

DK

ADVARSEL
Følgende operationer bør kun udføres på modulet i spændingsløs tilstand og under ESD-sikre forhold. Installation, ledningsmontage og -demontage. Fejlfinding på modulet. Reparation af modulet må kun foretages af PR electronics A/S.

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 eksplosionsfarligt 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 blivende plads.

Miljøforhold
Undgå direkte sollys, kraftigt støv eller varme, mekaniske rystelser og stød, og udsæt ikke modulet for regn eller kraftig 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 bekendte 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.
Installation og tilslutning af modulet skal følge landets gældende regler for installation af elektrisk materiel bl.a. med hensyn til ledningstværsnit, for-sikring og placering.
Beskrivelseaf indgang/udgangforsyningsforbindelser findes i produktmanualen, som kan hentes på www.prelectronics.dk.

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

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

Elektriske specifikationer
Specifikationsområde..... -40°C til +85°C
Forsyningsspænding, 5350A..... 9,0...32 VDC
Forsyningsspænding, 5350B..... 9,0...30 VDC
Forsyningsspænding i FISCO-installationer..... 9...17,5 V
Isolationsspænd., test/oper. 1,5 kVAC / 50 VAC
Kalibreringstemperatur..... 20...28°C
Relativ fugtighed..... < 95% RH (ikke kond.)
Mål..... Ø44 x 20,2 mm
Kapslingsklasse (hus/klemme)..... IP68 / IP00

Indgangstyper:
Pt25...Pt1000..... -200°C...+850°C
Ni25...Ni1000..... -60°C...+250°C
Cu10...Cu1000..... -50°C...+200°C
TC..... B, E, J, K, L, N, R, S, T, U, W3, W5
Lin. R..... 0 Ω...10 kΩ
Potentiometer..... 0 Ω...100 kΩ
Udgang..... -800...+800 mV

Spørg:
Bus-tilslutning..... PROFIBUS PA / FOUNDATION Fieldbus

Godkendelser:
EAC..... TR-CU 020/2011
EAC Ex..... TR-CU 012/2011

Overholdte myndighedskrav:
EMC..... 2014/30/EU
ATEX..... 2014/34/EU
RoHS..... 2011/65/EU

DECLARATION OF CONFORMITY

(5350DoC_102)
As manufacturer PR electronics A/S, Lerbakken 10, DK-8410 Rønde hereby declares that the following products:
Type: 5350
Name: PROFIBUS PA/FOUNDATION Fieldbus transmitter
From serial no.: 1520188436
is in conformity with the following directives and standards:
The EMC Directive and later amendments until 2016.04.19: 2004/108/EC from 2016.04.20: 2014/30/EU EN 61326-1 : 2013
For specification of the acceptable EMC performance level, refer to the electrical specifications for the device.
The ATEX Directive and later amendments until 2016.04.19: 94/9/EC from 2016.04.20: 2014/34/EU EN 60079-0 : 2012+A11, EN 60079-11 : 2012, EN 60079-15 : 2010
ATEX certificate: KEMA 02ATEX1318 X
Notified body DEKRA Certification B.V. (0344) Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
The RoHS2 Directive 2011/65/EU The product has been manufactured according to Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Rønde, 24 June 2016
Stig Lindemann, CTO
Manufacturer's signature

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	Area	Installation drawing	NEPSI
5350A	KEMA 02ATEX1318 X	2, 22	5350QE01				3015609	2 / Div 2	5350QE01	1418937	2 / Div 2	5350QE01				GJY14.1100U
5350B	KEMA 02ATEX1318 X	0, 1, 2, 20, 21, 22, M1	5350QE01	BVS 12.0035X	0, 1, 2, 20, 21, 22, M	5350QE01	3015609	0, 1, 2 / Div 1, 2	5350QE01	1418937	0, 1, 2 / Div 1, 2	5350QE01	NCC 12.1009 X	0, 1, 2, 20, 21, 22, M	5350QE01	GJY14.1101X

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

AVERTISSEMENT
Les opérations suivantes doivent être effectuées avec le module débranché et dans un environnement exempt de décharges électrostatiques (ESD): montage général, raccordement et débranchement de fils et recherche de pannes sur le module. Seule PR electronics SARL est autorisée à réparer le module.

