



Segurança



## DK

## ADVARSEL

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



## 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 devices must be installed according to the appropriate installation drawings. SYSTEM 6300 must be mounted on a DIN rail according to DIN EN 60715.



## 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.

## 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

Il est recommandé de réserver le raccordement du module aux techniciens qui connaissent les termes techniques, les avertissements et les instructions de ce guide et qui sont capables d'appliquer ces dernières.



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 mounting of electric materials. Descriptions of input/output and supply connections are shown in the product manual found on www.prelectronics.com.



## Calibration and adjustment

During calibration and adjustment, the measuring and connection of external voltages must be carried out according to the specifications of this installation guide. The technician must use tools and instruments that are safe to use.



## Cleaning

When disconnected, the device may be cleaned with a cloth moistened with distilled water.



## 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 detection, and output signal.



## Electrical specifications

Specifications range ..... -40°C to +85°C  
Supply voltage, ..... 7,2...35 VDC  
Supply voltage, ..... 7,2...30 VDC  
Max. forbrug, 6331A & 6334A, 1 / 2 kanaler ..... 0,8 W / 1,6 W  
Max. forbrug, 6331B & 6334B, 1 / 2 kanaler ..... 0,7 W / 1,4 W  
Intern effektab, 6331A & 6334A ..... 0,17...0,8 W  
Intern effektab, 6331B & 6334B ..... 0,17...0,7 W



## Isolationsspannung,

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 ..... 0,0...5000 Ω  
Spænding ..... -12...+800 mV



## Stromudgang:

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



## Overholde myndighedskrav:

EMC ..... 2014/20/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:

RU C-DK.HA65.B.00355/19



## Approvals:

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



## SIKKERHEDSREGLER

Modtagelse og udpakning

Udpak modulet uden at beskadige det. Kontrollér ved modtagelsen, at modultypen sværer til den bestilte. Indpakningen bør følge modulet, indtil dette er monteret på blivende plads.



## Miljøforhold

Undgå direkte sollys, kraftig stov 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 omgivelsets temperatur, 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.prelectronics.dk.



## Kalibrering og justering

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



## Rengøring

Modulet må i spændingsfri 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 kan ses på modulet. Kommunikationen er 2-vejs, så modulets opsætning kan hentes ind i PC'en, og opsættningen 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, følerdetektøret og udgangsignalet.



## Elektriske specifikationer

Specifikationsområde ..... -40°C til +85°C  
Forsyningsspænding, ..... 7,2...35 VDC  
Forsyningsspænding, ..... 7,2...30 VDC  
Max. forbrug, 6331A & 6334B, 1 / 2 kanaler ..... 0,8 W / 1,6 W  
Max. forbrug, 6331B & 6334B, 1 / 2 kanaler ..... 0,7 W / 1,4 W  
Intern effektab, 6331A & 6334A ..... 0,17...0,8 W  
Intern effektab, 6331B & 6334B ..... 0,17...0,7 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



## 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 ..... 0,0...5000 Ω  
Voltage ..... -12...+800 mV



## Current output:

Signal range ..... 4...20 mA  
Min. signal range ..... 16 mA  
Load resistance, Q ..... ≤ (Vorsyn.-7,2 V)/0,023



## 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



## Overholde myndighedskrav:

EMC ..... 2014/20/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:

RU C-DK.HA65.B.00355/19



## Approvals:

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



## Ex-godkendelser

UK I.5 approvals



## FR Approbations S.I.

DE Ex-Zulassungen



## DK

DK



## UK

UK



## FR

FR



## DE

DE



## DK

DK



## UK

UK



## FR

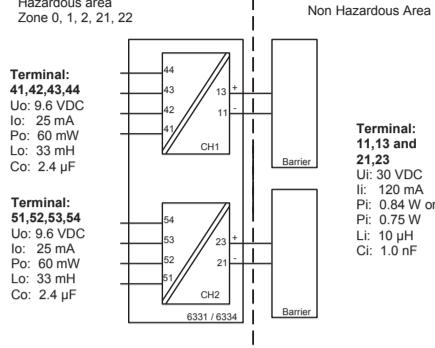
### ATEX-installation drawing 6331QA01-V3R0

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.

