



DK
ADVARSEL
Følgende operationer bør kun udføres på modulet i spændingsfrit tilstand og under ESD-sikre forhold:
Installation, ledningsmontage og -dismontage.
Fejlfinding på modulet.
Reparation af modulet må kun foretages af PR electronics A/S.

PR Loop Link programmeringenheten må ikke benyttes til kommunikation med moduler installeret i Ex-område.
Enhederne skal installeres i henhold til den tilhørende installationsvejledning ved montering i eksplosionsfarlig område System 6300 skal monteres på DIN-skine efter DIN EN 60715.

SIKKERHEDSREGLER

Modtagelse og udpakning
Udpak modulet uden at beskadige det. Kontroller ved modtagelse, at modulene svarer til den bestilte. Indpakningen bør følge modulen, 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 opvarming, ud over de opgivne grænser for omgivelsetemperatur, 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.

Hvis der er tvivl om modulenes 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 ledningstværtid, for-sikring og placering.
Beskrivelse af indgang / udgang og forsyningsforbindelser findes i produktmanuken 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 sikkerhedsmaßsigt korrekte værkøj og instrumenter.

Rengøring

Modulet må, i spændingsfrit 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 modulen både med og uden tilsluttet forsyningsspænding, idet kommunikationsinterfacet leverer nødvendig forsyning til opsetningen. 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 modullet. For at brugere, der ikke selv vil foretage opsetning, kan modullet leveres konfigureret efter oplyst specifikation: indgangstype, måleområde, færlejdsdetelektoren og udgangssignal.

Elektriske specifikationer

Specifikationsområde..... -40°C til +85°C

Forsyningsspænding.....

8,0...35 VDC

Max. forbrug 6335A &

8,0 W / 1,6 W

6337A, 1 / 2 kanaler..... 0,8 W / 1,6 W

Forsyningsspænding.....

8,0...30 VDC

Max. forbrug 6335D &

8,0 W / 1,6 W

6337D, 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

Kapslingsklasser..... IP20

Indgangstyper:

Pt100..... -200°C...+85°C

Nl100..... -60°C...+250°C

TC-indgang..... B, E, J, K, L, N, R, S, T,

U, W3, W5, Lr

Lin. R..... 0 Q...7000 Q

Spanning..... -800...+800 mV

Strømudgang:

Signalområde..... 4...20 mA

Min. signalområde..... 16 mA

Belastringsmodstand, Q..... ≤ (Vforsyn.-8,0 V)/0,023

Godkendelsers:

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

Overholde 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,

6335A & 6337A..... 8,0...35 VDC

Max. required power, 6335A & 6337A, 1 / 2 channels..... 0,8 W / 1,6 W

Supply voltage,

6335D & 6337D..... 8,0...30 VDC

Max. required power, 6335D & 6337D, 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...+85°C

Nl100..... -60°C...+250°C

TC input..... B, E, J, K, L, N, R, S, T,

U, W3, W5, Lr

Lin. R..... 0 Q...7000 Q

Voltage..... -800...+800 mV

Current output:

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

Min. signal range..... 16 mA

Load resistance, Q..... ≤ (Vsupply-8,0 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

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 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 latérale du module.

Étalonnage 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 temps. Le module peut être livré déjà programmé, si l'utilisateur le souhaite.

Spécifications

Plage de température..... -40°C à +85°C

Tension d'alimentation,

6335A & 6337A..... 8,0...35 Vcc

Puissance maximale requise,

6335A & 6337A, 1 /

ATEX-installation drawing 6335QA01-V5R0

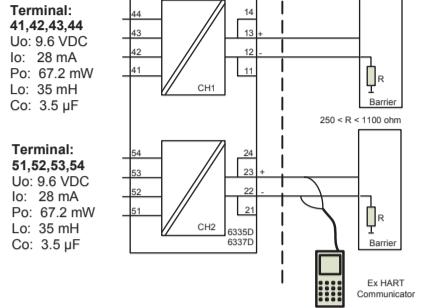
For safe installation of 6335D or 6337D the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