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
Déballiez 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.

Environnement
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 matériaux électriques, par exemple, diamètres des fils, fusibles de protection et implantation des modules. Les connexions des alimentations et des entrées / sorties sont décrites dans le manuel du produit sur www.prelectronics.fr.

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.

Spécifications
Plage de température..... -40°C à +85°C
Tension d'alimentation, 5350A..... 9,0...32 Vcc
Tension d'alimentation, 5350B..... 9,0...30 Vcc
Tension d'alimentation dans les installations FISCO 9,0...17,5 V
Tension d'iso. test/opér..... 1,5 kVca / 50 Vca
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:
Pt25...Pt1000..... -200°C...+850°C
Ni25...Ni1000..... -60°C...+250°C
Cu10...Cu1000..... -50°C...+200°C
TC..... B, E, J, K, L, N, R, S, T, U, W3, W5
Lin. R..... 0 Ω...10 kΩ
Potentiometer..... 0 Ω...100 kΩ
Voltage..... -800...+800 mV

Sortie:
Connexion bus..... PROFIBUS PA / Fieldbus FOUNDATION

Approbations:
EAC..... TR-CU 020/2011
EAC Ex..... TR-CU 012/2011

Compatibilité avec les normes:
CEM..... 2014/30/EU
ATEX..... 2014/34/EU
RoHS..... 2011/65/EU

DE

WARNUNG
Folgende Maßnahmen sollten nur in spannungslosem Zustand des Gerätes und unter ESD-sicheren Verhältnisse durchgeführt werden: Installation, Montage und Demontage von Leitungen. Fehlersuche im Gerät und Reparaturen des Gerätes dürfen nur von PR electronics A/S vorgenommen werden.

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

SICHERHEITSGEDELN
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 Staubentwicklung 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.

Elektrische Daten
Spezifikationsbereich..... -40°C bis +85°C
Versorgungsspannung, 5350A..... 9,0...32 VDC
Versorgungsspannung, 5350B..... 9,0...30 VDC
Versorgungsspannung in FISCO-Installationen..... 9,0...17,5 V
Isolationsspannung..... 1,5 kVAC / 50 VAC
Test / Betrieb..... 20...28°C
Luftfeuchtigkeit..... < 95% RF (nicht kond.)
Maß..... Ø44 x 20,2 mm
Schutzart (Gehäuse / Anschluss)..... IP68 / IP00

Eingangs-Typen:
Pt25...Pt1000..... -200°C...+850°C
Ni25...Ni1000..... -60°C...+250°C
Cu10...Cu1000..... -50°C...+200°C
TE..... B, E, J, K, L, N, R, S, T, U, W3, W5
Lin. R..... 0 Ω...10 kΩ
Potentiometer..... 0 Ω...100 kΩ
Spannung..... -800...+800 mV

Ausgang:
Bus-Verbindung..... PROFIBUS PA / FOUNDATION Fieldbus

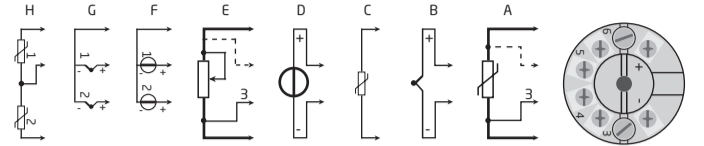
Zulassungen:
EAC..... TR-CU 020/2011
EAC Ex..... TR-CU 012/2011

Eingehaltene Behördenvorschriften:
EMV..... 2014/30/EU
ATEX..... 2014/34/EU
RoHS..... 2011/65/EU

PR electronics A/S
Lerbakken 10
DK-8410 Rønde
Tel. +45 8637 2677
Fax +45 8637 3085
www.prelectronics.com
SN5350_108 (1624)

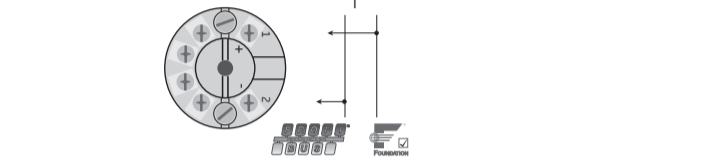
DK Installationsvejledningen for teknikere omfatter følgende produkter: 5350A og 5350B.
UK This installation guide for technical personnel covers the following products: 5350A and 5350B.
FR Ce guide d'installation pour le personnel qualifié couvre les produits suivants: 5350A et 5350B.
DE Diese Installationsanleitung für Techniker umfasst die folgenden Produkte: 5350A und 5350B.

