

DK
ADVARSEL

Følgende operationer bør kun udføres på modulet i spændingsløs tilstand og under ESD-sikre forhold:
Installation, ledningsmontage og -demontering.
Fejfinding 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 eksplorationsfaglig område. System 6300 skal monteres på DIN-skine 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 omgivelsernes temperatur, 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 ledningstværn, forsikring og placering.

Beskrivelse af indgang / udgang og forsyningsforbindelser findes i produktdokumentet og på sideskillet.

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 værktøj og instrumenter.

Rengøring

Modulet må, i spændingsløs tilstand, rengøres med et 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, fejfejlsdetection og udgangssignal.

Elektriske specifikationer

Specifikationsområde..... -40°C til +85°C
Forsyningsspænding,
6333A..... 8,0...35 VDC
Max. forbrug, 6333A,
1 / 2 kanaler..... 0,8 W / 1,6 W
Forsyningsspænding,
6333B..... 8,0...30 VDC
Max. forbrug, 6333B,
1 / 2 kanaler..... 0,7 W / 1,4 W
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..... 50°C...+250°C
Lin. R..... 0...10000 Ω

Strømgang:

Signalområde..... 4...20 mA
Min. signalområde..... 16 mA
Belastningsmodstand, Q..... ≤ (Vforsyn.-8,0 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

Electrical specifications

Specifications range -40°C to +85°C

Supply voltage, 6333A..... 8,0...35 VDC

Max. required power, 6333A, 1 / 2 channels..... 0,8 W / 1,6 W

Supply voltage, 6333B..... 8,0...30 VDC

Max. required power, 6333B, 1 / 2 channels..... 0,7 W / 1,4 W

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

Lin. R..... 0...10000 Ω

Current output:

Signal range..... 4...20 mA

Min. signal range..... 16 mA

Load resistance, Q..... ≤ (Vsupply-8,0 V)/0,023

Approvals:

EAC..... TR-CU 020/2011

EAC Ex..... TR-CU 012/2011

Observed authority requirements:

EMC..... 2014/30/EU

ATEX..... 2014/34/EU

RoHS..... 2011/65/EU

Compatibilité avec les normes:

CEM..... 2014/30/EU

ATEX..... 2014/34/EU

RoHS..... 2011/65/EU

Sortie courant:

Gamma de signal..... 4...20 mA

Plage de signal min..... 16 mA

Résistance de charge, Q..... ≤ (Vallim.-8,0 V)/0,023

Types d'entrée:

Pt100..... -200°C...+850°C

Ni100..... -60°C...+250°C

Lin. R..... 0...10000 Ω

Types d'entrée:

Pt100..... -200°C...+850°C

Ni100..... -60°C...+250°C

Lin. R..... 0...10000 Ω

Zulassungen:

EAC..... TR-CU 020/2011

EAC Ex..... TR-CU 012/2011

Compatibility with norms:

CEM..... 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.

Montage

Il est recommandé de réservé 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 avant du module.

Étalonnage et réglage

Lors des opérations d'étalement 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 est configuré à la présent task by 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 to 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.

Spécifications

Plage de température -40°C à +85°C

Tension d'alimentation,

6333A..... 8,0...35 Vcc

Power requirement, 6333A, 1 / 2 channels..... 0,8 W / 1,6 W

Supply voltage,

6333B..... 8,0...30 Vcc

Power requirement, 6333B, 1 / 2 channels..... 0,7 W / 1,4 W

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

Lin. R..... 0...10000 Ω

Current output:

Signal range..... 4...20 mA

Min. signal range..... 16 mA

Load resistance, Q..... ≤ (Vsupply-8,0 V)/0,023

Approvals:

EAC..... TR-CU 020/2011

EAC Ex..... TR-CU 012/2011

Observed authority requirements:

EMC..... 2014/30/EU

ATEX..... 2014/34/EU

RoHS..... 2011/65/EU

Compatibilité avec les normes:

CEM..... 2014/30/EU

ATEX..... 2014/34/EU

RoHS..... 2011/65/EU

Sortie courant:

Gamma de signal..... 4...20 mA

Plage de signal min..... 16 mA

Résistance de charge, Q..... ≤ (Vallim.-8,0 V)/0,023

Types d'entrée:

Pt100..... -200°C...+850°C

Ni100..... -60°C...+250°C

Lin. R..... 0...10000 Ω

Types d'entrée:

Pt100..... -200°C...+850°C

Ni100..... -60°C...+250°C

Lin. R..... 0...10000 Ω

Zulassungen:

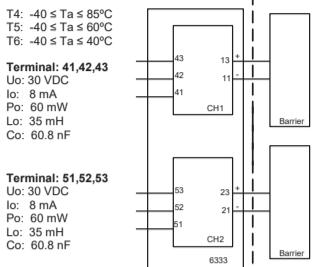
ATEX Installation drawing 6333QA01-V2R0

! For safe installation of 6333B and 6343B 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 09ATEX 0147 X
Marking Ex II 1 G Ex ia IIC T6..T4 Ga
II 1 D Ex ia IIC 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



General installation instructions

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

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 ≤ 85°C
T5: -40 ≤ Ta ≤ 60°C
T6: -40 ≤ Ta ≤ 40°C

