



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 monteringen i eksplosionsfarlig 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 modulypen svarer til den bestilte. Indpakningen bør følge modulet, indtil dette er monteret på blivende plads.

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

Installation
 Modulet må kun tilsluttes af kvalificerede teknikere, som er bekendte med de tekniske udtryk, advarsler og instruktioner i installationsvejledningen, og som vil følge disse. Hvis der er tvivl om modulets rette håndtering, skal der rettes henvendelse til den lokale forhandler eller alternativt direkte til PR electronics A/S. Installation og tilslutning af modulet skal følge landets gældende regler for installation af elektrisk materiel bl.a. med hensyn til ledningstværsnit, for-sikring og placering. 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.

Renngøring
 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'en 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.....	7.2...35 VDC
Max. forbrug, 6331A & 6334A, 1 / 2 kanaler.....	0,8 W / 1,6 W
Forsyningsspænding, 6331B & 6334B.....	7.2...30 VDC
Max. forbrug, 6331B & 6334B, 1 / 2 kanaler.....	0,7 W / 1,4 W
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

Strømdugang	
Signalområde.....	4...20 mA
Min. signalområde.....	16 mA
Belastningsmodstand, Ω.....	≤ (Vforsyn.-7,2 V)/0,023

Godkendelser	
EAC Ex.....	RU C-DK.HA65.B.00355/19
Overholdte myndighedskrav	
EMC.....	2014/30/EU & UK SI 2016/1091
ATEX.....	2014/34/EU & UK SI 2016/1107
RoHS.....	2011/65/EU & UK SI 2012/3032
EAC.....	TR-CU 020/2011
EAC Ex.....	TR-CU 012/2011

UK

WARNING
 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.....	7.2...35 VDC
Max. required power, 6331A & 6334A, 1 / 2 channels.....	0.8 W / 1.6 W
Supply voltage.....	7.2...30 VDC
Max. required power, 6331B & 6334B, 1 / 2 channels.....	0.7 W / 1.4 W
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.....	≤ (Vsupply-7.2 V)/0.023

Approvals	
EAC Ex.....	RU C-DK.HA65.B.00355/19
Observed authority requirements	
EMC.....	2014/30/EU & UK SI 2016/1091
ATEX.....	2014/34/EU & UK SI 2016/1107
RoHS.....	2011/65/EU & UK SI 2012/3032
EAC.....	TR-CU 020/2011
EAC Ex.....	TR-CU 012/2011

FR

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

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

Montage
 Il est conseillé de réserver le raccordement du module aux techniciens qualifiés qui connaissent les termes techniques, les avertissements et les instructions de ce guide et qui sont capables d'appliquer ces derniers. 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 dotée d'une isolation galvanique pour protéger le port du PC. La communication est bidirectionnelle. Cela permet non seulement la programmation du module mais également la récupération d'une configuration existante ainsi que la lecture du numéro de série et du repère. Le module peut être livré déjà programmé, si l'utilisateur le souhaite.

Spécifications	
Plage de température.....	-40°C à +85°C
Tension d'alimentation, 6331A & 6334A.....	7.2...35 Vcc
Puissance maximale requise, 6331A & 6334A, 1 / 2 voies.....	0,8 W / 1,6 W
Tension d'alimentation, 6331B & 6334B.....	7.2...30 Vcc
Puissance maximale requise, 6331B & 6334B, 1/2 voies.....	0,7 W / 1,4 W
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
Lin. R.....	0 Ω...5000 Ω
Voltage.....	-12...800 mV

Sortie courant:	
Plage de signal.....	4...20 mA
Plage de signal min.....	16 mA
Résistance de charge, Ω.....	≤ (V _{alim} -7,2 V)/0,023

Approbations	
EAC Ex.....	RU C-DK.HA65.B.00355/19
Compatibilité avec les normes	
CEM.....	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

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 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 Einbauezeichnungen installiert werden. Das System 6300 muss auf eine 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.

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.

