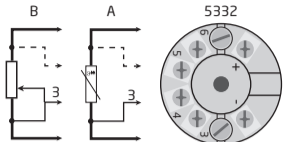


5332N, 5332A & 5332D

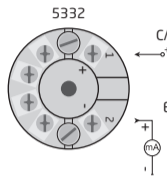


DK Indgangssignaler UK Input signals FR Signaux d'entrée DE Eingangssignale

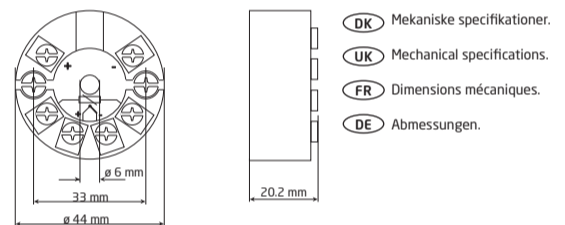
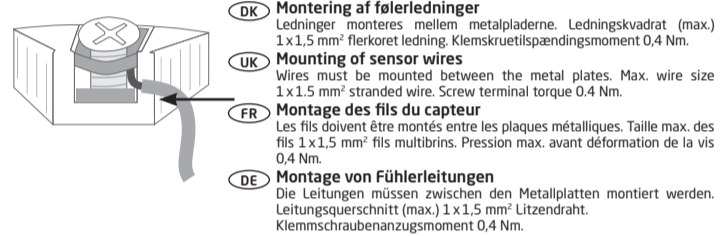


	DK	UK	FR	DE	5332
A	RTD	RTD	RTD	WTH	X
B	Lin R	Lin R	Lin R	Lin R	X

DK Udgangssignaler UK Output signals FR Signaux de sortie DE Ausgangssignale



	DK	UK	FR	DE	5332N 5332A	5332D
C	Forsyning +7.2...35 VDC	Supply +7.2...35 VDC	Alimentation +7.2...35 Vcc	Versorgung +7.2...35 VDC	X	
D	Forsyning +7.2...30 VDC	Supply +7.2...30 VDC	Alimentation +7.2...30 Vcc	Versorgung +7.2...30 VDC		X
E	4...20 mA udgang	4...20 mA output	Sortie 4...20 mA	4...20 mA- Ausgang	X	X



DK Dokumentation, godkendelser og yderligere information findes på internettet på www.prelectronics.dk

UK Documentation, permits and other information can be found on the internet at www.prelectronics.com

FR La documentation et toute autre information peuvent être trouvées sur l'Internet sur notre site: www.prelectronics.fr

DE Dokumentationen, Zulassungen und andere Informationen können auf unserer Internet-Seite unter www.prelectronics.de gefunden und abgerufen werden.

BR Documentações, licenças e outras informações podem ser encontradas no site www.prelectronics.com

DK ADVARSEL
Reparation af modulet må kun foretages af PR electronics A/S.

DK ADVARSEL
PR Loop Link programmeringsenheden må ikke benyttes til kommunikation med moduler installeret i Ex-område.
Enhederne skal installeres i henhold til den tilhørende installations vejledning ved montering i eksplosionsfarlig område.

SIKKERHEDSREGLER

Modtagelse og udpakning
Udpak modulet uden at beskadige det. Kontrollér ved modtagelsen, at modultypen svarer til den bestilte. Indpakningen bør følge modulet, indtil dette er monteret på bilvende plads.

Miljøforhold
Undgå direkte sollys, kraftigt støv eller varme, mekaniske rystelser og stød, og udsæt ikke modulet for regn eller kraftigt fugt. Om nødvendigt skal opvarmning, ud over de opgivne grænser for omgivelsestemperatur, forhindres ved hjælp af ventilation.

Installation
Modulet må kun tilsluttes af kvalificerede teknikere, som er bekendt med de tekniske udtryk, advarsler og instruktioner i installationsvejledningen, og som vil følge disse.
Hvis der er tvivl om modulets rette håndtering, skal der rettes henvendelse til den lokale forhandler eller alternativt direkte til PR electronics A/S.
Mounting and connection of the device should comply with national legislation for mounting of electric materials, i.e. wire cross section, protective fuse, and location. Descriptions of input / output and supply connections are shown in the product manual found on www.prelectronics.com.

Kalibrering og justering
Under kalibrering og justering skal måling og tilslutning af eksterne spændinger udføres i henhold til denne installations-vejledning, og teknikeren skal benytte sikkerhedsmæssigt korrekte værktøjer og instrumenter.

Renngøring
Modulet må, i spændingsløs tilstand, rengøres med en klud let fugtet med destilleret vand.

PC-programmering af SYSTEM 5300
Modulet konfigureres til den aktuelle opgave ved hjælp af en PC og PR electronics A/S kommunikationsinterface Loop Link. Det er muligt at konfigurere modulet både med og uden tilsluttet forsyningspænding, idet kommunikationsinterface leverer nødvendig forsyning til opsætningen. Kommunikationsinterface er galvanisk isoleret, så PC'ens port er optimalt beskyttet. Kommunikationen er 2-vejs, så modulets opsætning kan hentes ind i PC'en, og opsætningen i PC'en kan sendes til modulet. For de brugere, der ikke selv vil foretage opsætning, kan modulet leveres konfigureret efter oplyst specifikation: indgangstype, måleområde, følerfejldetektering og udgangssignal.