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



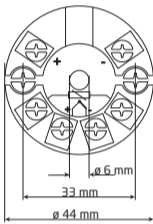
	DK	UK	FR	DE
A	RTD	RTD	RTD	WTH
B	TC	TC	TC	TE
C	CJC	CJC	CSF	CJC
D	Spænding	Voltage	Tension	Spannung
E	Lin R	Lin R	Lin R	Lin R
F	mV, differens eller middel	mV, difference or average	mV, différence ou moyen	mV, Differenz oder Mittel
G	TC, differens eller middel, med intern CJC	TC, difference or average, with internal CJC	TC, différence ou moyen avec CSF interne	TE, Differenz oder Mittel, mit interner CJC
H	RTD, differens eller middel	RTD, difference or average	RTD, différence ou moyen	WTH, Differenz oder Mittel

DK Udgangssignaler UK Output signals FR Signaux de sortie DE Ausgangssignale



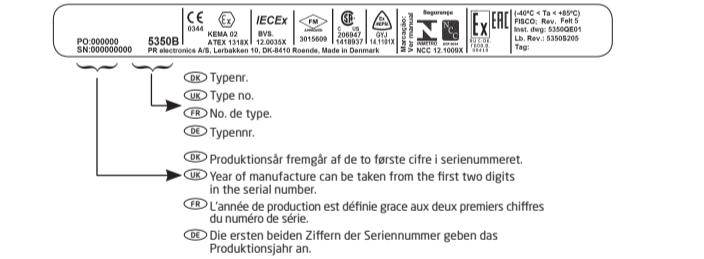
	DK	UK	FR	DE
I	PROFIBUS eller FOUNDATION FIELDBUS	PROFIBUS or FOUNDATION FIELDBUS	PROFIBUS ou FOUNDATION FIELDBUS	PROFIBUS oder FOUNDATION FIELDBUS

DK Mekaniske specifikationer.
UK Mechanical specifications.
FR Dimensions mécaniques.
DE Abmessungen.



DK **Montering af følerledninger**
Ledninger monteres mellem metalpladerne. Ledningskvadrat (max.) 1 x 1,5 mm² flertrådet ledning. Klemmekræft/spændingsmoment 0,4 Nm.
UK **Mounting of sensor wires**
Wires must be mounted between the metal plates. Max. wire size 1 x 1.5 mm² stranded wire. Screw terminal torque 0.4 Nm.
FR **Montage des fils du capteur**
Les fils doivent être montés entre les plaques métalliques. Taille max. des fils 1 x 1,5 mm² fils multibrins. Pression max. avant déformation de la vis 0,4 Nm.
DE **Montage von Fühlerleitungen**
Die Leitungen müssen zwischen den Metallplatten montiert werden. Leitungsquerschnitt (max.) 1 x 1,5 mm² Litzendraht. Klemmschraubenanzugsmoment 0,4 Nm.

DK Sideskilt
UK Side label
FR Etiquette
DE Typenschild
DK Godkendelser UK Approvals FR Homologations DE Zulassungen



DK Typennr.
UK Type no.
FR No. de type.
DE Typennr.
DK Produktionsår fremgår af de to første cifre i serienummeret.
UK Year of manufacture can be taken from the first two digits in the serial number.
FR L'année de production est définie grâce aux deux premiers chiffres du numéro de série.
DE Die ersten beiden Ziffern der Seriennummer geben das Produktionsjahr an.

