring the warnings may lead to severe personal injury or substantial damage to property.

The product must be operated by trained staff. Correct and safe operation of this equipment is dependent on proper transport, storage, installation and operation.

All electrical wiring must conform to local standards. In order to prevent stray electrical radiation, we recommend twisted and shielded input cables, as also to keep power supply cables separated from the input cables. The connection must be made according to the connecting diagrams.

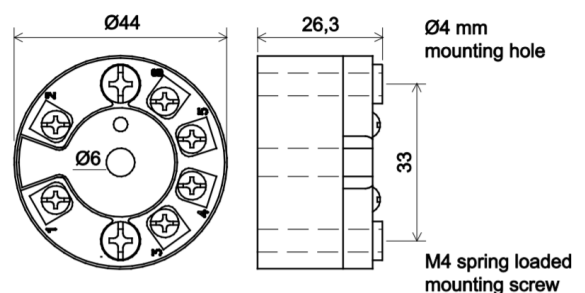
Before switching on the power supply take care that other equipment is not affected. Ensure that the supply voltage and the conditions in the environment comply with the specification of the device.

Before switching off the supply voltage check the possible effects on other equipment and the processing system.

WARNING

For electrical installation and commissioning of explosion protected devices, the data given in the conformity certificate as also the local regulations for installation of electrical apparatus within explosion protected areas must be considered. The intrinsically safe versions can be mounted in the explosion hazardous area according to its specification only connected to a certified intrinsically safe supply loop with the corresponding electrical values.