Elektriske specifikationer

Specifikationsområde.....	-40°C til +85°C
Forsyningsspænding, 5332N & 5332A.....	7.2...35 VDC
Internt effekttab, 5332N & 5332A.....	25 mW...0,8 W
Forsyningsspænding, 5332D.....	7.2...30 VDC
Internt effekttab, 5332D.....	25 mW...0,7 W
Kalibreringstemperatur.....	20...28°C
Relativ fugtighed.....	< 95% RH (ikke kond.)
Mål.....	Ø44 x 20,2 mm
Kapslingsklasse (hus/klemme).....	IP68 / IP00
Indgangstyper	
P1100.....	-200°C...+850°C
Ni100.....	-60°C...+250°C
Lin. R.....	0 Ω...5000 Ω
Strømodgang	
Signalområde.....	4...20 mA
Min. signalområde.....	16 mA
Belastningsmodstand, Ω.....	≤ (V _{forsyn.} -7,2 V)/0,023
Overholdte myndighedskrav	
EMC.....	2014/30/EU & UK SI 2016/1091
ATEX.....	2014/34/EU & UK SI 2016/1107
RoHS.....	2011/65/EU & UK SI 2012/3032
EAC.....	TR-CU 020/2011
EAC Ex.....	TR-CU 012/2011

UK WARNING
Repair of the device must be done by PR electronics A/S only.

UK WARNING
Do not use the Loop Link programming interface to program the units in Ex area.
For installation in classified area the modules must be installed according to the appropriate installation drawings.

SAFETY INSTRUCTIONS

Receipt and unpacking
Unpack the device without damaging it. The packing should always follow the device until this has been permanently mounted. Check at the receipt of the device whether the type corresponds to the one ordered.

Environment
Avoid direct sunlight, dust, high temperatures, mechanical vibrations and shock, as well as rain and heavy moisture. If necessary, heating in excess of the stated limits for ambient temperatures should be avoided by way of ventilation.

Mounting
Only qualified technicians who are familiar with the technical terms, warnings, and instructions in this installation guide and who are able to follow these should connect the device.
Should there be any doubt as to the correct handling of the device, please contact your local distributor or, alternatively, PR electronics A/S.
Mounting and connection of the device should comply with national legislation for mounting of electric materials, i.e. wire cross section, protective fuse, and location. Descriptions of input / output and supply connections are shown in the product manual found on www.prelectronics.com.

Calibration and adjustment
During calibration and adjustment, the measuring and connection of external voltages must be carried out according to the specifications of this installation guide. The technician must use tools and instruments that are safe to use.

Cleaning
When disconnected, the device may be cleaned with a cloth moistened with distilled water.

PC programming of SYSTEM 5300
The device is configured to the present task by way of a PC and PR electronics A/S communications interface Loop Link. The device can be configured with or without a connected supply voltage as the communications interface supplies the necessary voltage to the set-up. The communications interface is galvanically isolated to protect the PC port.
Communication is 2-way to allow the retrieval of the device set-up into the PC and to allow the transmission of the PC set-up to the device. For users who do not wish to do the set-up themselves, the device can be delivered configured according to customer specifications: input type, measurement range, sensor error detection, and output signal.

Electrical specifications

Specifications range.....	-40°C to +85°C
Supply voltage, 5332N & 5332A.....	7.2...35 VDC
Internal power dissipation, 5332N & 5332A.....	25 mW...0,8 W
Supply voltage, 5332D.....	7.2...30 VDC
Internal power dissipation, 5332D.....	25 mW...0,7 W
Calibration temperature.....	20...28°C
Relative humidity.....	< 95% RH (non-cond.)
Dimensions.....	Ø44 x 20,2 mm
Protection degree (enc./terminal).....	IP68 / IP00
Input types	
P1100.....	-200°C...+850°C
Ni100.....	-60°C...+250°C
Lin. R.....	0 Ω...5000 Ω
Current output	
Signal range.....	4...20 mA
Min. signal range.....	16 mA
Load resistance, Ω.....	≤ (V _{supply} -7,2 V)/0,023
Observed authority requirements	
EMC.....	2014/30/EU & UK SI 2016/1091
ATEX.....	2014/34/EU & UK SI 2016/1107
RoHS.....	2011/65/EU & UK SI 2012/3032
EAC.....	TR-CU 020/2011
EAC Ex.....	TR-CU 012/2011

FR AVERTISSEMENT
Seule PR electronics SARL est autorisée à réparer le module.

FR AVERTISSEMENT
Ne pas utiliser le kit de programmation "Loop Link" en zone classée dangereuse Ex.
Pour des installations en zone classée, les modules doivent être monté conformément aux plans appropriés.

CONSIGNES DE SECURITE

Réception et déballage
Déballé le module sans l'endommager. Il est recommandé de conserver l'emballage du module tant que ce dernier n'est pas définitivement monté. A la réception du module, vérifiez que le type de module reçu correspond à celui que vous avez commandé.

Environmentement
N'exposez pas votre module aux rayons directs du soleil et choisissez un endroit à humidité modérée et à l'abri de la poussière, des températures élevées, des chocs et des vibrations mécaniques et de la pluie. Le cas échéant, des systèmes de ventilation permettent d'éviter qu'une pièce soit chauffée au-delà des limites prescrites pour les températures ambiantes.