ATEX Certificate DEKRA 20ATEX 0095 X

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



Temperature Class	Ambient temperature range	
	Pt: 0.84 W	Pt: 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 Ma or Ga, 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 IP20, 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 IP40 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 ≥ 60°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 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 [ic] IIC T6 ... T4 Gc  
II 3 G Ex ec [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 41,42,43,44	Terminal 11,12,13,14	Terminal 21,22,23,24	Terminal 11,12,13,14	Terminal 21,22,23,24
51,52,53,54	51,52,53,54	51,52,53,54	51,52,53,54	51,52,53,54

Ex ic IIC, Ex ic IIC

Ex ic IIC,Ex ic IIC

Ex nA, Ex ec

Uo: 9.6 V

Ilo: 25 mA

Po: 60 mW

Lo: 33 mH

Co: 2.4 μF

Ex ic IIC, Ex ic IIC

Ex ic IIC,Ex ic IIC

Ex nA, Ex ec

Uo: 9.6 V

Ilo: 25 mA

Po: 60 mW

Lo: 33 mH

Co: 2.4 μF

Ex ic IIC, Ex ic IIC

Ex ic IIC,Ex ic IIC

Ex nA, Ex ec

Uo: 9.6 V

Ilo: 25 mA

Po: 60 mW

Lo: 33 mH

Co: 2.4 μF

Ex ec, Ex nA

Ambient temperature range

Vmax=35 V

Vmax=24 V

T6 -40°C to +43°C

-40°C to +55°C

T5 -40°C to +60°C

-40°C to +78°C

T4 -40°C to +85°C

-40°C to +85°C

Ex ec, Ex nA

Ambient temperature range

Vmax=35 V

Vmax=24 V

T6 -40°C to +43°C

-40°C to +55°C

T5 -40°C to +60°C

-40°C to +78°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 Gc, 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. 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 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.

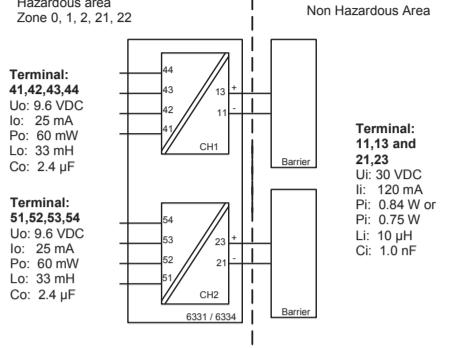
### IECEx-installation drawing 6331QI01-V2R0

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



Temperature Class	Ambient temperature range	
	Pt: 0.84 W	Pt: 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 Ma or Ga, 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 IP20, 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 IP40 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 ≥ 60°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.

### Desenho de Instalação INMETRO

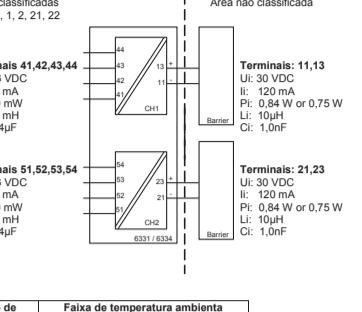
6331B02-V1R0

Para instalação segura do 6331Bxx ou 6334Bxx 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 pego dos dois primeiros dígitos do número de série.

Certificado.....DEKRA 23.0009 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



Classe de temperatura	Faixa de temperatura ambiente
T6	Pt: 0.84W Pt: 0.76W
T5	Pt: 0.84W Pt: 0.76W
T4	Pt: 0.84W Pt: 0.76W

#### Notas de instalação

Se o invólucro é 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.

Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de equipamento de nível de proteção Ga ou Ma, 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 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 60079-0, e que seja adequado para a aplicação e corretamente instalado. 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

Deverão ser utilizadas entradas de cabos e elementos de obturação adequados à aplicação e instalados corretamente.

Para uma temperatura ambiente ≥ 6