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 installationsvejledning ved montering i eksplosionfarlig område.
System 6300 skal monteres på DIN-skinne efter DIN EN 60715.

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, forsikring og placering.
Beskrivelse af indgang / udgang og forsyningsforbindelser findes i produktmanualen og på sideskiltet.

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.

Rengøring

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

PC-programmering af SYSTEM 6300

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 kommunikationsinterfacet leverer nødvendig forsyning til opsætningen. Kommunikationsinterfacet 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, følerfejlsdetektering og udgangssignal.

Elektriske specifikationer

Specifikationsområde	-40°C til +85°C
Forsyningsspænding, 6331A & 6334A	7,2...35 VDC
Forsyningsspænding, 6331B & 6334B	7,2...30 VDC
Isolationsspænding, test / arbejds-	1,5 kVAC / 50 VAC
Kalibreringstemperatur	20...28°C
Relativ fugtighed	< 95% RH (ikke kond.)
Mål	109 x 23,5 x 104 mm
Kapslingsklasse	IP20
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...5000 Ω
Spænding	-12...800 mV
Strømudgang:	
Signalområde	4...20 mA
Min. signalområde	16 mA
Belastningsmodstand, Ω	≤ ($V_{forsyn.}$-7,2 V)/0,023
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

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.
SYSTEM 6300 must be mounted on a DIN rail according to DIN EN 60715.

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 and on the side label.

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 6300

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

Electrical specifications

Specifications range	-40°C to +85°C
Supply voltage, 6331A& 6334A	7.2...35 VDC
Supply voltage, 6331B & 6334B	7.2...30 VDC
Isolation voltage, test/oper.	1.5 kVAC / 50 VAC
Calibration temperature	20...28°C
Relative humidity	< 95% RH (non-cond.)
Dimensions	109 x 23.5 x 104 mm
Protection degree	IP20
Input types:	
Pt100	-200°C...+850°C
Ni100	-60°C...+250°C
TC input	B, E, J, K, L, N, R, S, T, U, W3, W5, Lr
Lin. R	0 Ω...5000 Ω
Voltage	-12...800 mV
Current output:	
Signal range	4...20 mA
Min. signal range	16 mA
Load resistance, Ω	≤ (V_{supply}-7.2 V)/0.023
Approvals:	
EAC	TR-CU 020/2011
EAC Ex	TR-CU 012/2011
Observed aothority 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.
Il convient de monter l'appareil SYSTEME 6300 sur un rail DIN en se conformant à la norme DIN EN 60715.

CONSIGNES DE SECURITE

Réception et déballage

Déballez 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 et sur l'étiquette de la face latérale du module.

Etalonnage et réglage

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

Maintenance et entretien

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

Programmation par PC du SYSTEME 6300

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 doté d'une isolation galvanique pour protéger le port du PC. La communication est bidirectionnelle. Cela permet non seulement la programmation du module mais également la récupération d'une configuration existante ainsi que la lecture du numéro de série et du repère. Le module peut être livré déjà programmé, si l'utilisateur le souhaite.

Spécifications

Plage de température	-40°C à +85°C
Tension d'alimentation, 6331A & 6334A	7,2...35 Vcc
Tension d'alimentation, 6331B & 6334B	7,2...30 Vcc
Tension d'isolation test/opér.	1,5 kVca / 50 Vca
Température d'étalonnage	20...28°C
Humidité relative	< 95% HR (sans cond.)
Dimensions	109 x 23,5 x 104 mm
Degré de protection	IP20
Types d'entrée:	
Pt100	-200°C...+850°C
Ni100	-60°C...+250°C
Entrée TC	B, E, J, K, L, N, R, S, T, U, W3, W5, Lr
Résistance linéaire	0 Ω...5000 Ω
Tension	-12...800 mV
Sortie courant:	
Gamme de signal	4...20 mA
Plage de signal min	16 mA
Résistance de charge, Ω	≤ ($V_{alim.}$-7,2 V)/0,023
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.
Das System 6300 muss auf eine DIN-Schiene nach DIN EN 60715 montiert werden.

SICHERHEITSREGELN

Empfang und Auspacken

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

Umgebungsbedingungen

Direkte Sonneneinstrahlung, starke 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 Produktmanual und auf dem Typenschild.

