

# 9106A / 9106B



	DK	UK	FR	DE
A	Indgangssignaler	Input signals	Signaux d'entrée	Eingangssignale
B	Udgangssignaler	Output signals	Signaux de sortie	Ausgangssignale
C	2-tråds transmitter	2-wire transmitter	Transmetteur 2-fils	2-Draht-Messumformer
D	Strøm	Current	Courant	Strom
E	4...20 mA udgang	4...20 mA output	Sortie 4...20 mA	4...20 mA Ausgang
F	2-tråds 4...20 mA udgang	2-wire 4...20 mA output	Sortie 2-fils 4...20 mA	2-Draht-Ausgang 4...20 mA
G	Forsyning -	Supply -	Alimentation -	Versorgung -
H	Forsyning +19.2...31.2 VDC	Power supply +19.2...31.2 VDC	Alimentation +19.2...31.2 Vcc	2-Draht-Ausgang +19.2...31.2 VDC
I	Modulstatus	Device status	Etat du module	Gerätestatus
J	Forsyning via power rail	Power supply via power rail	Alimentation par rail	Versorgung über Power Rail
Ch.1	Kanal 1	Channel 1	Voie 1	Kanal 1
Ch.2	Kanal 2	Channel 2	Voie 2	Kanal 2
N.C.	Normalt lukket	Normally closed	Normalement fermé	Öffner

## DK ADVARSEL

Dette modul er beregnet for tilslutning til livsfarlige elektriske spændinger. Hvis denne advarsel ignoreres, kan det føre til alvorlig legemsbeskadigelse eller mekanisk ødelæggelse.

For at undgå fare for elektriske stød og brand skal sikkerhedsreglerne overholdes, og vejledningerne skal følges. Specifikationer må ikke overskrides, og modulet må kun benyttes som beskrevet i det følgende.

Installationsvejledningen skal studeres omhyggeligt, før modulet tages i brug. Kun kvalificeret personale (teknikere) må installere dette modul. Hvis modulet ikke benyttes som beskrevet i denne installationsvejledning, så forringes modulets beskyttelsesforanstaltninger.

## DK FÆRLIG SPÆNDING

Der må ikke tilsluttes farlig spænding til modulet, før dette er fastmonteret, og 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 og udskiftning af sikringer må kun foretages af PR electronics A/S.

## DK ADVARSEL

Modulets frontplade må ikke åbnes, da dette vil medføre skade på stikforbindelsen til display-/programmeringskablet PR 45xx. Modulet indeholder ingen DIP-switches eller jumpere.

## DK SIKKERHEDSREGLER

**Montagelse og udpakning**  
Udpak modulet uden at beskadige det. Kontrollér ved montagetiden, at modulyten svarer til den bestilte. Indpakningen bør følge modulet, indtil dette er monteret på blivende plads.

## DK Miljøforhold

Unådgående sollys, kraftigt støv eller varme, mekaniske vibrationer og stød, og udsættelse for regn eller kraftig fugt. Om nødvendigt skal opvarmning, ud over de opgivne grænser for omgivelsestemperatur, forhindres ved hjælp af ventilation.

## DK 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 modulets rette håndtering, skal der rettes henvendelse til den lokale forhandler eller alternativt direkte til PR electronics A/S.

## DK Elektriske specifikationer

Specifikationsområde..... -20°C til +60°C  
Forsyningsspænding..... 19.2...31.2 VDC  
Max. forbrug, 1 / 2 kanaler..... ≤ 1.1 W / 1.9 W  
Max. effekttab, 1 / 2 kn..... ≤ 0.8 W / 1.2 W  
Sikring..... 400 mA T / 250 VAC  
Isolationsspænding, test / drift..... 2.6 kVAC / 300 VAC  
Isolation, udgang 1 til udgang 2..... 1.5 kVAC / 150 VAC  
Isolation - relæ til forsyning..... 1.5 kVAC / 150 VAC (forstærket isolation)

## 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 sikkerhedsmæssigt korrekte værktøjer og instrumenter.

## DK Betjening under normal drift

Operatører må kun indstille eller betjene modulerne, når disse er fast installeret på forvarsligt målet i tavler eller lignende, så betjeningen ikke medfører fare for liv eller materiel. Dvs., at der ikke er berøringssfare, og at modulet er placeret, så det er let at betjene.