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

ATEX Installation drawing 5350QA01-V3R0

5350

For safe installation of 5350B 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: KEMA 02ATEX 1318X

Marking: II 1 G Ex ia IIC T6...T4 Ga
II 2 (1) G Ex ib IIA G IIC T6...T4 Gb
II 1 D Ex ia IIC Da
I M 1 Ex ia I Ma

Standards: EN 60079-0 : 2012+A11, EN 60079-11 : 2012

Hazardous area: Zone 0, 1, 2, 20, 21, 22

Non Hazardous Area

Max 10 modules

Termination

Unit	Barrier where Po < 0.84 W	Barrier where Po < 1.3 W	Suitable for FISCO systems	Suitable for FISCO systems
U _i	30 VDC	30 VDC	17.5 VDC	15 VDC
I _i	120 mADC	300 mADC	250 mADC	900 mADC
P _i	0.84 W	1.3 W	2.0 W	5.32 W
L _i	1 µH	1 µH	1 µH	1 µH
C _i	2 nF	2 nF	2 nF	2 nF
T1..T4	Tamb < 85°C	Tamb < 75°C	Tamb < 85°C	Tamb < 85°C
T5	Tamb < 70°C	Tamb < 65°C	Tamb < 60°C	Tamb < 60°C
T6	Tamb < 60°C	Tamb < 45°C	Tamb < 45°C	Tamb < 45°C

Unit	Barrier where Po < 5.32 W	FISCO segment coupler
U _i	30 VDC	17.5 VDC
I _i	250 mADC	any
P _i	5.32 W	any
L _i	1 µH	1 µH
C _i	2 nF	2 nF
T1..T4	Tamb < 85°C	Tamb < 85°C
T5	Tamb < 75°C	Tamb < 75°C
T6	Tamb < 60°C	Tamb < 60°C

Sensor input, terminal 3,4,5 and 6
U_o.....: 5.7 VDC
I_o.....: 8.4 mA
P_o.....: 12 mW
C_o.....: 200 mH
L_o.....: 40 µF

General installation instructions

The Sensor Circuit is not infallibly galvanic isolated from the Fieldbus circuit. However, the galvanic isolation is capable of withstanding a test voltage of 500Vac during 1 minute.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment of category 1G, 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 enclosure is made of non-metallic material or of metal having a paint layer thicker of more than 0.2mm (group IIC) or 2mm for (group IIB, IIA, I), electrostatic charging shall be avoided.

For installation in a potential explosive gas atmosphere . The transmitter shall be mounted in an enclosure form B according to DIN43729 or equivalent that provides a degree of protection of at least IP20 according to EN/IEC 60529, that is suitable for the application and correctly installed.

For installation in a potential explosive dust atmosphere. The transmitter shall be mounted in an enclosure form B according to DIN43729 or equivalent that provides a degree of protection of at least IPX6 according to EN/IEC 60529, 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. The surface temperature of the enclosure is equal to the ambient temperature +20 K. If the enclosure is made of non-metallic material or of metal having a paint layer, electrostatic charging shall be avoided.

For installation in mines. The transmitter shall be mounted in a steel or non-metallic enclosure that provides a degree of protection of at least IP6X according to EN/IEC 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. If the enclosure is made of non-metallic materials or painted metals electrostatic charging shall be avoided.

5350A: For safe installation 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.

Marking: II 3 G Ex nA [ic] IIC T6..T4 Gc T4: -40 ≤ Ta ≤ 85°C
II 3 G Ex ic IIC T6..T4 Gc T5: -40 ≤ Ta ≤ 75°C
II 3 D Ex ic IIC Dc T6: -40 ≤ Ta ≤ 60°C

Standards: EN 60079-0 : 2012+A11, EN 60079-11 : 2012, EN 60079-15 : 2010

General installation instructions:

The Sensor Circuit is not infallibly galvanic isolated from the Fieldbus circuit. However, the galvanic isolation is capable of withstanding a test voltage of 500Vac during 1 minute.

If the enclosure is made of non-metallic material or of metal having a paint layer thicker of more than 0.2mm (group IIC) or 2mm for (group IIB, IIA), electrostatic charging shall be avoided.

