

# 6335A, 6335D, 6337A & 6337D



## 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. Ved Ex-installation må kun godkendt udstyr anvendes. Enhederne skal installeres i henhold til den tilhørende installationsvejledning 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 indpakningsgrænser 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. Modulet må kun installeres af kvalificerede personer, som er bekendt med national og international lovgivning, direktiver og standarder i det land, hvor modulet skal installeres. Produktionsår fremgår af de to første cifre i serienummeret. 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. Beskrivelse af indgang / udgang og forsyningsforbindelser findes i produktmanualen, som kan hentes på [www.prellectronics.dk](http://www.prellectronics.dk).

### Kalibrering og justering

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

### Rengøring

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

### PC-programmering af SYSTEM 6437

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 forsyningsspænding, 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.

## 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 hazardous area installation, only certified test equipment may be used. For installation in classified area the devices 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. The device 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. 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 connections of electric materials. Descriptions of input/output and supply connections are shown in the product manual found on [www.prellectronics.com](http://www.prellectronics.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 6437

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.

## 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 l'installation en zone dangereuse, seul un équipement certifié peut être utilisé. Pour des installations en zone classée, les modules doivent être montés 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 derniers. Le module sera seulement installé par un personnel qualifié qui est informé des lois, des directives et des normes nationales et internationales qui s'appliquent à ce secteur. L'année de fabrication est indiquée dans les deux premiers chiffres dans le numéro de série. 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. Les connexions des alimentations et des entrées/sorties sont décrites dans le manuel du produit sur [www.prellectronics.fr](http://www.prellectronics.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 nettoier.

### Programmation par PC du Système 6437

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.

## DE WARNUNG

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

## WARNUNG

Benutzen Sie die Programmierschnittstelle Loop Link nicht im Ex-Bereich. Bei der Installation in Gefahrenbereichen darf nur zertifizierte Testausrüstung verwendet werden. Zur Montage in klassifizierten Zonen müssen die Geräte nach den dazugehörigen Einbauezeichnungen installiert werden. DIN-Schiene nach DIN EN 60715 montiert 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 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. Das Gerät darf nur von qualifiziertem Personal eingebaut werden, das mit den nationalen und internationalen Gesetzen, Richtlinien und Standards auf diesem Gebiet vertraut ist. Das Baujahr kann aus den ersten beiden Ziffern der Seriennummer ersehen werden. 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. Eine Beschreibung von Eingangs-/Ausgangs- und Versorgungsanschlüssen befindet sich im Produkthandbuch, das unter [www.prellectronics.de](http://www.prellectronics.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 6300

Das Gerät wird für die jeweilige Aufgabe mit Hilfe eines PCs und PR electronics A/S Kommunikationschnittstelle 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, Füllfehlererkennung und Ausgangssignal.

Specifikationsområde	-40°C til +85°C
Forsyningsspænding	8,0...35 VDC
Max. forbrug, 6335A & 6337A, 1 / 2 kanaler	0,8 W / 1,6 W
Forsyningsspænding, 6335D & 6337D	8,0...30 VDC
Max. forbrug, 6335D & 6337D, 1 / 2 kanaler	0,7 W / 1,4 W
Isolationsspænding	1,5 kVAC / 50 VAC
test / arbejds-	< 95% RH (ikke kond.)
Kalibreringstemperatur	20...28°C
Relativ fugtighed	109 x 23,5 x 104 mm
Mål	IP20
Kapslingsklasse	

Indgangstyper:	
Pt100	-200°C...+850°C
Ni100	-60°C...+250°C
TC-indgang	B, E, J, K, L, N, R, S, T, U, W3, W5, Lr
Lin. R	0 Ω...7000 Ω
Spænding	-800...+800 mV

Strømodgang:	
Signalområde	4...20 mA
Min. signalamråde	15 mA
Belastningsmodstand, Ω	≤ (Vforsyn.-8,0 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

Godkendelser:	
EAC Ex	RU C-DK.HA65.B.00355/19

Part Name	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Printed circuit board	X	0	0	0	0	0

This table is prepared in accordance with the provisions of SJ/T 11364-0. Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572. X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