Montage
Il est conseillé de réserver le raccordement du module aux techniciens qualifiés qui connaissent les termes techniques, les avertissements et les instructions de ce guide et qui sont capables d'appliquer ces dernières.
Si vous avez un doute quelconque quant à la manipulation du module, veuillez contacter votre distributeur local. Vous pouvez également vous adresser à PR electronics SARL.
Le montage et le raccordement du module doivent être conformes à la législation nationale en vigueur pour le montage de matériels électriques.
La communication est bidirectionnelle. Cela permet non seulement la programmation du module mais également la récupération d'une configuration existante ainsi que la lecture du numéro de série et du repère. Le module peut être livré déjà programmé, si l'utilisateur le souhaite.

Etalonnage et réglage
Lors des opérations d'étalonnage et de réglage, il convient d'effectuer les mesures et les connexions des tensions externes en respectant les spécifications mentionnées dans ce guide. Les techniciens doivent utiliser des outils et des instruments pouvant être manipulés en toute sécurité.

Maintenance et entretien
Une fois le module hors tension, prenez un chiffon imbibé d'eau distillée pour le nettoyer.

Programmation par PC du SYSTEME 5300
Le module peut être programmé en fonction d'une application donnée à partir d'un PC et le kit de programmation Loop Link de PR electronics A/S. Le module peut être programmé sans être alimenté car l'interface de communication fournit l'alimentation nécessaire pour la configuration. L'interface de communication est dotée d'une isolation galvanique pour protéger le port du PC. La communication est bidirectionnelle. Cela permet non seulement la programmation du module mais également la récupération d'une configuration existante ainsi que la lecture du numéro de série et du repère. Le module peut être livré déjà programmé, si l'utilisateur le souhaite.

Spécifications

Plage de température.....	-40°C à +85°C
Tension d'alimentation, 5332N & 5332A.....	7.2...35 Vcc
Puissance dissipée, 5332N & 5332A.....	25 mW...0,8 W
Tension d'alimentation, 5332D.....	7.2...30 Vcc
Puissance dissipée, 5332D.....	25 mW...0,7 W
Température d'étalonnage.....	20...28°C
Humidité relative.....	< 95% HR (sans cond.)
Dimensions.....	Ø44 x 20,2 mm
Degré de protection (boîtier/bornier).....	IP68 / IP00
Types d'entrée	
P1100.....	-200°C...+850°C
Ni100.....	-60°C...+250°C
Résistance linéaire.....	0 Ω...5000 Ω
Sortie courant	
Gamme de signal.....	4...20 mA
Plage de signal min.....	16 mA
Résistance de charge, Ω.....	≤ (V _{alim.} -7,2 V)/0,023
Compatibilité avec les normes	
CEM.....	2014/30/UE & UK SI 2016/1091
ATEX.....	2014/34/UE & UK SI 2016/1107
RoHS.....	2011/65/UE & UK SI 2012/3032
EAC.....	TR-CU 020/2011
EAC Ex.....	TR-CU 012/2011

DE WARNUNG
Reparaturen des Gerätes dürfen nur von PR electronics A/S vorgenommen werden.

DE WARNUNG
Benutzen Sie die Programmierschnittstelle Loop Link nicht im Ex-Bereich.
Zur Montage in klassifizierten Zonen müssen die Geräte nach den dazugehörigen Einbauezeichnungen installiert werden.

SICHERHEITSREGELN

Empfang und Auspacken
Packen Sie das Gerät aus, ohne es zu beschädigen, und kontrollieren Sie beim Empfang, ob der Gerätetyp Ihrer Bestellung entspricht. Die Verpackung sollte beim Gerät bleiben, bis dieses am endgültigen Platz montiert ist.

Umgebungsbedingungen
Direkte Sonneneinstrahlung, starke Staubeentwicklung oder Hitze, mechanische Erschütterungen und Stöße sind zu vermeiden; das Gerät darf nicht Regen oder starker Feuchtigkeit ausgesetzt werden. Bei Bedarf muss eine Erwärmung, welche die angegebenen Grenzen für die Umgebungstemperatur überschreitet, mit Hilfe eines Kühlgebläses verhindert werden.

Installation
Das Gerät darf nur von qualifizierten Technikern angeschlossen werden, die mit den technischen Ausdrücken, Warnungen und Anweisungen in dieser Installationsanleitung vertraut sind und diese befolgen.
Sollten Zweifel bezüglich der richtigen Handhabung des Gerätes bestehen, sollte man mit dem Händler vor Ort Kontakt aufnehmen. Sie können aber auch direkt mit PR electronics GmbH Kontakt aufnehmen.

Die Installation und der Anschluss des Gerätes haben in Übereinstimmung mit den geltenden Regeln des jeweiligen Landes bez. der Installation elektrischer Apparaturen zu erfolgen, u.a. bezüglich Leitungsquerschnitt, (elektrischer) Vor-Absicherung und Positionierung.

Eine Beschreibung von Eingangs- / Ausgangs- und Versorgungsanschlüssen befindet sich im Produkthandbuch, das unter www.prelectronics.de gefunden und abgerufen werden kann.

Kalibrierung und Justierung
Während der Kalibrierung und Justierung sind die Messung und der Anschluss externer Spannungen entsprechend dieser Installationsanleitung auszuführen, und der Techniker muss hierbei sicherheitsmäßig einwandfreie Werkzeuge und Instrumente benutzen.

Reinigung
Das Gerät darf in spannungslosem Zustand mit einem Lappen gereinigt werden, der mit destilliertem Wasser leicht angefeuchtet ist.