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

For installation in a potentially explosive gas atmosphere. For Ex ic installation, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP20 according to EN/IEC 60529 and that is suitable for the application and correctly installed.

For Ex nA installation the transmitter shall be installed in an enclosure providing a degree of protection of at least IP54, according to EN/IEC 60529 that is suitable for the application and correctly installed; e.g. an enclosure with protection Ex n or Ex e. Cable entry devices and blanking elements shall fulfill the same requirements.

For installation in a potentially explosive dust atmosphere: For Ex ic installation interfacing intrinsically safe signal "ic" (e.g. a passive device), the transmitter shall be mounted in a metal enclosure form B according to DIN 43729 or equivalent, that provides a degree of protection of at least IP6X according to EN/IEC 60529, that is suitable for the application. Cable entry devices and blanking elements shall fulfill the same requirements.

For non intrinsically safe installation the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP6X according to EN/IEC 60529, and in conformance with type of protection EX I that is suitable for the application and correctly installed. Cable entry devices and blanking elements shall fulfill the same requirements. If the enclosure is made of non-metallic material or of metal having a paint layer, electrostatic charging shall be avoided. The surface temperature of the enclosure is equal to the ambient temperature +20 K.

NEPSI Installation drawing 5350QN1-V2R0

Transmitter with Bus technology of Series 5350A manufactured by PR Electronics A/S via the test made by NEPSI (National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation have been provided that they are fulfilling the General Requirements according to Article 1, GB3836.1-2010 "Electrical equipment used in the Explosive Gas Environment" and the specified requirements for "n" series in Article IX, GB3836.2-2003. The symbol of explosive protection applied should be Ex nA(L) IIC T4-T6 while the Certificate No. is GYJ14.1100U.

Firstly, Note for the use of the products

- The Symbol U applied after the Cert. No., indicates that this transmitter cannot be applied in explosive environment of danger until the Protection Grade of the box where the transmitter will later on be placed is not lower than IP54 (GB4208), and has been approved by the National Authorized Inspection Body.
- The rated Voltage for the transmitter should be 32Vd.c. Proper measures should be applied to protect the working voltage from instantaneously jumping up to 40% of the rated Voltage caused by disturbance.
- The relationship between the temperature Code and ambient temperature is indicated as follows:

Temperature Code	Ambient Temperature
T4	-40→+85
T5	-40→+75
T6	-40→+60

- The parameters of the transmitter output which will be connected with the inputs of the Sensor (X3, X4, X5, X6) are as follows:
U_o=5.7 V I_o=8.4 V P_o=12 mW C_o=40 µF I_o=200 mH

- Only when the transmitter is combined with other power-restraint devices which have also been tested and approved by the National Authorized Inspection Body and met the requirements of GB3836.1-2000 and GB3836.2-2000 can the explosion protection system be applied in the explosive environment.

U_o=U_i I_o=I_i P_o=P_i C_o=C_i L_o=L_i
Note: C_o, L_o indicated the parameters of distributed electric capacity of connecting cable.

U_i, I_i, P_i indicated the parameters of the output of other power-restraint devices; C_i, L_i indicated the maximum of the external parameter of the power-restraint devices.

IECEX Installation drawing 5350QI01-V2R0

For safe installation of 5350 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.

IECEX Certificate: BVS 12.0035X

Marking: Ex ia IIC T6..T4 Ga
Ex ib IIA G IIC T6..T4 Gb
Ex ia IIC T6..T4 Gc
Ex ia I Ma
Ex nA [ic] IIC T6..T4 Gc
Ex ic IIC T6..T4 Gc

Standards: IEC60079-11:2011, IEC60079-0: 2011, IEC60079-15: 2010

Hazardous area: Zone 0, 1, 2, 20, 21, 22, M1

Non Hazardous Area

Max 10 modules

Termination

Unit	Barrier where Po < 0.84 W	Barrier where Po < 1.3 W	Suitable for FISCO systems	Suitable for FISCO systems
U _i	30 VDC	30 VDC	17.5 VDC	15 VDC
I _i	120 mADC	300 mADC	250 mADC	900 mADC
P _i	0.84 W	1.3 W	2.0 W	5.32 W
L _i	1 µH	1 µH	1 µH	1 µH
C _i	2 nF	2 nF	2 nF	2 nF
T1..T4	Tamb < 85°C	Tamb < 75°C	Tamb < 85°C	Tamb < 85°C
T5	Tamb < 70°C	Tamb < 65°C	Tamb < 60°C	Tamb < 60°C
T6	Tamb < 60°C	Tamb < 45°C	Tamb < 45°C	Tamb < 45°C