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 ≤ 85°C

For installation in a potentially explosive atmosphere in mines, the following instructions apply:

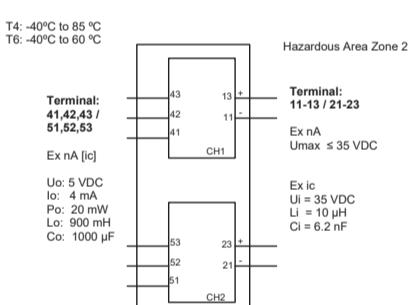
The transmitter shall be mounted in an enclosure providing a degree of protection of at least IP6X according to EN/IEC 60529. Cable entries and blanking elements shall be used that are suitable for the application and correctly installed. Ambient temperature range:
T4: -40 ≤ Ta ≤ 85°C

ATEX Installation drawing 6333QA02-V3R0

! For safe installation of 6333A and 6343A 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 09ATEX 0147 X
Marking Ex II 3 G Ex nA [ic] IIC T6..T4 Gc
II 3 D Ex ic IICc Dc

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



General installation instructions

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

For installation in a potentially 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 atmosphere, 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 6333QI01-V1R0

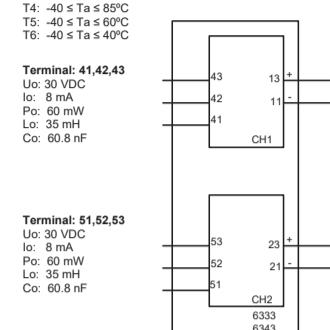
For safe installation of 6333B and 6343B the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

IECEx Certificate IECEx DEK 14.0049X

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

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

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



General installation instructions

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

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 ≤ 85°C
T5: -40 ≤ Ta ≤ 60°C
T6: -40 ≤ Ta ≤ 40°C

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 ≤ 85°C

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 ≤ 85°C

CSA Installation drawing 6333QC01-V1R0

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

Non Hazardous Location

T6: -40 ≤ Ta ≤ 60°C
T4: -40 ≤ Ta ≤ 85°C

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

Terminal: 11,13 and 21,23
Uo: 30 VDC
Io: 8 mA
Po: 60 mW
Lo: 35 mH
Co: 60.8 nF

Terminal: 11,13 and 21,23
Uo: 30 VDC
Io: 8 mA
Po: 60 mW
Lo: 35 mH
Co: 60.8 nF

Terminal: 11,13 and 21,23
Uo: 30 VDC
Io: 8 mA
Po: 60 mW
Lo: 35 mH
Co: 60.8 nF

Terminal: 11,13 and 21,23
Uo: 30 VDC
Io: 8 mA
Po: 60 mW
Lo: 35 mH
Co: 60.8 nF

Co(Ca) > Σ(Ci+Ccable)
Lo(La) > Σ(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 IC T4..T6 Ga
Class I, Zone 0, AEx ia IIC T4..T6 Ga

Non Hazardous Location

T6: -40 ≤ Ta ≤ 60°C
T4: -40 ≤ Ta ≤ 85°C

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

Terminal: 11,13 and 21,23
Uo: 30 VDC
Io: 120 mA
Po: 0.84 W
Li: 10μH
Ci: 6.2nF

Terminal: 11,13 and 21,23
Uo: 30 VDC
Io: 120 mA
Po: 0.84 W
Li: 10μH
Ci: 6.2nF

Terminal: 11,13 and 21,23
Uo: 30 VDC
Io: 120 mA
Po: 0.84 W
Li: 10μH
Ci: 6.2nF

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

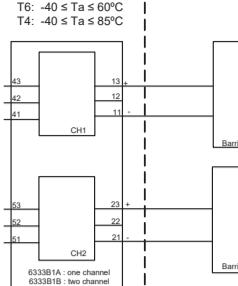
Installation notes
The Transmitter must be installed in a suitable enclosure to meet installation codes stipulated in The Canadian Electrical Code (CEC).

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.

FM Installation drawing 6333QF01-V1R0

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

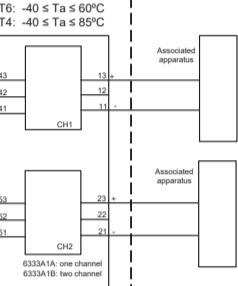
Non Hazardous Location



! 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_{MAX} and current I_{MAX}, and maximum power P_{MAX}, which the device can receive and remain intrinsically safe, must be equal to or greater than the voltage (Uo or V_O or V_I) and current (Io or ISC or I_O) 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 inductance (Li) which can be safely connected to the barrier. The entity parameters Uo, V_O and V_I and Io, ISC or I_O and Ci 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



! 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

(6333Doc_102)

As manufacturer

PR electronics A/S, Lerbakken 10, DK-8410 Rønde
hereby declares that the following products:

Type: 6333
Name: 2-wire programmable transmitter
From serial no.: 161618109

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 60079-0 : 2012 + A11 : 2013, EN 60079-11 : 2012 and

EN 60079-15 : 2010

ATEX certificate: KEMA 09ATEX0147 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 and later amendments

EN 50581 : 2012

Stig Lindemann, CTO
Manufacturer's signature

Rønde, 15 December 2016