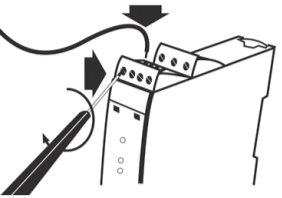
PC-Programmierung des Systems 6300
 Das Gerät wird für die jeweilige Aufgabe mit Hilfe eines PCs und PR electronics A/S Kommunikationschnittstelle Loop Link konfiguriert. Es ist möglich, das Gerät sowohl mit als auch ohne angeschlossene Versorgungsspannung zu konfigurieren, da die Kommunikationschnittstelle die notwendige Versorgung für die Einstellung liefert. Die Kommunikationschnittstelle 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, Fehlerfehlererkennung und Ausgangssignal.

Elektrische Daten	
Spezifikationsbereich.....	-40°C bis +85°C
Versorgungsspannung, 6331A & 6334A.....	7.2...35 VDC
Leistungsbedarf, 6331A & 6334A, 1 / 2 Kanäle.....	0,8 W / 1,6 W
Versorgungsspannung, 6331B & 6334B.....	7.2...30 VDC
Leistungsbedarf, 6331B & 6334B, 1 / 2 Kanäle.....	0,7 W / 1,4 W
Isolationsspannung, Test / Betrieb.....	1,5 kVAC / 50 VAC
Kalibreringstemperatur.....	20...28°C
Luftfeuchtigkeit.....	< 95% RF (nicht kond.)
Maß.....	109 x 23,5 x 104 mm
Schutzart.....	IP20

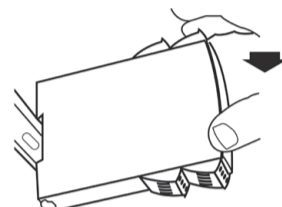
Eingangstypen	
Pt100.....	-200°C...+850°C
Ni100.....	-60°C...+250°C
TE-Eingang.....	B, E, J, K, L, N, R, S, T, U, W3, W5, Lr
Lin. R.....	0 Ω...5000 Ω
Spannung.....	-12...800 mV

Stromausgang	
Signalbereich.....	4...20 mA
Min. Signalbereich.....	16 mA
Belastungswiderstand, Ω.....	≤ (V _{forsyn} -7,2 V)/0,023

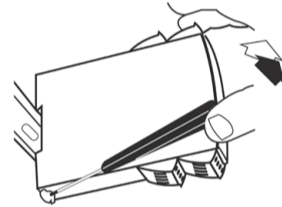
Zulassungen	
EAC Ex.....	RU C-DK.HA65.B.00355/19
Eingehaltene Behördenvorschriften	
EMV.....	2014/30/EU & UK SI 2016/1091
ATEX.....	2014/34/EU & UK SI 2016/1107
RoHS.....	2011/65/EU & UK SI 2012/3032
EAC.....	TR-CU 020/2011
EAC Ex.....	TR-CU 012/2011



- DK** Ledningskvadrat (min...max.) 0,13...2,08 mm² / AWG 26...14 flerkoret ledning. Klemmskrueflænsningsmoment 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-skinne 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 déloger 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** Sideskilt
- UK** Side label
- FR** Etiquette
- DE** Typenschild
- DK** Kina RoHS
- UK** China RoHS
- FR** RoHS chinois
- DE** China-RoHS

PR PR electronics A/S, Lerbakken 10, 8410 Rønde
 www.prelectronics.com
 Phone +45 8637 2677, Denmark, 6331S299

CE **6331B2B** 0344

-40°C ≤ T_a ≤ +85°C

11output ch1 12output ch1 13output ch1	supply+ looplink- supply+ looplink+	21output ch2 22output ch2 23output ch2	supply- looplink- supply+ looplink+
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41input ch1 42input ch1 43input ch1 44input ch1	TC- mV- RTD -3w/-4w CJC RTD -2w/-3w/-4w CJC RTD +2w/+3w/+4w TC+ mV+ RTD +4w	51input ch2 52input ch2 53input ch2 54input ch2	TC- mV- RTD -3w/-4w CJC RTD -2w/-3w/-4w CJC RTD +2w/+3w/+4w TC+ mV+ RTD +4w
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Ex ia IIC T₆..T₄ Ga
 Ex ia IIC D_b
 Ex ia I Ma
 IECEx DEK 20 0059X
 Installation Drawing: 6331Q001

