

## EX Instructions

A Pt100-sensor in a resistance thermometer is a simple electrical equipment per section 5.7 of EN 60079-11:2012. It is not covered by the EU directive 2014/34/EU (ATEX). The requirements of EN 60079-11 are fulfilled.

### Amendment to operating instructions for these type series

<u>Type</u>	<u>Description</u>	<u>Instructions</u>
GA2201	Inline temperature transducer with Pt100	BA_067

### Marking

Ex ia IIC T4/T5/T6 Gb

Ex ia IIIC Txx°C Db

- BG: Ако не разбирате указанията за безопасност, можете да изискате превод на вашия език.
- CZ: Pokud těmto bezpečnostním pokynům nerozumíte, můžete si vyžádat jejich překlad do vašeho jazyka.
- DA: Hvis du ikke forstår sikkerhedshenvisningerne, kan du forespørge en oversættelse i dit sprog.
- DE: Wenn Sie diese Sicherheitshinweise nicht verstehen, können Sie eine Übersetzung in Ihrer Landessprache anfordern.
- EL: Εάν δεν καταλαβαίνετε αυτές τις υποδείξεις ασφαλείας, μπορείτε να ζητήσετε μια μετάφραση στη μητρική σας γλώσσα
- ES: Si no entiende estas indicaciones de seguridad, puede solicitar una traducción en su idioma.
- ET: Kui need ohutusnõuded ei ole teile arusaadavad, võite tellida meilt tõlke oma keelde.
- FI: Jos et ymmärrä näitä turvaohjeita, voi pyytää ne lähetettäväksi omalle kielellesi käännettynä.
- FR: Si vous ne comprenez pas les consignes de sécurité, vous pouvez faire la demande d'une traduction dans votre langue.
- HU: Amennyiben nem érti ezeket a biztonsági utasításokat, akkor kérheti ezeknek az Ön nyelvére lefordított változatát.
- IT: Nel caso non capite queste avvertenze di sicurezza, ne potete richiedere una traduzione nella vs. lingua.
- LT: Jei nesuprantate šių saugos reikalavimų, galite užsisakyti jų vertimą į Jūsų kalbą.
- LV: Ja jūs nesaprotat šos drošības norādījumus, jūs varat pieprasīt tulkojumu jūsu valodā.
- NL: Indien u deze veiligheidsinstructies niet begrijpt, kunt u een vertaling in uw eigen taal aanvragen.
- PL: Jeżeli niniejsze przepisy bezpieczeństwa są niezrozumiałe, można poprosić o tłumaczenie we własnym języku.
- PT: Se não compreender os avisos de segurança, pode solicitar uma tradução no seu idioma.
- RO: Dacă nu înțelegeți aceste instrucțiuni de siguranță puteți cere traducerea acestora în limba dvs.
- SK: Ak ste nepochopili bezpečnostné pokyny, môžete si vyžiadat' preklad do svojho jazyka.
- SL: Če teh navodil ne razumete, lahko zahtevate prevod v Vaš jezik.
- SV: Om du inte förstår den här säkerhetsanvisningen kan du begära att få en översättning till ditt språk.

## 1 General Safety Notes

The installation, set up, service or disassembly of this device must only be done by trained, qualified personnel using suitable equipment and authorized to do so.



### Warning

Media can escape if unsuitable devices are used or if the installation is not correct.

Danger of severe injury or damage

- Ensure that the device is suitable for the process and undamaged.

Measuring devices in explosive environments must be installed and commissioned by competent personnel that are familiar with the specialties of explosion protection. Modifications or damage of devices or electrical connections might negatively influence the operating safety or the ex-proofing.

Observe the regulations and standards for erection and operation of electrical installations in explosive atmospheres as well as the installation and safety notes in the corresponding operation instructions.

Avoid electrostatic charge on plastic surfaces, if present.

## 2 Requirements for intrinsically safe supply

Connect the Pt100 measuring insert to an intrinsically safe power circuit.

Permissible maximum values:

$$U_i \leq 30 \text{ V}$$

$$P_i \leq 200 \text{ mW}$$

The inner capacity  $C_i$  and inductance  $L_i$  are negligible small.

The connection cable must be considered separately per EN 60079-14:2014 section 16.2.2.2. According to that standard you can assume the following values:

$$C_c \leq 200 \text{ pF/m}$$

$$L_c \leq 1 \text{ } \mu\text{H/m}$$

### 3 Permissible media and ambient temperatures

<u>Type</u>	<u>Marking</u>	<u>Class</u>	<u>Media and Ambient</u>
all	Ex ia IIC T4/T5/T6 Gb	T6	-20...78 °C
		T5	-20...93 °C
		T4	-20...128 °C
	Ex ia IIIC Txx°C Db - without dust layer -	T85°C	-20...78 °C
		T100°C	-20...93 °C
		T135°C	-20...128 °C

For temperature classes T1, T2 and T3 the temperature limits for T4 apply.

The maximum permissible media and ambient temperatures for the specific application depend on the device type and its configuration as documented in the data sheet, as well as on the temperature limits specified above and, if applicable, supplementary information in our order confirmation. Please pay attention to all mentioned aspects! The permissible range lies between the lowest value of the upper limit and the highest value of the lower limit.

### 4 Resistance thermometer with transmitter

Combining a transmitter with a resistance thermometer is an installation per ATEX-guideline. Adhere to the limits and safety instructions of the transmitter when using this combination in an explosion protected environment.