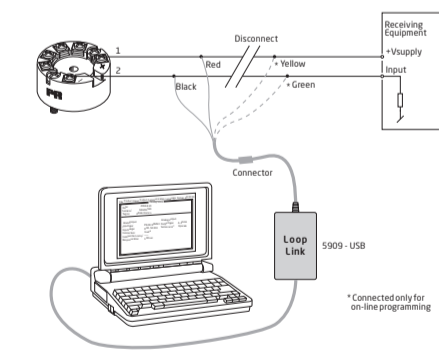
PC-Programmierung des Systems 5300
Das Gerät wird für die jeweilige Aufgabe mit Hilfe eines PCs und PR electronics A/S Kommunikationsschnittstelle Loop Link konfiguriert. Es ist möglich, das Gerät sowohl mit als auch ohne angeschlossene Versorgungsspannung zu konfigurieren, da die Kommunikationsschnittstelle die notwendige Versorgung für die Einstellung liefert. Die Kommunikationsschnittstelle ist galvanisch isoliert, sodass der Anschluss des PCs optimal geschützt ist. Die Kommunikation erfolgt in beiden Richtungen, sodass die Einstellung des Gerätes in den PC geholt, und die Einstellung im PC an das Gerät gesandt werden kann. Für diejenigen Anwender, welche die Einstellung nicht selbst vornehmen wollen, kann das Gerät nach folgenden Kundenspezifikationen konfiguriert geliefert werden: Eingangstyp, Messbereich, Fehlererkennung und Ausgangssignal.

Elektrische Daten

Spezifikationsbereich.....	-40°C bis +85°C
Versorgungsspannung, 5332N & 5332A.....	7.2...35 VDC
Verlustleistung, 5332N & 5332A.....	25 mW...0,8 W
Versorgungsspannung, 5332D.....	7.2...30 VDC
Verlustleistung, 5332D.....	25 mW...0,7 W
Kalibrungstemperatur.....	20...28°C
Luftfeuchtigkeit.....	< 95% RF (nicht kond.)
Maß.....	Ø44 x 20,2 mm
Schutzart (Gehäuse / Anschluss).....	IP68 / IP00
Eingangs-Typen	
P1100.....	-200°C...+850°C
Ni100.....	-60°C...+250°C
Lin. R.....	0 Ω...5000 Ω
Stromausgang	
Signalbereich.....	4...20 mA
Min. Signalbereich.....	16 mA
Belastungswiderstand, Ω.....	≤ (V _{Versorg.} -7,2 V)/0,023
Eingehaltene Behördenvorschriften	
EMV.....	2014/30/UE & UK SI 2016/1091
ATEX.....	2014/34/UE & UK SI 2016/1107
RoHS.....	2011/65/UE & UK SI 2012/3032
EAC.....	TR-CU 020/2011
EAC Ex.....	TR-CU 012/2011

DK Godkendelser UK Approvals FR Approbations DE Zulassungen BR Aprovações

	ATEX	Area / Zone	Installation drawing	IECEX	Area / Zone	Installation drawing	FM	Zone / Div.	Installation drawing	CSA	Zone / Div.	Installation drawing	INMETRO	Zone / Div.	Installation drawing	EAC Ex	PESO
5332A	DEKRA 20ATEX0096 X	2, 22	5332QA02	DEK 20.0059X	2, 22	5332QI02				1125003	2 / Div 2	5331QC02	DEKRA 23.0009X	2, 22	5332QB02	EAEU KZ 7500361.01.01.08756	
5332D	DEKRA 20ATEX0095 X	0, 1, 2, 21, 22, M1	5332QA01	DEK 20.0059X	0, 1, 2, 21, 22, M	5332QI01	FMI17U50013X	0, 1, 2 / Div 1, 2	5332QC01	1125003	0, 1, 2 / Div 1, 2	533XQC03	DEKRA 23.0009X	0, 1, 2, 21, 22, M	5332QB01	EAEU KZ 7500361.01.01.08756	P658778/2



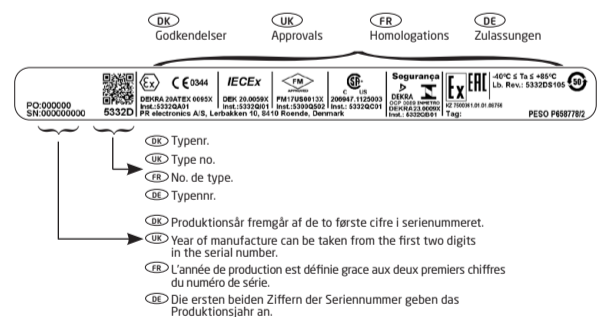
DK Loop Link er et kommunikationsinterface, der er nødvendigt for programmering af 53xx. Loop Link må ikke benyttes til kommunikation med moduler installeret i Ex-område.

UK Loop Link is a communications interface that is needed for programming 53xx. Loop link is not approved for communication with devices installed in hazardous (Ex) areas.

FR Loop Link est un kit de programmation permettant de programmer le 53xx. Loop Link ne doit pas être utilisé pour communication avec des modules installés en zone dangereuse.

DE Loop Link ist eine Schnittstelle zur Programmierung des 53xx. Loop Link darf nicht zur Kommunikation mit Geräten, die in Ex-gefährdeten Bereichen installiert sind, benutzt werden.