II G Ex ia IIC T₆..T₄ Ga
 II D Ex ia IIC D_b
 II M Ex ia I Ma
 DEKRA 20ATEX 0095X
 Installation Drawing: 6331Q001

IS, CL I, Div 1, GP ABCD T₆..T₄
 CL I, Zn A, AEx ia IIC T₆..T₄
 NI, CL I, Div 1, GP ABCD T₆..T₄
 FM 1120013X AN, CL I, Div 2, GP ABCD T₆..T₄ ST
 Entry Installation Drawing: 6331Q001

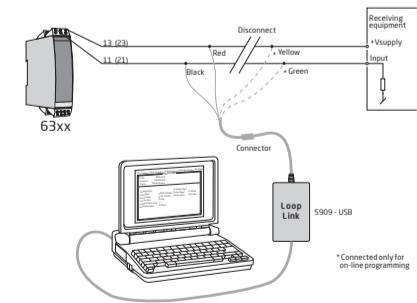
Ex Ex ia IIC T₆ Ga

2-WIRE PROGRAMMABLE TRANSMITTER

Part Name	Hazardous Substances					
	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.

The product's Environmentally Friendly Use Period (EFUP) is 50 years



- 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, benutzt werden.

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

ATEX-installation drawing 6331QA01-V3R0

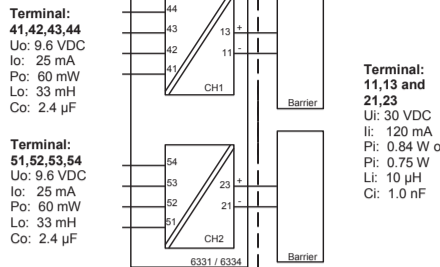
For safe installation of 6331Bxx or 6334Bxx the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

Certificate DEKRA 20ATEX 0095 X

Marking I I 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



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 of at least IP20 according to EN 60529, and that is suitable for the application and correctly installed.

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

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

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

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

For an ambient temperature $\geq 60^\circ\text{C}$, heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

The sensor circuit is not infallibly 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 6331QA02-V3R0

For safe installation of 6331A and 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.

Certificate DEKRA 20ATEX 0096X

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

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

Terminal	Terminal	Terminal	Terminal
41,42,43,44	11,12,13,14	21,22,23,24	11,12,13,14
51,52,53,54	21,22,23,24	21,22,23,24	21,22,23,24
Ex ic IIC, Ex ic IIC	Ex ic IIC, Ex ic IIC	Ex ic IIC, Ex ic IIC	Ex na, Ex ec
Uo: 9.6 V	Ui: 35 V	Ui: 24 V	Umax \leq 35 VDC
Ii: 25 mA	Ii: 110 mA	Ii: 260 mA	or
Po: 60 mW	Ci: 1 nF	Ci: 1 nF	Umax \leq 24 VDC
Lo: 33 mH	Li: 10 μH	Li: 10 μH	
Co: 2.4 μF			

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

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

Installation notes

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

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

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

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

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

IECEx-installation drawing 6331Q101-V2R0

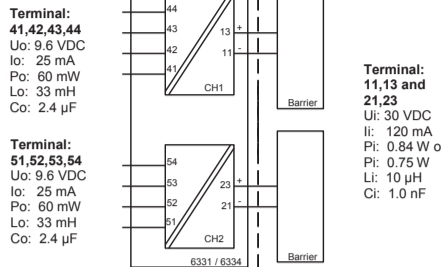
For safe installation of 6331Bxx or 6334Bxx the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

Certificate IECEx DEK 20.0059X

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



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 of at least IP20 according to IEC 60529, and that is suitable for the application and correctly installed.