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

Elektrische Daten

Spezifikationsbereich	-40°C bis +85°C
Versorgungsspannung, 6331A & 6334A	7,2...35 VDC
Versorgungsspannung, 6331B & 6334B	7,2...30 VDC
Isolationsspannung, Test / Betrieb	1,5 kVAC / 50 VAC
Kalibrierungstemperatur	20...28°C
Luftfeutigkeit	< 95% RF (nicht kond.)
Maß	109 x 23,5 x 104 mm
Schutzart	IP20
Eingangs-Typen:	
Pt100	-200°C...+850°C
Ni100	-60°C...+250°C
TE-Eingang	B, E, J, K, L, N, R, S, T, U, W3, W5, Lr
Lin. R	0 Ω...5000 Ω
Spannung	-12...800 mV
Stromausgang:	
Signalbereich	4...20 mA
Min. Signalbereich	16 mA
Belastungswiderstand, Ω	≤ ($V_{Vers.}$-7,2 V)/0,023
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

SN6300-1_103 (1614)

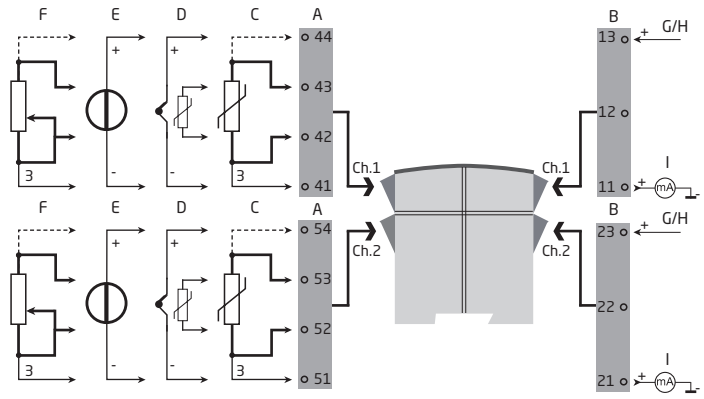
DK Installationsvejledningen for teknikere omfatter følgende produkter: 6331A, 6331B, 6334A og 6334B.

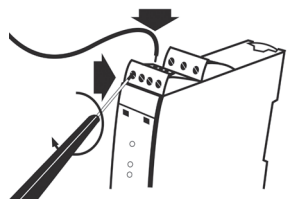
UK The installation guide for technical personnel covers the following products: 6331A, 6331B, 6334A and 6334B.

FR Le guide d'installation pour le personnel qualifié couvre les produits suivants: 6331A, 6331B, 6334A et 6334B.

DE Die Installationsanleitung für Techniker umfasst die folgenden Produkte: 6331A, 6331B, 6334A und 6334B.

	DK	UK	FR	DE
A	Indgangssignaler	Input signals	Signaux d'entrée	Eingangssignale
B	Udgangssignaler	Output signals	Signaux de sortie	Ausgangssignale
C	RTD	RTD	RTD	WTH
D	TC	TC	TC	TE
E	Spænding	Voltage	Tension	Spannung
F	Lin R - Ω	Lin R - Ω	R lin - Ω	Lin R - Ω
G	6331A & 6334A Forsyning + 7,2...35 VDC	6331A & 6334A Supply + 7.2...35 VDC	6331A & 6334A Alimentation + 7,2...35 Vcc	6331A & 6334A Versorgung + 7,2...35 VDC
H	6331B & 6334B Forsyning + 7,2...30 VDC	6331B & 6334B Supply + 7.2...30 VDC	6331B & 6334B Alimentation + 7,2...30 Vcc	6331B & 6334B Versorgung + 7,2...30 VDC
I	4...20 mA udgang	4...20 mA output	Sortie 4...20 mA	4...20 mA-Ausgang
Ch.1	Kanal 1	Channel 1	Voie 1	Kanal 1
Ch.2	Kanal 2	Channel 2	Voie 2	Kanal 2



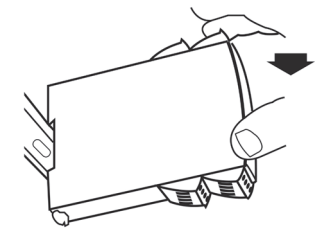


DK Ledningskvadrat (min....max.) 0,13...2,08 mm² / AWG 26...14 flerkoret ledning.
Klemskruetilspændingsmoment 0,5 Nm.