DK Sideskilt UK Side label FR Etiquette DE Typenschild



EU DECLARATION OF CONFORMITY (5332DoC_106)



As manufacturer
PR electronics A/S, Lerbakken 10, DK-0410 Rønde
hereby declares that the following products:
Type: 5332
Name: 2-wire programmable RTD transmitter
From serial no.: 211661138
is in conformity with the following directives and standards:
The EMC Directive 2014/30/EU and later amendments
EN 61326-1 : 2013
Immunity test requirements for equipment intended to be used in an industrial electromagnetic environment.
For specification of the acceptable EMC performance level, refer to the electrical specifications for the device.
The ATEX Directive 2014/34/EU and later amendments
EN IEC 60079-0 : 2018, EN 60079-7 : 2015 + A1 : 2018, EN 60079-11 : 2012 and EN 60079-15 : 2010
ATEX certificate: DEKRA 20ATEX0096 X (5332A)
ATEX certificate: DEKRA 20ATEX0095 X (5332D)
ATEX notified body (type approval)
DEKRA Certification B.V.
Heander 1051, 6825 NJ Arnhem
P.O. Box 5185, 6802 EA Arnhem
The Netherlands
The RoHS Directive 2011/65/EU and later amendments
EN IEC 63000 : 2018
Notified body 0344
DEKRA Certification B.V.
Heander 1051, 6825 NJ Arnhem
P.O. Box 5185, 6802 EA Arnhem
The Netherlands
This declaration of conformity is issued under the sole responsibility of the manufacturer.
Sieg Lindemann, CTO
Rønde, 2 November 2022
Sieg Lindemann, CTO
Manufacturer's signature

ATEX-installation drawing 5332QA01-V2R0

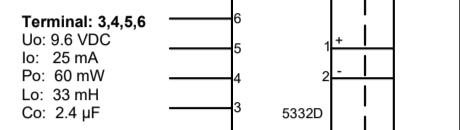
For safe installation of 5332D the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

ATEX Certificate DEKRA 20ATEX0095 X

Marking  II 1 G Ex ia IIC T6...T4 Ga
II 2 D Ex ia IIIC Db
I M1 Ex ia I Ma

Standards EN 60079-0: 2018, EN 60079-11: 2012

Hazardous area Zone 0, 1, 2, 21, 22 Non Hazardous Area



Terminal: 3,4,5,6
Uo: 9.6 VDC
Io: 25 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 µF

Terminal: 1,2
Ui: 30 VDC
Ii: 120 mA
Pi: 0.84 W or 0.75 W
Li: 10 µH
Ci: 1.0 nF

Temperature Class	Ambient temperature range	
	Pi: 0.84 W	Pi: 0.75 W
T6	-40°C to +47°C	-40°C to +50°C
T5	-40°C to +62°C	-40°C to +65°C
T4	-40°C to +85°C	-40°C to +85°C

Installation notes

If the enclosure is made of non-metallic plastic materials, electrostatic charges on the transmitter enclosure shall be avoided.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Ga, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP20 according to EN 60529, and that is suitable for the application and correctly installed.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Ga or Ma, and if the enclosure is made of aluminum, it must be installed such that ignition sources due to impact and friction sparks are excluded.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Db, the transmitter shall be mounted in a separately certified enclosure that provides a degree of protection of at least IP5X according to EN 60079-0, and that is suitable for the application and correctly installed.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Ma, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP54 according to EN 60529, and that is suitable for the application and correctly installed.

Cable entries and blanking elements shall be used that are suitable for the application and correctly installed.

For an ambient temperature ≥ 60°C, heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

ATEX-installation drawing 5332QA02-V2R0

For safe installation of 5332A the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

ATEX Certificate DEKRA 20ATEX0096 X

Marking  II 3 G Ex nA [ic] IIC T6 ... T4 Gc
II 3 G Ex ec [ic] IIC T6 ... T4 Gc
II 3 G Ex ic IIC T6 ... T4 Gc
II 3 D Ex ic IIIC Dc

Standards EN 60079-0: 2018, EN 60079-11: 2012, EN 60079-15: 2010, EN 60079-7:2015 +A1: 2018

Terminal 3,4,5,6	Terminal 1,2	Terminal 1,2	Terminal 1,2
Ex ic IIC, Ex ic IIIC	Ex ic IIC, Ex ic IIIC	Ex ic IIC, Ex ic IIIC	Ex nA, Ex ec
Uo: 9.6 V Io: 25 mA Po: 60 mW Lo: 33 mH Co: 2.4 µF	Ui = 35 V Ii = 110 mA Ci = 1 nF Li = 10 µH	Ui = 24 V Ii = 260 mA Ci = 1 nF Li = 10 µH	Umax ≤ 35 VDC or Umax ≤ 24 VDC

Ex ic IIC, Ex ic IIIC Temperature Class	Ambient temperature range	
	Ui=35 V	Ui=24 V
T6	-40°C to +54°C	-40°C to +63°C
T5	-40°C to +69°C	-40°C to +78°C
T4	-40°C to +85°C	-40°C to +85°C

Ex ec, Ex nA Temperature Class	Ambient temperature range	
	Vmax=35 V	Vmax=24 V
T6	-40°C to +43°C	-40°C to +55°C
T5	-40°C to +85°C	-40°C to +85°C
T4	-40°C to +85°C	-40°C to +85°C