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

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

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

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

For an ambient temperature $\geq 60^\circ\text{C}$, heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

The sensor circuit is not infallibly 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 6331Q102-V3R0

For safe installation of 6331A and 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.

Certificate IECEx DEK 20.0059X

Marking Ex na [c] IIC T6...T4 Gc
Ex ec [c] 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	Terminal	Terminal	Terminal
41,42,43,44	11,12,13,14	21,22,23,24	11,12,13,14
51,52,53,54	21,22,23,24	21,22,23,24	21,22,23,24
Ex ic IIC, Ex ic IIC	Ex ic IIC, Ex ic IIC	Ex ic IIC, Ex ic IIC	Ex na, Ex ec
Uo: 9.6 V	Ui: 35 V	Ui: 24 V	Umax \leq 35 VDC
Ii: 25 mA	Ii: 110 mA	Ii: 260 mA	or
Po: 60 mW	Ci: 1 nF	Ci: 1 nF	Umax \leq 24 VDC
Lo: 33 mH	Li: 10 μH	Li: 10 μH	
Co: 2.4 μF			

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

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

Installation notes

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

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

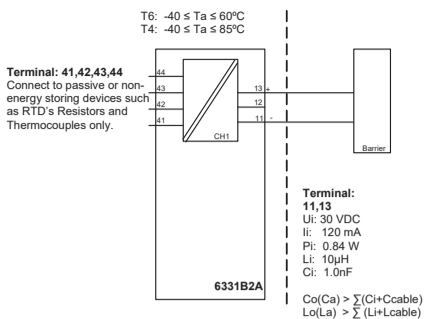
If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Dc, the transmitter shall be mounted in a separately certified enclosure that provides a degree of protection of at least IP5X according to IEC 60079-0, and that is suitable for the application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

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

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

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

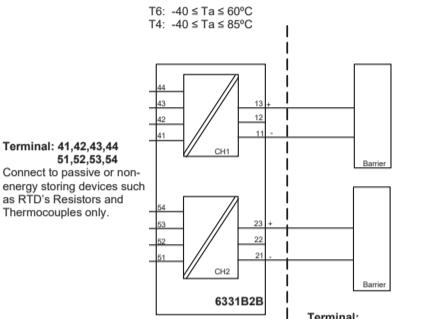


Installation notes

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



Installation notes

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

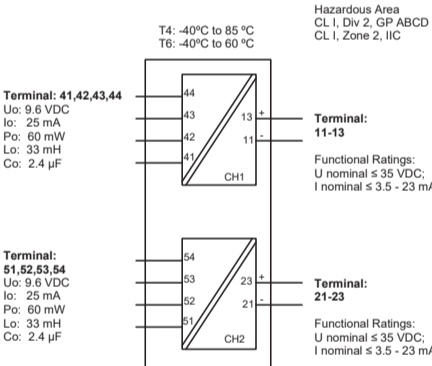
Channel 1 and Channel 2 are separate channels and therefore separate shielded cables shall be used for each channel.

Substitution of components may impair intrinsic safety.

CSA Installation drawing 6331QC02 - V2R0

For safe installation of the single channel 6331A2A or the two channel 6331A2B the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area.

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



NI Installation instructions

The transmitter must be installed in an enclosure providing a degree of protection of at least IP54 according to IEC60529 that is suitable for the application and is correctly installed. Cable entry devices and blanking elements shall fulfill the same requirements.

If the enclosure is made of non-metallic materials or of painted metal, electrostatic charging shall be avoided.