Unit	Barrier where Po < 0.84 W	Barrier where Po < 1.3 W	Suitable for FISCO systems	Suitable for FISCO systems
U _i	30 VDC	30 VDC	17.5 VDC	15 VDC
I _i	120 mADC	300 mADC	250 mADC	900 mADC
P _i	0.84 W	1.3 W	2.0 W	5.32 W
L _i	1 µH	1 µH	1 µH	1 µH
C _i	2 nF	2 nF	2 nF	2 nF
T1..T4	Tamb < 85°C	Tamb < 75°C	Tamb < 85°C	Tamb < 85°C
T5	Tamb < 70°C	Tamb < 65°C	Tamb < 60°C	Tamb < 60°C
T6	Tamb < 60°C	Tamb < 45°C	Tamb < 45°C	Tamb < 45°C

Unit	Barrier where Po < 5.32 W	FISCO segment coupler
U _i	30 VDC	17.5 VDC
I _i	250 mADC	any
P _i	5.32 W	any
L _i	1 µH	1 µH
C _i	2 nF	2 nF
T1..T4	Tamb < 85°C	Tamb < 85°C
T5	Tamb < 75°C	Tamb < 75°C
T6	Tamb < 60°C	Tamb < 60°C

Unit	Supply, terminal 1,2 Ex nA [ic] IIC T6..T4 Gc or Ex ic IIC T6..T4 Gc
U _i	Max 32 VDC
L _i	1 µH
C _i	2 nF
T1..T4	Tamb < 85°C
T5	Tamb < 75°C
T6	Tamb < 60°C

Installation notes

The sensor circuit is not infallibly galvanic isolated from the input circuit. However, the galvanic isolation between the circuits is capable of withstanding a test voltage of 500Vac during 1 minute.

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

For installation in a potentially explosive gas atmosphere requiring EPL Ga or EPL Gb, the following instructions apply: The transmitter shall be mounted in an enclosure that is providing a degree of protection of at least IP54 according to IEC 60529 that is suitable for the application and correctly installed.

For installation in a potentially explosive dust atmosphere requiring EPL Da or EPL Db, the following instructions apply: The transmitter shall be mounted in a Form B enclosure according to DIN 43729, that is providing a degree of protection of at least IP6X according to IEC 60079-0 and IEC 60079-31 Equipment dust ignition protection by enclosure 'D' 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. Maximum surface temperature with a 5 mm layer of dust is T 135°C.

For installation in mines the following instructions apply: The transmitter shall be mounted in a metal enclosure that is providing a degree of protection of at least IP6X according to IEC 60529, and 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 installation in a potentially explosive gas atmosphere requiring EPL Gc the following instructions apply: The transmitter shall be mounted in an enclosure according to IEC 60079-15, that is suitable for the application and correctly installed.

For installation in a potentially explosive gas atmosphere requiring EPL Gc the following instructions apply: The transmitter shall be mounted in an enclosure according to IEC 60079-15, that is suitable for the application and correctly installed.

For installation in a potentially explosive gas atmosphere. For Ex ic installation, the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP20 according to EN/IEC 60529 and that is suitable for the application and correctly installed.

For Ex nA installation the transmitter shall be installed in an enclosure providing a degree of protection of at least IP54, according to EN/IEC 60529 that is suitable for the application and correctly installed; e.g. an enclosure with protection Ex n or Ex e. Cable entry devices and blanking elements shall fulfill the same requirements.

For installation in a potentially explosive dust atmosphere: For Ex ic installation interfacing intrinsically safe signal "ic" (e.g. a passive device), the transmitter shall be mounted in a metal enclosure form B according to DIN 43729 or equivalent, that provides a degree of protection of at least IP6X according to EN/IEC 60529, that is suitable for the application. Cable entry devices and blanking elements shall fulfill the same requirements.