Installation notes

If the enclosure is made of non-metallic plastic materials, electrostatic charges on the transmitter enclosure shall be avoided.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Gc and applied in type of protection Ex ic, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP20 according to EN 60529, and that is suitable for the application and correctly installed.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Dc, the transmitter shall be mounted in a separately certified enclosure that provides a degree of protection of at least IP5X according to EN 60079-0, and that is suitable for the application and correctly installed. The surface temperature of the outer enclosure is +20 K above the ambient temperature, determined without a dust layer. Ambient temperature range: -40°C to +85°C.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Gc and applied in type of protection Ex nA or Ex ec, the transmitter shall be mounted in a separately certified enclosure that provides a degree of protection of at least IP54 according to EN 60079-0, and that is suitable for the application and correctly installed.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Gc and applied in type of protection Ex nA or Ex ec, the equipment shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.

IECEx-installation drawing 5332QI01-V2R0

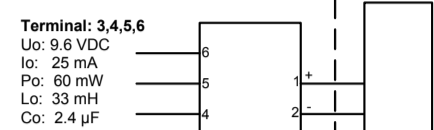
For safe installation of 5332D the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

Certificate IECEx DEK 20.0059X

Marking Ex ia IIC T6...T4 Ga
Ex ia IIIC Db
Ex ia I Ma

Standards IEC 60079-0: 2017, IEC 60079-11: 2011

Hazardous area Zone 0, 1, 2, 21, 22 Non Hazardous Area



Terminal: 3,4,5,6
Uo: 9.6 VDC
Io: 25 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 µF

Terminal: 1,2
Ui: 30 VDC
Ii: 120 mA
Pi: 0.84 W or 0.75 W
Li: 10 µH
Ci: 1.0 nF

Temperature Class	Ambient temperature range	
	Pi: 0.84 W	Pi: 0.75 W
T6	-40°C to +47°C	-40°C to +50°C
T5	-40°C to +62°C	-40°C to +65°C
T4	-40°C to +85°C	-40°C to +85°C

Installation notes

If the enclosure is made of non-metallic plastic materials, electrostatic charges on the transmitter enclosure shall be avoided.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Ga, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP20 according to IEC 60529, and that is suitable for the application and correctly installed.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Ga or Ma, and if the enclosure is made of aluminum, it must be installed such that ignition sources due to impact and friction sparks are excluded.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Db, the transmitter shall be mounted in a separately certified enclosure that provides a degree of protection of at least IP5X according to IEC 60079-0, and that is suitable for the application and correctly installed. The surface temperature of the outer enclosure is +20 K above the ambient temperature, determined without a dust layer. Ambient temperature range: -40°C to +85°C.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Ma, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP54 according to IEC 60529, and that is suitable for the application and correctly installed. Ambient temperature range: -40°C to +85°C.

Cable entries and blanking elements shall be used that are suitable for the application and correctly installed.

For an ambient temperature ≥ 60°C, heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

IECEx-installation drawing 5332QI02-V2R0

For safe installation of 5332A the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

Certificate IECEx DEK 20.0059X

Marking Ex nA [ic] IIC T6 ... T4 Gc
Ex ec [ic] IIC T6 ... T4 Gc
Ex ic IIC T6 ... T4 Gc
Ex ic IIIC Dc

Standards IEC 60079-0: 2017, IEC 60079-11: 2011, IEC 60079-15: 2010, IEC 60079-7:2017

Terminal 3,4,5,6	Terminal 1,2	Terminal 1,2	Terminal 1,2
Ex ic IIC, Ex ic IIIC	Ex ic IIC, Ex ic IIIC	Ex ic IIC, Ex ic IIIC	Ex nA, Ex ec
Uo: 9.6 V Io: 25 mA Po: 60 mW Lo: 33 mH Co: 2.4 µF	Ui = 35 V Ii = 110 mA Ci = 1 nF Li = 10 µH	Ui = 24 V Ii = 260 mA Ci = 1 nF Li = 10 µH	Umax ≤ 35 VDC or Umax ≤ 24 VDC

Ex ic IIC, Ex ic IIIC Temperature Class	Ambient temperature range	
	Ui=35 V	Ui=24 V
T6	-40°C to +54°C	-40°C to +63°C
T5	-40°C to +69°C	-40°C to +78°C
T4	-40°C to +85°C	-40°C to +85°C

Ex ec, Ex nA Temperature Class	Ambient temperature range	
	Vmax=35 V	Vmax=24 V
T6	-40°C to +43°C	-40°C to +55°C
T5	-40°C to +85°C	-40°C to +85°C
T4	-40°C to +85°C	-40°C to +85°C

Installation notes

If the enclosure is made of non-metallic plastic materials, electrostatic charges on the transmitter enclosure shall be avoided.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Gc and applied in type of protection Ex ic, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP20 according to IEC 60529, and that is suitable for the application and correctly installed.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Dc, the transmitter shall be mounted in a separately certified enclosure that provides a degree of protection of at least IP5X according to IEC 60079-0, and that is suitable for the application and correctly installed. The surface temperature of the outer enclosure is +20 K above the ambient temperature, determined without a dust layer. Ambient temperature range: -40°C to +85°C.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Gc and applied in type of protection Ex nA or Ex ec, the transmitter shall be mounted in a separately certified enclosure that provides a degree of protection of at least IP54 according to IEC 60079-0, and that is suitable for the application and correctly installed.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Gc and applied in type of protection Ex nA or Ex ec, the equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.