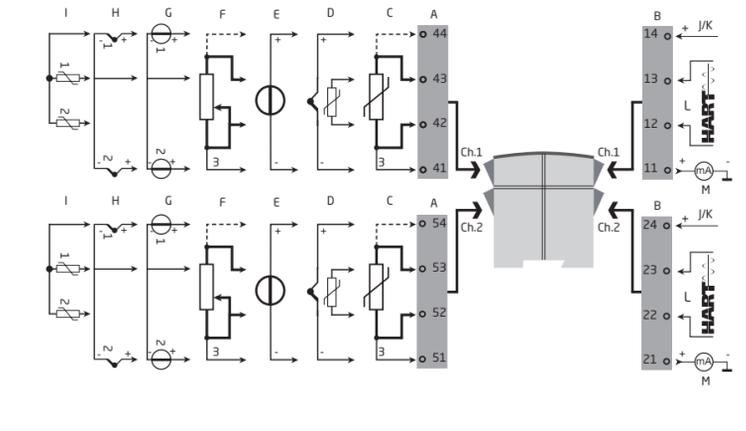
DK	UK	FR	DE
Ex-godkendelser	I.S approvals	Approbations S.I.	Ex-Zulassungen

6335A & 6337A	6335D & 6337D
DEKRA 20ATEX0109 X	DEKRA 20ATEX0108 X
2, 22	0, 1, 2, 21, 22, M1
6335QA02	6335QA01
DEK 20.0063X	DEK 20.0063X
2, 22	0, 1, 2, 21, 22, M1
6335QI02	6335QI01
FM17US0013X	FM17US0013X
0, 1, 2 / Div 1	0, 1, 2 / Div 1
6335QF01	6335QF01
1125003	1125003
2 / Div 2	0, 1, 2 / Div 1
6337QC02	6335QC02
DEKRA 23.0011 X	DEKRA 23.0011 X
2, 22	0, 1, 2, 21, 22, M1
6335QB02	6335QB01

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 Phone: +45 8637 2677, Denmark, 83372205

DK	UK	FR	DE
A	Indgangssignaler	Input signals	Signaux d'entrée
B	Udgangssignaler	Output signals	Signaux de sortie
C	RTD	RTD	RTD
D	TC / CJC	TC / CJC	TC / CSF
E	Spænding	Voltage	Tension
F	Lin R - Ω	Lin R - Ω	R lin - Ω
G	mV, differens eller middel	mV, difference or average	mV, différence ou moyen
H	TC, differens eller middel, med intern CJC	TC, difference or average, with internal CJC	TC, différence ou moyen avec CSF interne
I	RTD, differens eller middel	RTD, difference or average	RTD, différence ou moyen
J	6335A & 6337A Forsyning + 8,0...35 VDC	6335A & 6337A Supply + 8,0...35 VDC	6335A & 6337A Alimentation + 8,0...35 Vcc
K	6335D & 6337D Forsyning + 8,0...30 VDC	6335D & 6337D Supply + 8,0...30 VDC	6335D & 6337D Alimentation + 8,0...30 Vcc
L	4...20 mA udgang	4...20 mA output	Sortie 4...20 mA
M	HART	HART	HART
Ch.1	Kanal 1	Channel 1	Voie 1
Ch.2	Kanal 2	Channel 2	Voie 2



## DK Sideskilt

## UK Side label

## FR Etiquette

## DE Typenschild

PR electronics A/S, Lerbakken 10, 8410 Rønde  
 E-mail: [info@prelectronics.com](mailto:info@prelectronics.com) www.prellectronics.com  
 Phone: +45 8637 2677, Denmark, 83372205

**CE** **6337D2B**

-40°C & +85°C

11 output ch1	12 output ch1	13 output ch1	14 output ch1	21 output ch2	22 output ch2	23 output ch2	24 output ch2
Supply HART	Supply HART	Supply HART	Supply HART	Supply HART	Supply HART	Supply HART	Supply HART
TC	TC	TC	TC	TC	TC	TC	TC
RTD	RTD	RTD	RTD	RTD	RTD	RTD	RTD
CJC	CJC	CJC	CJC	CJC	CJC	CJC	CJC
mV	mV	mV	mV	mV	mV	mV	mV
Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω

**IECEx** Ex ia IIC T4 Gc Ex ia IIC Dg IECEx 20.0063X Installation Drawing: 6335QB01

**ATEX** Ex ia IIC T4 Gc Ex ia IIC Dg 2014/34/EU & UK SI 2016/1107 Installation Drawing: 6335QB01

**RoHS** Ex ia IIC T4 Gc Ex ia IIC Dg 2011/65/EU & UK SI 2012/3032 Installation Drawing: 6335QB01

**EAC** Ex ia IIC T4 Gc Ex ia IIC Dg TR-CU 020/2011 Installation Drawing: 6335QB01

**EAC Ex** Ex ia IIC T4 Gc Ex ia IIC Dg TR-CU 012/2011 Installation Drawing: 6335QB01

**FM** Ex ia IIC T4 Gc Ex ia IIC Dg FM 17US0013X Entry Installation Drawing: 6335QF01

**2-WIRE HART® TRANSMITTER**

DK	Benforbindelser.	DK	Godkendelser.
UK	Pin connections.	UK	Approvals.
FR	Raccordement des bornes.	FR	Homologations.
DE	Klemmenanschluss.	DE	Zulassungen.

