

# DK

**ADVARSEL**  
Følgende operationer bør kun udføres på modulet i spændingsløs tilstand og under ESD-sikre forhold. Installation, ledningsmontage og demontage. Fejlfindning 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 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 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.  
Beskrivelse af indgang/udgang/forsyningsforbindelser findes i produktmanualen, som kan hentes på [www.prelectronics.dk](http://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  
Max. forbrug..... < 350 mW  
Hvilestrøm..... < 11 mA  
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  
Spænding..... -800...+800 mV

**Udgang:**  
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\_103)

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.:** 161771433  
is in conformity with the following directives and standards:

The EMC Directive 2014/30/EU and later amendments  
**EN 61326-1 : 2013 and EN 61326-2-3 : 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 60079-0 : 2012 + A11 : 2013, EN 60079-11 : 2012, EN 60079-15 : 2010**  
**ATEX certificate:** KEMA 02ATEX1318 X  
Notified body  
DEKRA Certification B.V. (0344)  
Heander 1051, 6825 MJ Arnhem  
P.O. Box 5185, 6802 ED Arnhem  
The Netherlands

The RoHS2 Directive 2011/65/EU and later amendments  
**EN 50581 : 2012**

Rønde, 15 December 2015  
Sng 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
<b>5350A</b>	KEMA 02ATEX1318 X	2, 22	5350QE01				3015609	2 / Div 2	5350QE01	1418937	2 / Div 2	5350QE01				GYJ14.1100U
<b>5350B</b>	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	GYJ14.1101X

**DK**  
Dokumentation, godkendelser og yderligere information findes på internettet på [www.prelectronics.dk](http://www.prelectronics.dk)

**UK**  
Documentation, permits and other information can be found on the internet at [www.prelectronics.com](http://www.prelectronics.com)

**FR**  
La documentation et toute autre information peuvent être trouvées sur l'Internet sur notre site: [www.prelectronics.fr](http://www.prelectronics.fr)

**DE**  
Dokumentationen, Zulassungen und andere Informationen können auf unserer Internet-Seite unter [www.prelectronics.de](http://www.prelectronics.de) gefunden und abgerufen werden.

**BR**  
Documentações, licenças e outras informações podem ser encontradas no site [www.prelectronics.com](http://www.prelectronics.com)

# UK

**WARNING**  
The following operations should only be carried out on a disconnected device and under ESD safe conditions:  
General mounting, connection and disconnection of wires. Troubleshooting the device.  
Repair of the device must be done by PR electronics A/S only.

**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](http://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.

**Electrical specifications**  
Specifications range..... -40°C to +85°C  
Supply voltage, 5350A..... 9,0...32 VDC  
Supply voltage, 5350B..... 9,0...30 VDC  
Supply voltage in FISCO installations..... 9,0...17,5 V  
Max. required power..... < 350 mW  
Quiescent current..... < 11 mA  
Isolation voltage, test/oper. 1,5 kVAC / 50 VAC  
Calibration temperature..... 20...28°C  
Relative humidity..... < 95% RH (non-cond.)  
Dimensions..... Ø44 x 20,2 mm  
Protection degree (encl./terminal)..... IP68 / IP00

**Input types:**  
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

**Output:**  
Bus connection..... PROFIBUS PA / FOUNDATION Fieldbus

**Approvals:**  
EAC..... TR-CU 020/2011  
EAC Ex..... TR-CU 012/2011

**Observed authority requirements:**  
EMC..... 2014/30/EU  
ATEX..... 2014/34/EU  
RoHS..... 2011/65/EU

# 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**  
Déballer 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](http://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  
Puissance maximale requise..... < 350 mW  
Courant de repos..... < 11 mA  
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  
Potentiomètre..... 0 Ω...100 kΩ  
Tension..... -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](http://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  
Leistungsbedarf, max..... < 350 mW  
Ruhestrom..... < 11 mA  
Isolationsspannung, Test / Betrieb..... 1,5 kVAC / 50 VAC  
Kalibrierungstemperatur..... 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

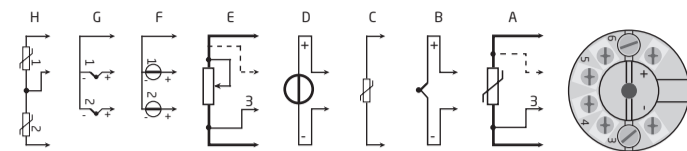
**PR electronics A/S**  
Lerbakken 10  
DK-8410 Rønde