For non intrinsically safe installation the transmitter shall be mounted in an enclosure that provides a degree of protection of at least IP6X according to EN/IEC 60529, and in conformance with type of protection EX I that is suitable for the application and correctly installed. Cable entry devices and blanking elements shall fulfill the same requirements. If the enclosure is made of non-metallic material or of metal having a paint layer, electrostatic charging shall be avoided. The surface temperature of the enclosure is equal to the ambient temperature +20 K.

- Users are not allowed to replace the inner electrical parts with permission.
- The installation, implementation and maintenance of the transmitter should strictly conform to the Regulation of "Design Code for electricity Equipment used in explosive and flammable environment" in GB50058-1992 and "Installation of Electrical Equipment in Dangerous Environment" the Article 15, Electrical Equipment of explosive Gas Environment of GB3836.15-2000.

Transmitter with Bus technology of Series 5350B manufactured by PR Electronics A/S via the test made by NEPSI (National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation) have been provided that they are fulfilling the General Requirements according to Article 1, GB3836.1-2010 "Electrical equipment used in the Explosive Gas Environment" and the specified requirements for "n" series in Article IX, GB3836.2-2003. The symbol of explosive protection are Ex ia IIC T4-T6 or Ex ib IIA G IIC T4-T6 while the Certificate No. is GYJ14.1101X.

Note for the use of transmitter:

- The Symbol "X" applied after the Cert. No., indicates that this transmitter cannot be applied in explosive environment of danger until the Protection Grade of the box where the transmitter will later on be placed is not lower than IP20 (GB4208), and has been approved by the National Authorized Inspection Body. The metallic case must accord to item 8, GB3836.1-2010; the nonmetallic case must accord to item 7.3, GB3836.1-2010.
- The relationship of the explosive protection ingress, the temperature Code, ambient temperature and max. output parameter is indicated as follows:

	Ex ia IIC	Ex ib IIA	Ex ic IIC
T4	-40°C→+85°C	-40°C→+75°C	-40°C→+85°C
T5	-40°C→+70°C	-40°C→+65°C	-40°C→+75°C
T6	-40°C→+60°C	-40°C→+45°C	-40°C→+60°C
U _i	30 V	30 V	17.5 V
I _i	120 mA	300 mA	250 mA
P _i	0.84 W	1.3 W	2.0 W
C _i	2 nF	2 nF	2 nF
L _i	1 µH	1 µH	1 µH

FM/CSA Installation drawing 5350QFC1-V2R0

Hazardous (Classified) Location: Class I, Division 1, Groups, A, B, C, D OR Class I, Zone 0, IIC

Unclassified Location

Associated Apparatus Barrier or FISCO Supply with entity Parameters: U_m ≤ 250V, Voc or U_o ≤ V_{max} or U_i I_{sc} or I_o ≤ I_{max} or I_i Po ≤ Pi, Ca or Co ≥ Ci + C_{cable}, La or Lo ≥ Li + L_{cable}

This device must not be connected to any associated apparatus which uses or generates more than 250 VRMS

Terminal 3, 4, 5, 6
V_t or U_o: 5.71 V
I_t or I_o: 8.4 mA
P_t or P_o: 12 mW
C_a or C_o: 40 µF
L_a or L_o: 200 mH

Terminal 1,2 Class I, Zone 0, Ex ia IIC, Entity / FISCO IS, Class I, Division 1, Group A, B, C, D Entity / FISCO				
Barrier type:	Linear barrier	Trapezoid barrier	Suitable for FISCO systems	Suitable for FISCO systems
T1..T4:	Ta ≤ +85°C	Ta ≤ +75°C	Ta ≤ +85°C	Ta ≤ +85°C
T5:	Ta ≤ +70°C	Ta ≤ +65°C	Ta ≤ +60°C	Ta ≤ +60°C
T6:	Ta ≤ +60°C	Ta ≤ +45°C	Ta ≤ +45°C	Ta ≤ +45°C
V _{max} or U _i	30 V	30 V	17.5 V	15 V
I _{max} or I _i	120 mA	300 mA	250 mA	900 mA
P _i	0.84 W	1.3 W	2.0 W	5.32 W
C _i	2.0 nF	2.0 nF	2.0 nF	2.0 nF
L _i	1 µH	1 µH	1 µH	1 µH

See Installation notes.