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

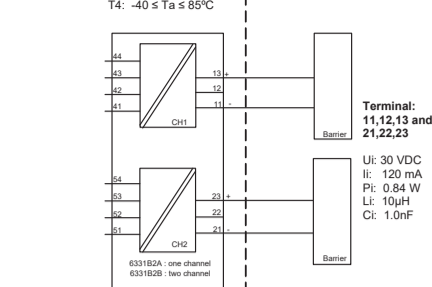
WARNING: Substitution of components may impair suitability for Class I, Division 2. AVERTISSEMENT: la substitution de composants peut nuire à l'aptitude à la Classe I, Division 2.

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

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



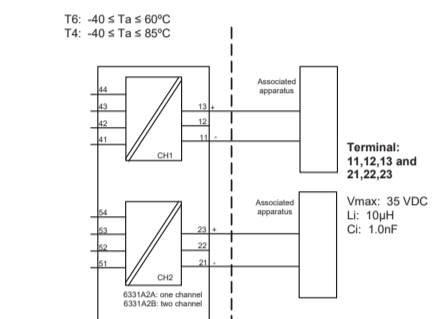
Installation notes

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 (U(VMAX)) and current (I(IMAX)), and maximum power (P(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 safe 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 safe 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



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.

EU DECLARATION OF CONFORMITY

(6331_6334DoC_103)

As manufacturer PR electronics A/S, Lerbakken 10, DK-8410 Rønde hereby declares that the following product:
Type: 6331 / 6334
Name: 2-wire programmable transmitter
From serial no.: 221792250 (6331) / 221792263 (6334)
is in conformity with the following directives and standards:
The EMC Directive 2014/30/EU and later amendments
EN 61326-1: 2013
Immunity test requirements for equipment intended to be used in an industrial electromagnetic environment. For specification of the acceptable EMC performance level, refer to the electrical specifications for the device.
The ATEX Directive 2014/34/EU and later amendments
EN IEC 60079-0: 2018, EN 60079-7: 2015 + A1: 2018, EN 60079-11: 2012 and EN 60079-15: 2010
ATEX certificate: DEKRA 20ATEX0096 X (6331A / 6334A)
ATEX certificate: DEKRA 20ATEX0095 X (6331D / 6334B)
ATEX notified body (type approval)
DEKRA Certification B.V.
Heander 1051, 6825 HJ Arnhem
P.O. Box 5185, 6802 ED Arnhem
The Netherlands
The RoHS2 Directive 2011/65/EU and later amendments
EN IEC 63000: 2018
Notified body 0344
DEKRA Certification B.V.
Heander 1051, 6825 HJ Arnhem
P.O. Box 5185, 6802 ED Arnhem
The Netherlands
This declaration of conformity is issued under the sole responsibility of the manufacturer.
Rønde, 2 November 2022
Stig Lindemann, CTO
Manufacturer's signature

UKCA DECLARATION OF CONFORMITY

(6331_6334DoC_UKCA_100)

As manufacturer PR electronics A/S, Lerbakken 10, DK-8410 Rønde hereby declares that the following product:
Type: 6331 / 6334
Name: 2-wire programmable transmitter
From serial no.: 221792250 (6331) / 221792263 (6334)
is in conformity with the following statutory requirements:
The Electromagnetic Compatibility Regulations 2016 (UK SI 2016/1091) and later amendments
EN 61326-1: 2013
Immunity test requirements for equipment intended to be used in an industrial electromagnetic environment. For specification of the acceptable EMC performance level, refer to the electrical specifications for the device.
The Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres Regulations 2016 (UK SI 2016/1107) and later amendments
EN IEC 60079-0: 2018, EN 60079-7: 2015 + A1: 2018, EN 60079-11: 2012 and EN 60079-15: 2010
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (UK SI 2010/3032) and later amendments
EN IEC 63000: 2018
The conformity declared by this document is based on the EU standards covered by 6331_6334DoC_EU_103 and the ATEX certificates:
DEKRA 20ATEX0096 X (6331A / 6334A)
DEKRA 20ATEX0095 X (6331D / 6334B)
This declaration of conformity is issued under the sole responsibility of the manufacturer.
Rønde, 18 November 2022
Stig Lindemann, CTO
Manufacturer's signature

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
J	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