Dimensions



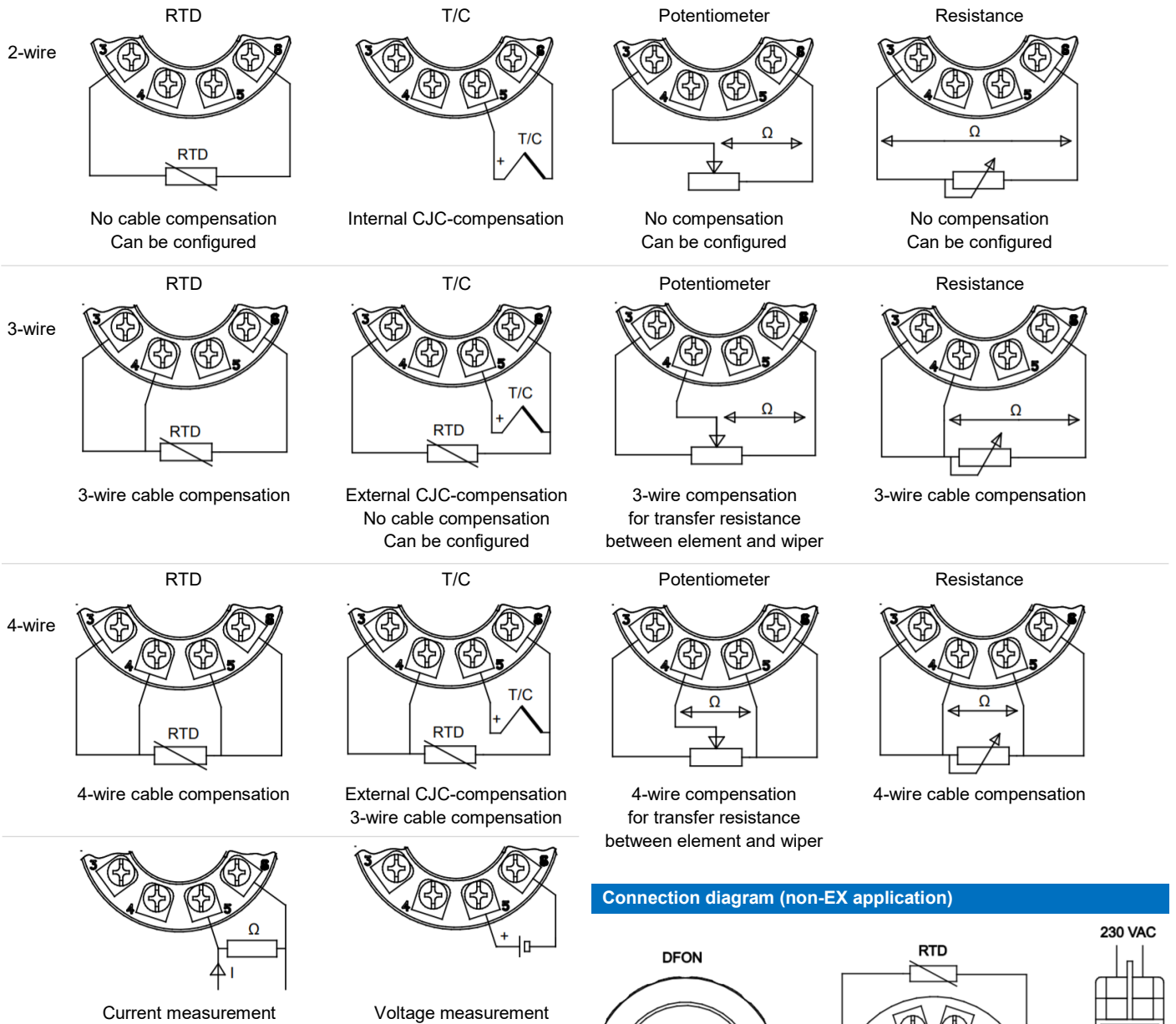
WARNING

This product contains no replaceable parts.

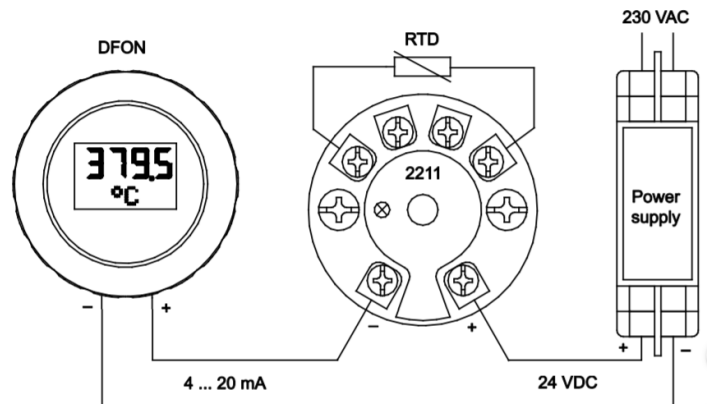
In case of malfunction the product must be shipped to Baumer for repair

English

Electrical installation



Connection diagram (non-EX application)



LED function

The LED of the FlexTop indicates the actual status of the measured value. The LED will be turned on continuously as long as the measured value results in an output current between 4 and 20 mA. If the output current is higher than 20 mA or lower than 4 mA the LED will flash with 1Hz. The same flashing behaviour will occur if a sensor break error is detected.

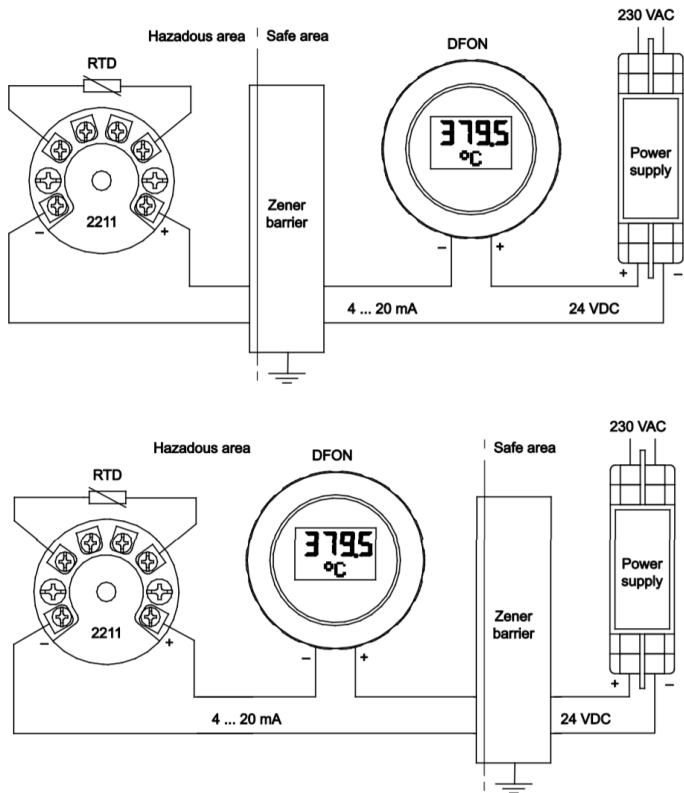
FlexTop 2211

Operating instructions

English

Hazardous area - ATEX

Connection diagram ATEX



ATEX data for FlexTop™ 2211 Ex ia (2211-0002)

Approval	ATEX II 1G, Ex ia IIC T5/T6	
Voltage supply range	6,5...30 V DC	
Internal inductivity	L_i	$\leq 15 \mu\text{H}$
Internal capacity	C_i	$\leq 5 \text{nF}$
Temperature class	T1...T5:	$-40 < T_{\text{amb}} < 85^\circ\text{C}$
	T6:	$-40 < T_{\text{amb}} < 50^\circ\text{C}$
Barrier data	U_i :	$\leq 28 \text{VDC}$
	I_i :	$\leq 0,1 \text{A}$
	P_i :	$\leq 0,7 \text{W}$

The installation of FlexTop 2211 must be done in accordance with prevailing guidelines for zones 0 or 1.