Hazardous (Classified) Location: Class I, Division 2, Groups, A, B, C, D OR Class I, Zone 1, IIC

Unclassified Location

Associated Apparatus Barrier with entity Parameters: U_m ≤ 250V, Voc or U_o ≤ V_{max} or U_i I_{sc} or I_o ≤ I_{max} or I_i Po ≤ Pi, Ca or Co ≥ Ci + C_{cable}, La or Lo ≥ Li + L_{cable} or FISCO Supply

This device must not be connected to any associated apparatus which uses or generates more than 250 VRMS

Terminal 3, 4, 5, 6
V_t or U_o: 5.71 V
I_t or I_o: 8.4 mA
P_t or P_o: 12 mW
C_a or C_o: 40 µF
L_a or L_o: 200 mH

Entity Parameters		Nonincendive Field Wiring parameters	
Terminal 1, 2 Class I, Zone 1, Ex ib IIC Entity / FISCO		Terminal 1, 2 NI, Class I, Division 2, Group A, B, C, D NIWF/FNICO	
Barrier type:	Rectangular barrier	FISCO Segment coupler	
T1..T4:	Ta ≤ +85°C	Ta ≤ +85°C	Ta ≤ +85°C
T5:	Ta ≤ +75°C	Ta ≤ +75°C	Ta ≤ +75°C
T6:	Ta ≤ +60°C	Ta ≤ +60°C	Ta ≤ +60°C
V _{max} / U _i	30 V	17.5 V	
I _{max} or I _i	250 mA	any	
P _i	5.32 W	any	
C _i	2.0 nF	2.0 nF	
L _i	1 µH	1 µH	

For a current-controlled circuit the parameter I_{max} is not required and need not be aligned with the parameter I_{sc} or I_t of the barrier or associated nonincendive field wiring apparatus.

See Installation notes.

Hazardous (Classified) Location: Class I, Division 2, Groups, A, B, C, D OR Class I, Zone 2, IIC

Unclassified Location

Associated Apparatus Barrier with entity Parameters: U_m ≤ 250V, Voc or U_o ≤ V_{max} or U_i I_{sc} or I_o ≤ I_{max} or I_i Po ≤ Pi, Ca or Co ≥ Ci + C_{cable}, La or Lo ≥ Li + L_{cable}

This device must not be connected to any associated apparatus which uses or generates more than 250 VRMS

Terminal 3, 4, 5, 6
V_t or U_o: 5.71 V
I_t or I_o: 8.4 mA
P_t or P_o: 12 mW
C_a or C_o: 40 µF
L_a or L_o: 200 mH

Unit	Supply, terminal 1,2 Ex nA [ic] IIC T6..T4 Gc or Ex ic IIC T6..T4 Gc
U _i	Max 32 VDC
L _i	1 µH
C _i	2 nF
T1..T4	Tamb < 85°C
T5	Tamb < 75°C
T6	Tamb < 60°C

See installation notes:

Installation notes:

FM / CSA:
For installation in the US the 5350 shall be installed according to the National Electrical Code (ANSI/NFPA 70).
For installation in Canada the transmitter shall be installed in a suitable enclosure to meet installation codes stipulated in the Canadian Electrical Code (CEC).

The entity concept:

Equipment that is FM / CSA-approved for intrinsic safety may be connected to barriers based on the ENTITY CONCEPT. This concept permits interconnection of approved transmitters, meters and other devices in combinations which have not been specifically examined by FM / CSA, provided that the agency's criteria are met. The combination is intrinsically safe, if the entity concept is acceptable to the authority having jurisdiction over the installation.
The entity concept criteria are as follows:
The intrinsically safe devices, other than barriers, must not be a source of power.

The maximum voltage U_{i</}