Certificate DEKRA 20ATEX010X

Marking II 1 G Ex ia IIC T6...T4 Ga
II 2 D Ex ia IIC Db
I M1 Ex ia I Ma

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

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



Terminal: 41,42,43,44

Uo: 9.6 VDC
Io: 28 mA
Po: 67.2 mW
Lo: 35 mH
Co: 3.5 µF

Terminal: 51,52,53,54

Uo: 9.6 VDC
Io: 28 mA
Po: 67.2 mW
Lo: 35 mH
Co: 3.5 µF

Terminal: 11,13 and 21,23

Ui: 30 VDC Il: 120 mA Pi: 0.84 W or Pi: 0.75 W
Li: 0 µH Ci: 1.0 nF

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

Installation notes

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

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Ga, the transmitter shall be mounted in 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. 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 EN 60529, and that is suitable for the application and correctly installed. Ambient temperature range: -40°C to +85°C.

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

For an ambient temperature ≥ 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 6335QA02-V5R0

For safe installation of 6335A and 6337A the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

Certificate DEKRA 20ATEX0109 X

Marking II 3 G Ex na [ic] IIC T6 ... T4 Ga
II 3 G Ex ec [ic] IIC T6 ... T4 Ga
II 3 G Ex ic IIC Dc

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

EN 60079-15: 2010, EN 60079-7:2015+A1: 2018

Terminal 41,42,43,44	Terminal 11,12,13,14	Terminal 21,22,23,24	Terminal 11,12,13,14	Terminal 21,22,23,24
51,52,53,54				
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 Io: 28 mA Po: 67 mW Lo: 35 mH Co: 3.5 µF	Ui = 35 V Il = 110 mA Cl = 1 nF Li = 0 µH	Ui = 24 V Il = 260 mA Cl = 1 nF Li = 0 µH	Umax ≤ 35 VDC or Umax ≤ 24 VDC	

Ex ic IIC, Ex IIIC Temperature Class		Ambient temperature range	
UI=35 V	UI=24 V	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	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. 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 IEC 60664-1.

IECEx-installation drawing 6335QI01-V5R0

For safe installation of 6335D or 6337D the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

Certificate IECEx DEK 20.0063X

Marking Ex ia IIC T6...T4 Ga

Ex ia III Cb

Ex ia I Ma

Standards IEC 60079-0: 2017, IEC 60079-11: 2011

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

Terminal: 41,42,43,44

Uo: 9.6 VDC
Io: 28 mA
Po: 67.2 mW
Lo: 35 mH
Co: 3.5 µF

Terminal: 51,52,53,54

Uo: 9.6 VDC
Io: 28 mA
Po: 67.2 mW
Lo: 35 mH
Co: 3.5 µF

Terminal: 11,13 and 21,23

Ui: 30 VDC Il: 120 mA Pi: 0.84 W or Pi: 0.75 W
Li: 10 µH Ci: 1.0 nF

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

CSA Installation drawing 6337QC02 – V2R0

For safe installation of the single channel 6335A2, 6337A2 or the two channel 6335A2B, 6337A2B the following must be observed. The module shall only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area. Year of manufacture can be taken from the first two digits in the serial number.

Marking Class I, Division 2, Group A,B,C,D T6...T4

Ex nA[ic] IIC T6...T4

Class I, Zone 0, AEx ia IIC IIC T6...T4

Hazardous Area CL I, Div 2, GP ABCD CL I, Zone 2, IIC

T4: -40°C to 85 °C
T6: -40°C to 60 °C

Terminal: 41,42,43,44

Uo: 9.6 VDC
Io: 28 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 pF

Functional Ratings: U nominal ≤ 35 VDC; I nominal ≤ 3.5 - 23 mA

Terminal: 51,52,53,54

Uo: 9.6 VDC
Io: 28 mA
Po: 60 mW
Lo: 33 mH
Co: 2.4 pF

Functional Ratings: U nominal ≤ 35 VDC; I nominal ≤ 3.5 - 23 mA

Terminal: 11,13 and 21,23

Ui: 30 VDC Il: 120 mA Pi: 0.84 W or Pi: 0.75 W
Li: 10 µH Ci: 1.0 nF

NI Installation instructions

The transmitter must be installed in an enclosure providing a degree of protection of at least IP54 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.