Sensor circuit parameters (terminals 3 to 6):

VDC < 6.6 V; IDC < 17 mA; Pout < 30m W; La < 99 mH; Ca < 3μF.

The FlexTop 2211 must be connected in the 4...20 mA loop circuit only.

FlexTop 2211 must be mounted in a housing, e.g. ø80mm stainless steel housing or DIN-B housing.

ATEX data for FlexTop™ 2211 Ex nA (2211-0003)

Approval	ATEX II 3G, Ex nA II T4/T5	
Voltage supply range	U_i :	6,5...30 V DC,
	I_i :	<100 mA
Temperature class	T4:	$-20 < T_{\text{amb}} < 70^\circ\text{C}$
	T5:	$-20 < T_{\text{amb}} < 60^\circ\text{C}$

A FlexTop 2211-0003 may be mounted in hazardous areas in accordance with the current EU-directives.

The product must be mounted in a suitable enclosure fulfilling relevant requirement in EN 60 079-0 among these minimum IP54 ingress protection.

ATEX configuration with FlexProgrammer 9701

The FlexProgrammer 9701 configuring unit must be connected to the FlexTop 2211 or DFON outside the hazardous area.

Configuring procedure:

- Disconnect mains from the 4...20 mA loop circuit.
- Disconnect the FlexTop 2211 from the circuitry within the hazardous area.
- Bring the FlexTop 2211 to the safe area.
- Connect the FlexProgrammer 9701 and perform the configuring session.
- Reinstall the FlexTop 2211 in the hazardous area.
- Connect the power supply to the circuit.

Manufacturer

EU Declaration of Conformity (EN)
The undersigned declares on behalf of the manufacturer, that the products to which this declaration relates comply with all relevant provisions of the listed EU directive(s) and are based on the specified standard(s).

EU-Konformitätserklärung (DE)
Der Unterschriebener erklärt im Namen des Herstellers, dass die Produkte, auf die sich diese Erklärung bezieht, allen einschlägigen Bestimmungen der aufgeführten EU-Richtlinie(n) entsprechen und die angegebenen Norm(en) zugrunde gelegt sind.

ЕС Декларация за съответствие (BG)
Допълнителният декларатор от името на производителя, че продуктите, за които се отнася настоящата декларация, отговарят на съответните разпоредби на изброените(ите) директива(и) на ЕС и се основават на определените(те) стандарт(и).

EU Prohlášení o shodě (CZ)
Niže podepsaný prohlašuje jménem výrobce, že výrobky, na které se toto prohlášení vztahuje, jsou v souladu se všemi příslušnými ustanoveními uvedených EU směrnic (směrnice) a vycházejí ze stanovených norem.

EU-Konformitetserklæring (DK)
Undersignede forklærer på producentens vegne, at produktet, som denne erklæring omhandler, overholder alle gældende bestemmelser i det eller de anførte EU-direktiv(er) og de angivne standarder.

Declaración de conformidad de la UE (ES)
El abajo firmante declara, en nombre del fabricante que los productos a los que afecta esta declaración cumplen con todas las disposiciones de la directriz o las directrices de la UE, enumeradas y que la norma o normas indicadas han sido tomadas como base.

EU-vaatimusemmukaisuuskvakuutus (FI)
Allekirjoittanut vakuuttaa valmistajan puolesta, että tuotteen, jolla tämä kvakuutus koskee, ovat kaikkiin lueteltuihin EU-direktiivien asiantuultuihin määräysten mukaisia ja että ne perustuvat määrättyihin standardeihin.

Déclaration de conformité UE (FR)
Le signataire déclare au nom du fabricant que les produits auxquels cette déclaration fait référence sont conformes à toutes les dispositions applicables de l'adès directives UE mentionnées(s) et satisfont à la/aux norme(s) indiquée(s).

Δηλώση συμμόρφωσης ΕΕ (GR)
Ο υπογράφων δηλώνει εν ονόματι του κατασκευαστή ότι τα προϊόντα, τα οποία αφορά η παρούσα δήλωση, συμμορφώνονται με όλες τις σχετικές διατάξεις των αναφερόμενων οδηγιών της ΕΕ και βασίζονται στα καθορισμένα πρότυπα.