UK Wire size (min....max.) 0.13...2.08 mm² / AWG 26...14 stranded wire.
Screw terminal torque 0.5 Nm.

FR Taille des fils (min....max.) 0,13...2,08 mm² / AWG 26...14 fils multibrins.
Pression max. avant déformation de la vis 0,5 Nm.

DE Leitungsquerschnitt (min....max.) 0,13...2,08 mm² / AWG 26...14 Litzendraht.
Klemmschraubenanzugsmoment 0,5 Nm.

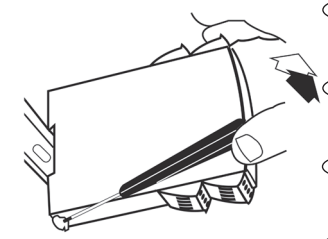


DK Montering på DIN-skinne.

UK Mounting on DIN rail.

FR Montage sur rail DIN.

DE Montage auf DIN-Schiene.

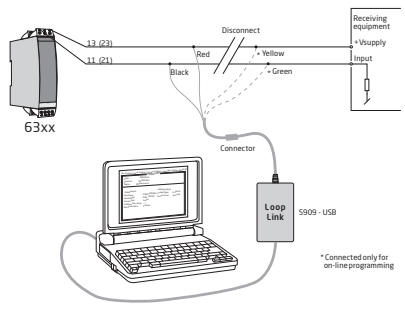


DK **Frigørelse fra DIN-skinne**
Husk først at demontere tilslutningsklemmerne med farlig spænding. Modulet frigøres fra DIN-skinnen ved at løfte i den nederste lås.

UK **Demounting from DIN rail**
First, remember to demount the connectors with hazardous voltages. Detach the device from the DIN rail by lifting the bottom lock.

FR **Démontage du rail DIN**
Tout d'abord, n'oubliez pas de démonter les connecteurs où règnent des tensions dangereuses. Débloquez le verrou inférieur pour dégager le module du rail DIN.

DE **Lösen von DIN-Schiene**
Zunächst ist gefährliche Spannung von den Anschlussklemmen zu trennen. Das Gerät wird von der DIN-Schiene gelöst, indem man den unteren Verschluss löst.



DK Loop Link er et kommunikationsinterface, der er nødvendigt for programmering af 63xx. Loop Link må ikke benyttes til kommunikation med moduler installeret i Ex-område.

UK Loop Link is a communications interface that is needed for programming 63xx. Loop Link is not approved for communication with devices installed in hazardous (Ex) areas.

FR Loop Link est un kit de programmation permettant de programmer les 63xx. Loop Link ne doit pas être utilisé pour communication avec des modules installés en zone dangereuse.

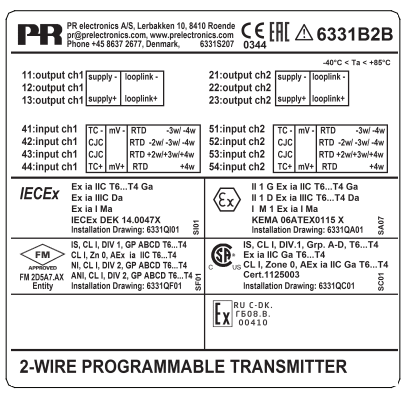
DE Loop Link ist eine Schnittstelle zur Programmierung des 63xx. Loop Link darf nicht zur kommunikation mit Geräten, die in Ex-gefährdeten Bereichen installiert sind, benutz werden.

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

	ATEX	Area	Installation drawing	IECEx	Area	Installation drawing	FM	Area	Installation drawing	CSA	Area	Installation drawing
6331A & 6334A	KEMA 06ATEX0115 X	2, 22	6331QA02	DEK 14.0047X	2, 22	6331QI02	2D5A7.AX	2 / Div 2	6331QF01			
6331B	KEMA 06ATEX0115 X	0, 1, 2, 20, 21, 22, M1	6331QA01	DEK 14.0047X	0, 1, 2, 20, 21, 22, M1	6331QI01	2D5A7.AX	0, 1, 2 / Div 1	6331QF01	1125003	0 , 1, 2 / Div 1	6331QC01
6334B	KEMA 06ATEX0115 X	0, 1, 2, 20, 21, 22, M1	6331QA01	DEK 14.0047X	0, 1, 2, 20, 21, 22, M1	6331QI01						

DK Sideskilt UK Side label FR Etiquette DE Typenschild

DK Benforbindelser.
UK Pin connections.
FR Raccordement des bornes.
DE Klemmen-anschluss.