Tel. +45 8637 2677  
Fax +45 8637 3085  
[www.prelectronics.com](http://www.prelectronics.com)

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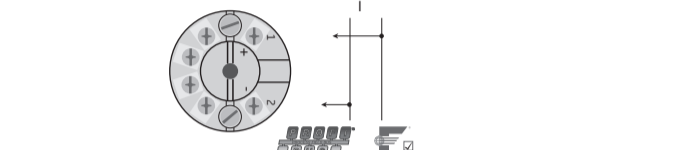
- DK** Installationsvejledningen for teknikere omfatter følgende produkter: 5350A og 5350B.
- UK** This installation guide for technical personnel covers the following products: 5350A and 5350B.
- FR** Ce guide d'installation pour le personnel qualifié couvre les produits suivants: 5350A et 5350B.
-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

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



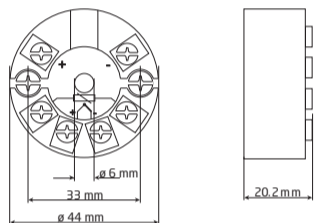
	DK	UK	FR	DE
<b>A</b>	RTD	RTD	RTD	WTH
<b>B</b>	TC	TC	TC	TE
<b>C</b>	CJC	CJC	CSF	CJC
<b>D</b>	Spænding	Voltage	Tension	Spannung
<b>E</b>	Lin R	Lin R	Lin R	Lin R
<b>F</b>	mV, differens eller middel	mV, difference or average	mV, différence ou moyen	mV, Differenz oder Mittel
<b>G</b>	TC, differens eller middel,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

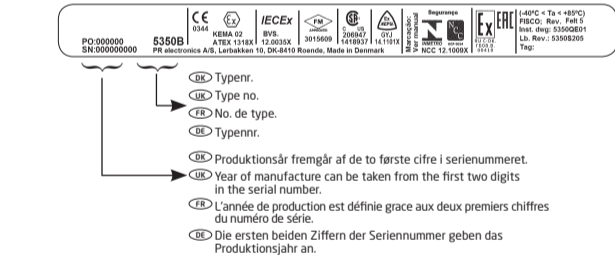
- DK** Mekaniske specifikationer.
- UK** Mechanical specifications.
- FR** Dimensions mécaniques.
- DE** Abmessungen.



- DK** **Montering af førerledninger**  
Ledninger monteres mellem metalpladerne. Ledningskvadrat (max.) 1 x 1,5 mm<sup>2</sup> 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 mm<sup>2</sup> 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 mm<sup>2</sup> 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 mm<sup>2</sup> Litzendraht. Klemmschraubenanzugsmoment 0,4 Nm.

**DK** Sideskilt **UK** Side label **FR** Etiquette **DE** Typenschild

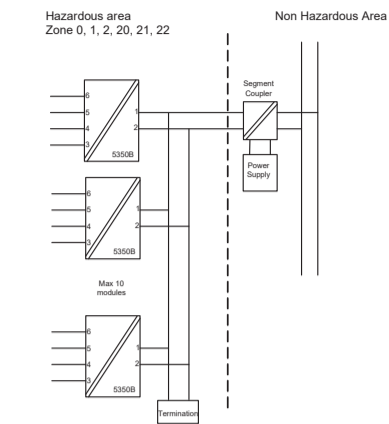
**DK** Godkendelser **UK** Approvals **FR** Homologations **DE** Zulassungen



## 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 [ia Ga] 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



Unit	Barrier where $P_o < 0.84$ W	Barrier where $P_o < 1.3$ W	Suitable for FISCO systems	Suitable for FISCO systems
U <sub>i</sub>	30 VDC	30 VDC	17.5 VDC	15 VDC
I <sub>i</sub>	120 mADC	300 mADC	250 mADC	900 mADC
P <sub>i</sub>	0.84 W	1.3 W	2.0 W	5.32 W
L <sub>i</sub>	1 μH	1 μH	1 μH	1 μH
C <sub>i</sub>	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 $P_o < 5.32$ W	FISCO segment coupler
U <sub>i</sub>	30 VDC	17.5 VDC
I <sub>i</sub>	250 mADC	any
P <sub>i</sub>	5.32 W	any
L <sub>i</sub>	1 μH	1 μH
C <sub>i</sub>	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<sub>o</sub>.....: 5.7 VDC  
I<sub>o</sub>.....: 8.4 mA  
P<sub>o</sub>.....: 12 mW  
C<sub>o</sub>.....: 200 mH  
L<sub>o</sub>.....: 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 IPX 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  
II 3 G Ex ic IIC T6..T4 Gc  
II 3 D Ex ic IIC Dc

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 potential 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 potential 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<sub>o</sub>=5.7 V I<sub>o</sub>=8.4 V P<sub>o</sub>=12 mW C<sub>o</sub>=40 μF I<sub>o</sub>=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.