<p><b>DK</b> Dokumentation, godkendelser og yderligere information findes på internettet på <a href="http://www.prellectronics.dk">www.prellectronics.dk</a></p> <p><b>UK</b> Documentation, permits and other information can be found on the internet at <a href="http://www.prellectronics.com">www.prellectronics.com</a></p>	<p><b>FR</b> La documentation et toute autre information peuvent être trouvées sur l'Internet sur notre site: <a href="http://www.prellectronics.fr">www.prellectronics.fr</a></p> <p><b>DE</b> Dokumentationen, Zulassungen und andere Informationen können auf unserer Internet-Seite unter <a href="http://www.prellectronics.de">www.prellectronics.de</a> gefunden und abgerufen werden.</p>	<p><b>BR</b> Documentações, licenças e outras informações podem ser encontradas no site <a href="http://www.prellectronics.com">www.prellectronics.com</a></p>
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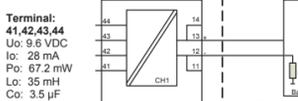
## ATEX-installation drawing 6335QA01-V5R0

For safe installation of 6335D or 6337D 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 DEKRA 20ATEX0108X  
Marking II 1 G Ex ia IIC T6...T4 Ga  
II 2 D Ex ia IIC Db  
I M1 Ex ia I Ma

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

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



**Terminal: 41,42,43,44**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67.2 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 51,52,53,54**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67.2 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 11,13 and 21,23**  
Ui: 30 VDC Ii: 120 mA Pi: 0.84 W or Pi: 0.75 W  
Li: 0 µH Ci: 1.0 nF

Temperature Class	Ambient temperature range	
	Pi: 0.84 W	Pi: 0.75 W
T6	-40°C to +40°C	-40°C to +45°C
T5	-40°C to +55°C	-40°C to +60°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 a separately certified enclosure that provides a degree of protection 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 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 Ma, the transmitter shall be mounted in a separately certified enclosure that provides a degree of protection at least IP54 according to EN 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  $\geq 60^\circ\text{C}$ , heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

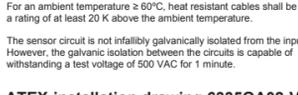
The sensor circuit is not intrinsically galvanically isolated from the input circuit. However, the galvanic isolation between the circuits is capable of withstanding a test voltage of 500 VAC for 1 minute.

## ATEX-installation drawing 6335QA02-V5R0

For safe installation of 6335A and 6337A 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 DEKRA 20ATEX01019 X  
Marking II 1 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 G Ex ic IIC Dc

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



**Terminal: 41,42,43,44**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 51,52,53,54**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 11,12,13,14**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

Ex ic IIC, Ex ic IIC	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

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 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 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 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.

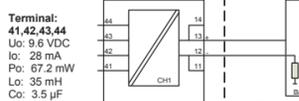
## IECEx-installation drawing 6335QI01-V5R0

For safe installation of 6335D or 6337D 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 20.0063X  
Marking Ex ia IIC T6...T4 Ga  
Ex ia IIC 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: 41,42,43,44**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67.2 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 51,52,53,54**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67.2 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 11,13 and 21,23**  
Ui: 30 VDC Ii: 120 mA Pi: 0.84 W or Pi: 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 +40°C	-40°C to +45°C
T5	-40°C to +55°C	-40°C to +60°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 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 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 a separately certified enclosure that provides a degree of protection 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  $\geq 60^\circ\text{C}$ , heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

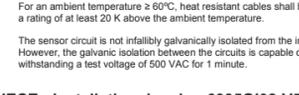
The sensor circuit is not intrinsically galvanically isolated from the input circuit. However, the galvanic isolation between the circuits is capable of withstanding a test voltage of 500 VAC for 1 minute.

## IECEx-installation drawing 6335QI02-V5R0

For safe installation of 6335A and 6337A 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 20.0063X  
Marking Ex na [ic] IIC T6...T4 Gc  
Ex ec [ic] IIC T6...T4 Gc  
Ex ic IIC T6...T4 Gc  
Ex ic IIC Dc

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



**Terminal: 41,42,43,44**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 51,52,53,54**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 11,12,13,14**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

Ex ic IIC, Ex ic IIC	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

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 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 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 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.