DK Typenr.
UK Type no.
FR No. de type.
DE Typennr.

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

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

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

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

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

ATEX Installation drawing 6331QA01-V2R0

For safe installation of 6331Bxx or 6334Bxx 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 06ATEX 0115X

Marking II 1 G Ex ia IIC T6..T4 Ga
II 1 D Ex ia IIIC Da
I M 1 Ex ia I Ma

Standards EN 60079-0 : 2012, EN 60079-11 : 2012, EN 60079-26 : 2007

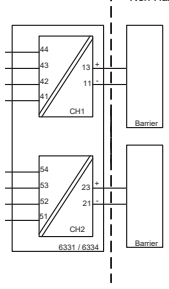
Hazardous area
Zone 0, 1, 2, 20, 21, 22

Non Hazardous Area

T4: -40 ≤ Ta ≤ 85ºC
T5: -40 ≤ Ta ≤ 60ºC
T6: -40 ≤ Ta ≤ 40ºC

Terminal: 41,42,43,44
Uo: 9.6 VDC
Io: 25 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 µF

Terminal: 51,52,53,54
Uo: 9.6 VDC
Io: 25 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 µF



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

General installation instructions
To avoid risk of ignition during installation and maintenance appropriate safety measures against electrostatic discharge (ESD) are to be considered.

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

For installation in a potentially explosive gas atmosphere the following instructions apply:
To avoid risk of ignition due to electrostatic discharge (ESD) the transmitter shall be mounted in an enclosure providing a degree of protection of at least IP20 according to EN/IEC 60529.
Ambient temperature range:
T4: -40 ≤ Ta ≤ 85ºC
T5: -40 ≤ Ta ≤ 60ºC
T6: -40 ≤ Ta ≤ 40ºC

For installation in a potentially explosive dust atmosphere, the following instructions apply:
The transmitter shall be mounted in a metal enclosure or equivalent that is providing a degree of protection of at least IP6X 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 +20K for a dust layer with a maximum thickness of 5 mm.
Ambient temperature range:
T4: -40 ≤ Ta ≤ 85ºC

For installation in a potentially explosive atmosphere in mines, the following instructions apply:
The transmitter shall be mounted in an enclosure providing a degree of protection of at least IP6X according to EN/IEC 60529. Cable entries and blanking elements shall be used that are suitable for the application and correctly installed.
Ambient temperature range:
T4: -40 ≤ Ta ≤ 85ºC

ATEX Installation drawing 6331QA02-V2R0

For safe installation of 6331A or the 6334A 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 06 ATEX0115X

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 IIIC Dc

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

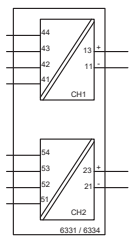
T4: -40ºC to 85 ºC
T6: -40ºC to 60 ºC

Hazardous Area Zone 2

Terminal: 41,42,43,44 / 51,52,53,54

Ex nA [ic]

Uo: 9.6 VDC
Io: 25 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 µF



Terminal: 11-13 / 21-23

Ex nA
Umax ≤ 35 VDC

Ex ic
Ui = 35 VDC
Li = 10 µH
Ci = 1.0 nF

General installation instructions
To avoid risk of ignition during installation and maintenance appropriate safety measures against electrostatic discharge (ESD) are to be considered.

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

For installation in a potentialy explosive gas atmosphere, the following instructions apply:
If the transmitter is applied in type of protection "Ex nA", it shall be installed in an enclosure that is Ex nA certified according to IEC-EN 60079-15 or "Ex e" certified and suitable for the application and correctly installed.
Cable entry devices and blanking elements shall fulfill the same requirements.

For installation in a potentially explosive dust atmposphere, the following instructions apply:
If the transmitter is supplied with an intrinsically safe signal "ic" and interfaces an intrinsically safe signal "ic" (e.g. a passive device), the transmitter shall be mounted in a metal enclosure that provides a degree of protection of at least IP6X according to EN/IEC 60529, and that is suitable for the application. Cable entry devices and blanking elements shall fulfill the same requirements. The surface temperature of the enclosure is equal to the ambient temperature +20K for a dust layer with a maximum thickness of 5 mm.