Desenho de Instalação INMETRO 5332QB01-V2R0

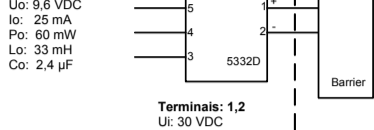
Para instalação segura do 5332D o seguinte deve ser observado. O modelo deve apenas ser instalado por pessoas qualificadas que são familiarizadas com as leis nacionais e internacionais, diretrizes e padrões que se aplicam a esta área. O ano de fabricação pode ser pego dos dois primeiros dígitos do número de série.

Certificado DEKRA 23.0009 X

Marcas Ex ia IIC T6...T4 Ga
Ex ia IIIC Db
Ex ia I Ma

Normas ABNT NBR IEC 60079-0:2020 Versão Corrigida:2023
ABNT NBR IEC 60079-11:2013 Versão Corrigida:2017

Áreas classificadas Zona 0, 1, 2, 21, 22 Área não classificada



Classe de temperatura	Faixa de temperatura ambiente	
	Pi: 0,84W	Pi: 0,75W
T6	-40 °C to +47 °C	-40 °C to +50 °C
T5	-40 °C to +62 °C	-40 °C to +65 °C
T4	-40 °C to +85 °C	-40 °C to +85 °C

Notas de instalação

Se o invólucro for feito de materiais plásticos não metálicos, devem ser evitadas cargas eletrostáticas no invólucro do transmissor.

Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de nível de proteção de equipamento Ga, o transmissor deverá ser montado em um invólucro que forneça um grau de proteção de pelo menos IP20 de acordo com a ABNT NBR IEC 60529, e que seja adequado para a aplicação e corretamente instalado.

Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de nível de proteção de equipamento Ga ou Ma, e se o invólucro for feito de alumínio, ele deverá ser instalado de forma que fontes de ignição devido a faíscas de impacto e fricção sejam excluídas.

Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de nível de proteção de equipamento Db, o transmissor deverá ser montado em um invólucro certificado separadamente que forneça um grau de proteção de pelo menos IP5X de acordo com a ABNT NBR IEC 60079-0, e que seja adequado para o aplicativo e instalado corretamente. A temperatura da superfície do invólucro externo é +20 K acima da temperatura ambiente, determinada sem camada de poeira. Faixa de temperatura ambiente: -40 °C a +85 °C.

Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de nível de proteção de equipamento Ma, o transmissor deverá ser montado em um invólucro que forneça um grau de proteção de pelo menos IP54 de acordo com a ABNT NBR IEC 60529, e que seja adequado para a aplicação e corretamente instalado. Faixa de temperatura ambiente: -40 °C a +85 °C.

Devem ser utilizadas entradas de cabos e elementos de vedação adequados à aplicação e instalados corretamente.

Para uma temperatura ambiente ≥ 60°C, devem ser utilizados cabos resistentes ao calor com uma classificação de pelo menos 20 K acima da temperatura ambiente.

Desenho de Instalação INMETRO 5332QB02-V2R0

Para instalação segura do 5332A o seguinte deve ser observado. O modelo deve apenas ser instalado por pessoas qualificadas que são familiarizadas com as leis nacionais e internacionais, diretrizes e padrões que se aplicam a esta área. O ano de fabricação pode ser pego dos dois primeiros dígitos do número de série.

Certificado DEKRA 23.0009 X

Marcas Ex ec [ic] IIC T4, T6 Gc
Ex ic IIC T4, T6 Gc
Ex ic IIIC Dc

Normas ABNT NBR IEC 60079-0:2020 Versão Corrigida:2023
ABNT NBR IEC 60079-7:2018 Versão Corrigida:2022
ABNT NBR IEC 60079-11:2013 Versão Corrigida:2017

Terminals 3,4,5,6	Terminals 1,2	Terminals 1,2	Terminals 1,2
Ex ic IIC, Ex ic IIIC	Ex ic IIC, Ex ic IIIC	Ex ic IIC, Ex ic IIIC	Ex ec
Uo: 9.6 V Io: 25 mA Po: 60 mW Lo: 33 mH Co: 2.4 µF	Ui = 35 V Ii = 110 mA Ci = 1 nF Li = 10 µH	Ui = 24 V Ii = 260 mA Ci = 1 nF Li = 10 µH	Umax ≤ 35 Vdc or Umax ≤ 24 Vdc

Ex ic IIC, Ex ic IIIC Classe de temperatura	Faixa de temperatura ambiente	
	Ui=35V	Ui=24V
T6	-40 °C to +54 °C	-40 °C to +63 °C
T5	-40 °C to +69 °C	-40 °C to +78 °C
T4	-40 °C to +85 °C	-40 °C to +85 °C

Ex ec Classe de temperatura	Faixa de temperatura ambiente	
	Umax=35V	Umax=24V
T6	-40 °C to +43 °C	-40 °C to +55 °C
T5	-40 °C to +85 °C	-40 °C to +85 °C
T4	-40 °C to +85 °C	-40 °C to +85 °C

Notas para instalação

Se o invólucro for feito de materiais plásticos não metálicos, devem ser evitadas cargas eletrostáticas no invólucro do transmissor.

Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de nível de proteção de equipamento Gc e aplicado no tipo de proteção Ex ic, o transmissor deverá ser montado em um gabinete que forneça um grau de proteção de pelo menos IP20 de acordo com ABNT NBR IEC 60529, e adequado à aplicação e instalado corretamente.

Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de nível de proteção de equipamento Dc, o transmissor deverá ser montado em um invólucro certificado separadamente que forneça um grau de proteção de pelo menos IP5X de acordo com a ABNT NBR IEC 60079-0, e que seja adequado para o aplicativo e instalado corretamente. A temperatura da superfície do invólucro externo é +20 K acima da temperatura ambiente, determinada sem camada de poeira. Faixa de temperatura ambiente: -40 °C a +85 °C.

Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de nível de proteção de equipamento Gc e aplicado no tipo de proteção Ex ec, o transmissor deverá ser montado em um invólucro certificado separadamente que forneça um grau de proteção de pelo menos IP54 de acordo com a ABNT NBR IEC 60079-0, e que seja adequado à aplicação e instalado corretamente.

Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de nível de proteção de equipamento Gc e aplicado no tipo de proteção Ex ec, o equipamento deverá ser usado somente em uma área com grau de poluição não superior a 2, conforme definido na IEC 60664-1.

CSA Installation drawing 5332QC01 - V2R0

Hazardous area T4: -40 °C Ta ≤ 85°C
T6: -40 °C Ta ≤ 60°C Non Hazardous Area

Terminal: 3,4,5,6
Connect only to passive, or non-energy storing devices such as RTD's.

Terminal: 1,2
Ui: 30 VDC
Ii: 120 mA
Pi: 0.84 W
Li: 10 µH
Ci: 1.0 nF

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsic Safe Entity - For Hazardous Locations
CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsic Safe Entity - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C and D T6...T4
Ex ia IIC T6...T4
Class I, Zone 0, AEx ia IIC Ga

Warning:
Substitution of components may impair intrinsic safety.

The transmitters must be installed in a suitable enclosure to meet installation codes stipulated in the Canadian Electrical Code (CEC) or for US the National Electrical Code (NEC).

CSA Installation drawing 5331QC02 - V2R0

For safe installation of the 5331A and 5332A the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area.

Marking Class I, Division 2, Group A,B,C,D T6...T4
Ex nA [ic] IIC T6...T4
Class I Zone 2 AEx nA [ic] IIC T6...T4

Hazardous Area CL I, Div 2, GP ABCD CL I, Zone 2, IIC

Terminal: 3,4,5,6
Uo: 9.6 VDC
Io: 25 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 µF

Terminal: 1,2
Functional Ratings:
Ui nominal ≤ 35 VDC;
Ii nominal 5.5 - 23 mA

NI Installation instructions

The transmitter must be installed in an enclosure providing a degree of protection of at least IP54 according to IEC60529 that is suitable for the application and is correctly installed. Cable entry devices and blanking elements shall fulfill the same requirements. If the enclosure is made of non-metallic materials or of painted metal, electrostatic charging shall be avoided.

Use supply wires with a rating of at least 5 K above the ambient temperature. Equipment from a Class 2 Power Supply with Transient protection or equivalent.

WARNING: Substitution of components may impair suitability for Class I, Division 2
AVERTISSEMENT: la substitution de composants peut nuire à l'aptitude à la Classe I, Division 2.

WARNING: Do not disconnect equipment unless power has been switched off or the area is known to be safe.
AVERTISSEMENT: Ne débranchez pas l'équipement sauf si l'alimentation a été coupée ou si la zone est connue pour être sûre.

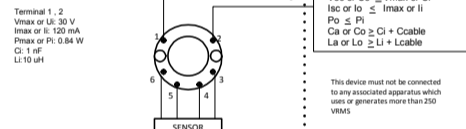
Non Incendive field wiring installation
The non incendive field wiring concept allows interconnection of Nonincendive Field wiring Apparatus with Associated Nonincendive Field Wiring Apparatus or Associated Intrinsically Safe Apparatus or Associated Apparatus not specially examined in combination as a system using any of the wiring methods permitted for unclassified locations,
Voc ≤ Vmax, Ca ≥ Ci + Ccable, La ≥ Li + Lcable.

FM Installation Drawing 5300Q502 V3R0

Model 5331D, 5332D, 5333D and 5343B

Hazardous (Classified) Location Class I, Division1, Groups, A,B,C,D T4, T6 Class I, Zone 0, AEx ia IIC T4, T6

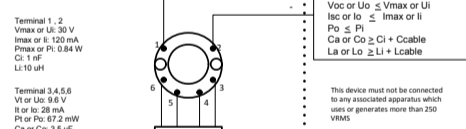
Non Hazardous Location Associated Apparatus or Barrier with entity Parameters:
UM ≤ 250V
Voc or Uo ≤ Vmax or Ui
Isc or Io ≤ Imax or Ii
Po ≤ Pi
Ca or Co ≥ Ci + Ccable
La or Lc ≥ Li + Lcable



Model 5335D, 5337D

Hazardous (Classified) Location Class I, Division1, Groups, A,B,C,D T4, T6 Class I, Zone 0, AEx ia IIC T4, T6

Non Hazardous Location Associated Apparatus or Barrier with entity Parameters:
UM ≤ 250V
Voc or Uo ≤ Vmax or Ui
Isc or Io ≤ Imax or Ii
Po ≤ Pi
Ca or Co ≥ Ci + Ccable
La or Lc ≥ Li + Lcable



The entity concept