EU-megfelelősségi nyilatkozat (HU)
Alulírott a gyártó nevében kijelentem, hogy a jelen nyilatkozattal megjelölt termékek a hivatkozott EU-irányelv(ek) minden vonatkozó rendelkezésének megfelelnek és a megadott jogszabályok szerint kerültek elhelyezésre.



Kurt Møller Jensen
Managing Director

Aarhus, 29.04.2021

Baumer_Flextop 2211+2221_ML_DoC_81081916.pdf / su

Baumer A/S
Runefortøjen 19
DK-8210 Aarhus V
CVR: DK25275071
VAT. No.: DK11841813

DK Phone +45 8931 7611
SE Phone +46 (0) 36 13 9430
sales.dk@baumer.com
sales.se@baumer.com
www.baumer.com

Baumer AVS

Dichiarazione di conformità UE (IT)
Il sottoscritto dichiara, a nome del fabbricante, che i prodotti oggetto della presente dichiarazione sono conformi a tutte le disposizioni pertinenti delle direttive UE elencate e si basano sulle norme specificate.

ES atifikties deklaracija (LT)
Pasirašęs asmuo gamintojo vardu patvirtina, kad gaminiai, kuriems taikoma ši deklaracija, atitinka visus nurodytos(-ų) ES direktyvos(-ų) ir standart(-ų) darniausius reikalavimus.

ES Atibilstības deklarācija (LV)
Persona, kas parakstījis dokumentu, rāzotāja vārda apliecinā, ka visi izstrādājumi, uz kuriem attiecināma šī Deklarācija, atbilst visai norādīto piemērojamā ES Direktīvu prasībām, un ir piemērots(-i) norādītais(-ie) standarts(-i).

EU-conformiteitsverklaring (NL)
Ondergetekende verklaart namens de fabrikant dat de producten waarop deze verklaring betrekking heeft aan alle relevante bepalingen van genoemde EU-richtlijn(en) voldoen en conform de gestelde norm(en) zijn.

EU-samsvarserklæring (NO)
Den un dertegnede erklærer på produsentens vegne at produktene nevnt i denne erklæringen, er i samsvar med alle relevante bestemmelser i de/de angitte EU-direktiv(er)-ene og opplytler den/de angitte standarden(e).

Deklaracja zgodności UE (PL)
Nижé podpisaný oświadcza w imieniu producenta, że produkty, których dotyczy niniejsza deklaracja, są zgodne ze wszystkimi odpowiednimi przepisami wymienionymi(eg) dyrektywami UE i są oparte na określonych normach.

Declaração de conformidade da UE (PT)
O signatário declara, em nome do fabricante, que os produtos, a qual esta declaração diz respeito, estão em conformidade com todas as disposições aplicáveis da(s) referida(s) diretiva(s) da UE e que foram baseados na(s) norma(s) indicada(s).

Declarație de conformitate UE (RO)
Subsemnatul declară, în numele producătorului, că produsele alifate sub incidența prezentei declarații sunt conforme cu toate dispozițiile relevante ale Directivei (-lor) UE enumerate și se bazează pe standardul (-ele) specificat (-e).

EU-vyhlášení o zhode (SK)
Podpisaná osoba vyhlasuje v mene výrobcu, že produkty, na ktoré sa vztahuje toto vyhlásenie, zodpovedajú všetkým príslušným ustanoveniam uvedenej smernice/vedených smerníc EU a že bola aplikovaná špecifikovaná norma/boli aplikované špecifikované normy.

Izjava EU o skladnosti (SI)
Spodaj podpisani izjavlja v imenu proizvajalca, da so proizvodi, na katere se ta izjava nanaša, skladni z vsemi ustreznimi določbami navedenih direktiv EU in temeljijo na navedenih standardih.



i. V. Matthias Sutter
Head of Product Compliance Management

1/2

Danske Bank: SWIFT: DABADKKK
(DKK) Konto: 4387-362793852
(EUR) IBAN: DK0230003617021021
(SEK) Bankgiro: 5220-9632

Directives:

2014/30/EU, 2014/34/EU, 2011/65/EU (incl. EU 2015/863)

Regulations (if applicable):

Standards / Technical Specifications:

EN 60079-0:2012+A11:2013;

EN 60079-11:2012;

EN 60079-15:2010;

EN 60079-26:2007;

EN 61326-1:2013;

EN IEC 63000:2018;

Remarks:

X: any figures or letter or character

Notified body (if applicable):

TUV Nord 0044

Am TÜV 1

30519 Hannover

Type examination certificate (if applicable):

TÜV 07 ATEX 347151 X

Product group:

Electronic temperature measurement

Type(s):

2211-0002.X;

2211-0003.X;

2221-0002.X;

2221-0003.X;

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www.baumer.com

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(SEK) Bankgiro: 5220-9632