IECEx Installation drawing 6331QI01-V1R0

For safe installation of 6331Bxx or 6334Bxx 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 IECEx DEK 14.0047X

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

Standards: IEC60079-11:2011, IEC60079-0: 2011, IEC60079-26:2006

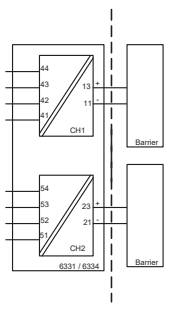
Hazardous area
Zone 0, 1, 2, 20, 21, 22

Non Hazardous Area

T4: -40 ≤ Ta ≤ 85ºC
T5: -40 ≤ Ta ≤ 60ºC
T6: -40 ≤ Ta ≤ 40ºC

Terminal: 41,42,43,44
Uo: 9.6 VDC
Io: 25 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 µF

Terminal: 51,52,53,54
Uo: 9.6 VDC
Io: 25 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 µF



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

General installation instructions
To avoid risk of ignition during installation and maintenance appropriate safety measures against electrostatic discharge (ESD) are to be considered.

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

For installation in a potentially explosive gas atmosphere the following instructions apply:
To avoid risk of ignition due to electrostatic discharge (ESD) the transmitter shall be mounted in an enclosure providing a degree of protection of at least IP20 according to EN/IEC 60529.
Ambient temperature range:
T4: -40 ≤ Ta ≤ 85ºC
T5: -40 ≤ Ta ≤ 60ºC
T6: -40 ≤ Ta ≤ 40ºC

For installation in a potentially explosive dust atmosphere, the following instructions apply:
The transmitter shall be mounted in a metal enclosure or equivalent that is providing a degree of protection of at least IP6X 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 +20K for a dust layer with a maximum thickness of 5 mm.
Ambient temperature range:
T4: -40 ≤ Ta ≤ 85ºC

For installation in a potentially explosive atmosphere in mines, the following instructions apply:
The transmitter shall be mounted in an enclosure providing a degree of protection of at least IP6X according to EN/IEC 60529. Cable entries and blanking elements shall be used that are suitable for the application and correctly installed.
Ambient temperature range:
T4: -40 ≤ Ta ≤ 85ºC

IECEx Installation drawing 6331QI02-V2R0

For safe installation of 6331A or the 6334A 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 IECEx DEK 14.0047X

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

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

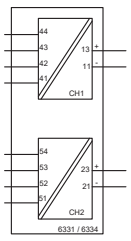
T4: -40ºC to 85 ºC
T6: -40ºC to 60 ºC

Hazardous Area Zone 2

Terminal: 41,42,43,44 / 51,52,53,54

Ex nA [ic]

Uo: 9.6 VDC
Io: 25 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 µF



Terminal: 11-13 / 21-23

Ex nA
Umax ≤ 35 VDC

Ex ic
Ui = 35 VDC
Li = 10 µH
Ci = 1.0 nF

General installation instructions
To avoid risk of ignition during installation and maintenance appropriate safety measures against electrostatic discharge (ESD) are to be considered.

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

For installation in a potentialy explosive gas atmosphere, the following instructions apply:
If the transmitter is applied in type of protection "Ex nA", it shall be installed in an enclosure that is Ex nA certified according to IEC-EN 60079-15, or "Ex e" certified and suitable for the application and correctly installed.
Cable entry devices and blanking elements shall fulfill the same requirements

For installation in a potentially explosive dust atmposphere, the following instructions apply:
If the transmitter is supplied with an intrinsically safe signal "ic" and interfaces an intrinsically safe signal "ic" (e.g. a passive device), the transmitter shall be mounted in a metal enclosure that provides a degree of protection of at least IP6X according to EN/IEC 60529, and that is suitable for the application. Cable entry devices and blanking elements shall fulfill the same requirements. The surface temperature of the enclosure is equal to the ambient temperature +20K for a dust layer with a maximum thickness of 5 mm.

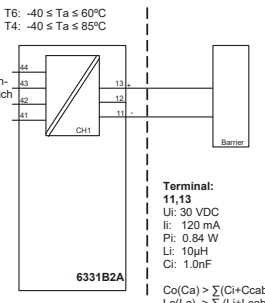
CSA Installation drawing 6331QC01 – V1R0

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

T6: -40 ≤ Ta ≤ 60ºC
T4: -40 ≤ Ta ≤ 85ºC

Terminal: 41,42,43,44
Connect to passive or non-energy storing devices such as RTD's Resistors and Thermocouples only.