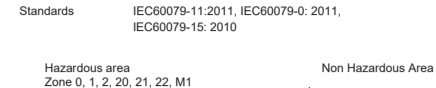
U<sub>o</sub>=U<sub>i</sub> I<sub>o</sub>=I<sub>i</sub> P<sub>o</sub>=P<sub>i</sub> C<sub>o</sub>=C<sub>i</sub> L<sub>o</sub>=L<sub>i</sub> L<sub>o</sub>=L<sub>i</sub> L<sub>o</sub>=L<sub>i</sub>  
Note: C<sub>o</sub>, L<sub>o</sub> indicated the parameters of distributed electric capacity of connecting cable.

U<sub>i</sub>, I<sub>i</sub>, P<sub>i</sub> indicated the parameters of the output of other power-restraint devices; C<sub>i</sub>, L<sub>i</sub> indicated the maximum of the external parameter of the power-restraint devices.

## IECEX Installation drawing 5350QI01-V2R0

**5350**  
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 [ia Ga] IIC T6..T4 Gb  
Ex ia IIC T135°C Da  
Ex ia I Ma  
Ex nA [ic] IIC T6..T4 Gc  
Ex ic IIC T6..T4 Gc



Unit	Barrier where $P_o < 0.84$ W	Barrier where $P_o < 1.3$ W	Suitable for FISCO systems	Suitable for FISCO systems
U <sub>i</sub>	30 VDC	30 VDC	17.5 VDC	15 VDC
I <sub>i</sub>	120 mADC	300 mADC	250 mADC	900 mADC
P <sub>i</sub>	0.84 W	1.3 W	2.0 W	5.32 W
L <sub>i</sub>	1 μH	1 μH	1 μH	1 μH
C <sub>i</sub>	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 $P_o < 0.84$ W	Barrier where $P_o < 1.3$ W	Suitable for FISCO systems	Suitable for FISCO systems
U <sub>i</sub>	30 VDC	30 VDC	17.5 VDC	15 VDC
I <sub>i</sub>	120 mADC	300 mADC	250 mADC	900 mADC
P <sub>i</sub>	0.84 W	1.3 W	2.0 W	5.32 W
L <sub>i</sub>	1 μH	1 μH	1 μH	1 μH
C <sub>i</sub>	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 $P_o < 5.32$ W	FISCO segment coupler
U <sub>i</sub>	30 VDC	17.5 VDC
I <sub>i</sub>	250 mADC	any
P <sub>i</sub>	5.32 W	any
L <sub>i</sub>	1 μH	1 μH
C <sub>i</sub>	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	Max 32 VDC
L <sub>i</sub>	1 μH
C <sub>i</sub>	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 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.

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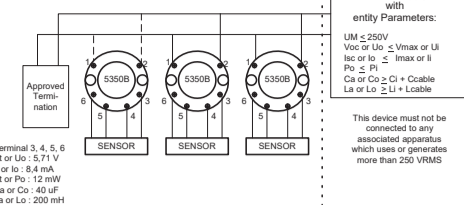
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For installation in a potentially explosive gas atmosphere requiring EPL Gc the following instructions apply: The transmitter shall be mounted in an enclosure according to IEC 60079-15, that is suitable for the application and correctly installed.

## FM/CSA Installation drawing 5350QFC1-V2R0

**5350**  
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.



Unit	Barrier where $P_o < 0.84$ W	Barrier where $P_o < 1.3$ W	Suitable for FISCO systems	Suitable for FISCO systems
U <sub>i</sub>	30 VDC	30 VDC	17.5 VDC	15 VDC
I <sub>i</sub>	120 mADC	300 mADC	250 mADC	900 mADC
P <sub>i</sub>	0.84 W	1.3 W	2.0 W	5.32 W
L <sub>i</sub>	1 μH	1 μH	1 μH	1 μH
C <sub>i</sub>	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 $P_o < 5.32$ W	FISCO segment coupler
U <sub>i</sub>	30 VDC	17.5 VDC
I <sub>i</sub>	250 mADC	any
P <sub>i</sub>	5.32 W	any
L <sub>i</sub>	1 μH	1 μH
C <sub>i</sub>	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	Max 32 VDC
L <sub>i</sub>	1 μH
C <sub>i</sub>	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

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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.

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