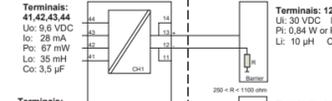
## Desenho de Instalação INMETRO 6335QB01 - V1R0

Para instalação segura do 6335D, ou 6337D, 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 pegado dos dois primeiros dígitos do número de série.

Certificado DEKRA 23.0011 X  
Marcas Ex ia IIC T6...T4 Ga  
Ex ia IIC 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 Áreas não classificadas



**Terminais: 41,42,43,44**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminais: 51,52,53,54**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminais: 11,13 and 21,23**  
Ui: 30 VDC Ii: 120 mA Pi: 0.84 W or Pi: 0.75 W  
Li: 10 µH Ci: 1.0 nF

Classe de temperatura	Faixa de temperatura ambiente	
	Pi: 0.84W	Pi: 0.75W
T6	-40°C to +40°C	-40°C to +45°C
T5	-40°C to +55°C	-40°C to +60°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. 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 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 obstrução adequados à aplicação e instalados corretamente.

Para uma temperatura ambiente  $\geq 60^\circ\text{C}$ , devem ser utilizados cabos resistentes ao calor com uma classificação de pelo menos 20 K acima da temperatura ambiente.

O circuito do sensor não é intrinsecamente isolado galvanicamente do circuito de entrada. Porém, o isolamento galvânico entre os circuitos é capaz de suportar uma tensão de teste de 500Vac por 1 minuto.

## Desenho de Instalação INMETRO 6335QB02 - V1R0

Para instalação segura do 6335A, ou 6337A, 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 pegado dos dois primeiros dígitos do número de série.

Certificado DEKRA 23.0011 X  
Marcas Ex ec [ic] IIC T6...T4 Gc  
Ex ic IIC T6...T4 Gc

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



**Terminais: 41,42,43,44**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminais: 51,52,53,54**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminais: 11,12,13,14**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

Ex ic IIC, Ex ic IIC	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

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

**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 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 a 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 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 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 equipamento deverá ser usado somente em uma área com grau de poluição não superior a 2, conforme definido na IEC 60664-1.

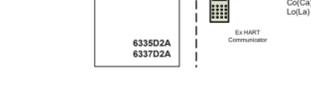
## CSA Installation drawing 6335QC02-V4R0

Hazardous (Classified) Location IS, Class I, Division 1, Group A,B,C,D,T4, T6 Ex ia IIC T4...T6 Ga Class I, Zone 0, AEx ia IIC T4...T6 Ga

Non Hazardous Location

Terminal: 41,42,43,44  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

Terminal: 51,52,53,54  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF



**Terminal: 11,12,13,14**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 21,22,23,24**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

**Terminal: 41,42,43,44**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 67 mW  
Lo: 35 mH  
Co: 3.5 µF

Temperature Class	Ambient temperature range	
	Pi: 0.84 W	Pi: 0.75 W
T6	-40°C to +40°C	-40°C to +45°C
T5	-40°C to +55°C	-40°C to +60°C
T4	-40°C to +85°C	-40°C to +85°C

### Installation notes

The Transmitter must be installed in a suitable enclosure to meet installation codes stipulated in The Canadian Electrical Code (CEC).

Substitution of components may impair intrinsic safety.

Channel 1 and Channel 2 are separate channels and therefore separate shielded cables shall be used for each channel.

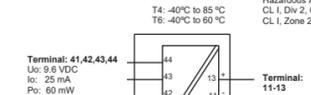
Substitution of components may impair intrinsic safety.

## CSA Installation drawing 6337QC02 - V2R0

For safe installation of the single channel 6335A2A, 6337A2A or the two channel 6335A2B, 6337A2B 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 ia 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: 41,42,43,44**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 60 mW  
Lo: 33 mH  
Co: 2.4 µF

**Terminal: 11-13**  
Functional Ratings:  
U nominal  $\leq$  35 VDC;  
I nominal  $\leq$  3.5 - 23 mA

**Terminal: 51,52,53,54**  
Uo: 9.6 VDC  
Io: 28 mA  
Po: 60 mW  
Lo: 33 mH  
Co: 2.4 µF

**Terminal: 21-23**  
Functional Ratings:  
U nominal  $\leq$  35 VDC;  
I nominal  $\leq$  3.5 - 23 mA

Ex ec IIC, Ex ic IIC	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