Terminal: 11,13
Ui: 30 VDC
Ii: 120 mA
Pi: 0.84 W
Li: 10µH
Ci: 1.0nF

Co(Ca) > ∑(Ci+Ccable)
Lo(La) > ∑ (Li+Lcable)

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

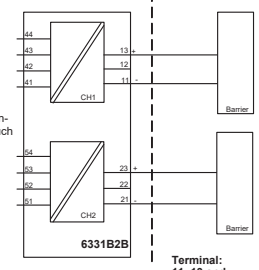
Substitution of components may impair intrinsic safety.

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

T6: -40 ≤ Ta ≤ 60ºC
T4: -40 ≤ Ta ≤ 85ºC

Terminal: 41,42,43,44
51,52,53,54
Connect to passive or non-energy storing devices such as RTD's Resistors and Thermocouples only.



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

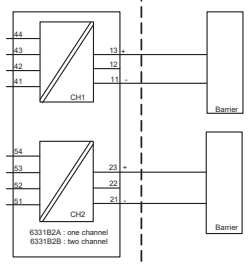
Co(Ca) > ∑(Ci+Ccable)
Lo(La) > ∑ (Li+Lcable)

FM Installation Drawing 6331QF01-V1R0

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

Non Hazardous Location

T6: -40 ≤ Ta ≤ 60ºC
T4: -40 ≤ Ta ≤ 85ºC



Terminal: 11,12,13 and 21,22,23

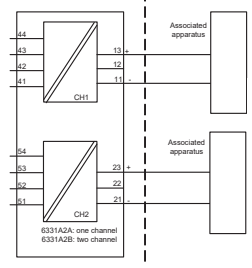
Ui: 30 VDC
Ii: 120 mA
Pi: 0.84 W
Li: 10µH
Ci: 1.0nF

Installation notes
For installation in Class I the Transmitter must be installed in a suitable enclosure to meet installation codes stipulated in The National Electrical Code (ANSI-NFPA 70).
Equipment that is FM-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, provided that the agency's criteria are met. The combination is then 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 Ui(VMAX) and current Ii(IMAX), and maximum power Pi(Pmax), which the device can receive and remain intrinsically safe, must be equal to or greater than the voltage (Uo or VOC or Vt) and current (Io or ISC or It) and the power Po which can be delivered by the barrier. The sum of the maximum unprotected capacitance (Ci) for each intrinsically device and the interconnecting wiring must be less than the capacitance (Ca) which can be safely connected to the barrier. The sum of the maximum unprotected inductance (Li) for each intrinsically device and the interconnecting wiring must be less than the inductance (La) which can be safely connected to the barrier. The entity parameters Uo, VOC or Vt and Io, ISC or It, and Ca and La for barriers are provided by the barrier manufacturer.

Hazardous (Classified) Location
Class I, Division 2, Group A,B,C,D T4..T6
Class I, Zone 2, IIC T4..T6

Non Hazardous Location

T6: -40 ≤ Ta ≤ 60ºC
T4: -40 ≤ Ta ≤ 85ºC



Terminal: 11,12,13 and 21,22,23

Vmax: 35 VDC
Li: 10µH
Ci: 1.0nF

Installation notes
The Transmitter must be installed in a suitable enclosure to meet installation codes stipulated in The National Electrical Code (ANSI-NFPA 70).

To assure a Non-Incendive system the transmitter and associated apparatus must be wired in accordance with the associated apparatus manufacturers field wiring instructions and the circuit diagram shown above.

DECLARATION OF CONFORMITY

(6331_6334DoC_101)

As manufacturer
PR electronics A/S, Lerbakken 10, DK-8410 Rønde
hereby declares that the following products:
Type: **6331 / 6334**
Name: **2-Wire programmable transmitter**
From serial no.: **159740001 (6331) / 159765033 (6334)**
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, EN 60079-11 : 2012, EN 60079-15 : 2010
and EN 60079-26 : 2007
ATEX certificate: KEMA 06ATEX0115 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, 21 March 2016

Stig Lindemann, CTO
Manufacturer's signature