## DK Rengøring

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

Strømindgang	Programmerbare måleområder..... 3.5...23 mA
	Indgangsmodstand..... Nom. 20 Ω + PTC 50 Ω
Strømodgang	Programmerbare signalområder..... 3.5...23 mA
	Belastning..... ≤ 600 Ω
	Belastingsstabilitet..... ≤ 0.01% af span / 100 Ω
	Strømbegrænsning..... ≤ 28 mA

Stratusrelæ udgangsklemme 33-34	Max. spænding..... 110 VDC / 125 VAC
	Max. strøm..... 0.3 ADC / 0.5 AAC
	Max. spænding, Ex-installationer..... 32 VDC / 32 VAC
	Max. strøm, Ex-installationer..... 1 ADC / 0.5 AAC

Godkendelser	DNV-GL Marine..... TAA00000JD
	ClassNK..... TA18527M
	c UL us, UL 61010-1..... E314307
	EAC..... TR-CU 020/2011
	EAC LVD..... TR-CU 004/2011
	EAC Ex..... TR-CU 012/2011
	SIL..... IEC 61508

Overholdte myndighedskrav	EMC..... 2014/30/EU
	LVD..... 2014/35/EU
	ATEX..... 2014/34/EU
	RoHS..... 2011/65/EU

Observed authority requirements	EMC..... 2014/30/EU
	LVD..... 2014/35/EU
	ATEX..... 2014/34/EU
	RoHS..... 2011/65/EU

## UK WARNING

This device is designed for connection to hazardous electric voltages. Ignoring this warning can result in severe personal injury or mechanical damage.

To avoid the risk of electric shock and fire, the safety instructions in this guide must be observed and the guidelines followed. The specifications must not be exceeded, and the device must only be applied as described in the following.

Prior to the commissioning of the device, this installation guide must be examined carefully. Only qualified personnel (technicians) should install this device. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## UK HAZARDOUS VOLTAGE

Until the device is fixed, do not connect hazardous voltages to the device. 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 and replacement of circuit breakers must be done by PR electronics A/S only.

## UK WARNING

Do not open the front plate of the device as this will cause damage to the connector for the display / programming front PR 45xx. The SYSTEM 9000 devices contain no DIP-switches or jumpers.

## UK 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.

## UK 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.

## UK 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.

## UK Electrical specifications

Specifications range..... -20°C to +60°C  
Supply voltage..... 19.2...31.2 VDC  
Max. required power, 1 / 2 ch..... ≤ 1.1 W / 1.9 W  
Max. power dissipation, 1 / 2 ch..... ≤ 0.8 W / 1.2 W  
Fuse..... 400 mA SB / 250 VAC  
Isolation voltage, test / operation..... 2.6 kVAC / 300 VAC  
Isolation, output 1 to output 2..... 1.5 kVAC / 150 VAC  
Isolation - relay to supply..... 1.5 kVAC / 150 VAC (reinforced isolation)

## UK 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.

## UK Normal operation

Operators are only allowed to adjust and operate devices that are safely fixed in panels, etc., thus avoiding the danger of personal injury and damage. This means there is no electrical shock hazard, and the device is easily accessible.

## UK Cleaning

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

Strømindgang	Programmerbare måleområder..... 3.5...23 mA
	Indgangsmodstand..... Nom. 20 Ω + PTC 50 Ω
Strømodgang	Programmerbare signalområder..... 3.5...23 mA
	Load..... ≤ 600 Ω
	Load stability..... ≤ 0.01% of span / 100 Ω
	Current limit..... ≤ 28 mA

Statusrelæ udgangsklemme 33-34	Max. voltage..... 110 VDC / 125 VAC
	Max. current..... 0.3 ADC / 0.5 AAC
	Max. voltage, Ex-installation..... 32 VDC / 32 VAC
	Max. current, hazardous installation..... 1 ADC / 0.5 AAC

Godkendelser	DNV-GL Marine..... TAA00000JD
	ClassNK..... TA18527M
	c UL us, UL 61010-1..... E314307
	EAC..... TR-CU 020/2011
	EAC LVD..... TR-CU 004/2011
	EAC Ex..... TR-CU 012/2011
	SIL..... IEC 61508

Observed authority requirements	EMC..... 2014/30/EU
	LVD..... 2014/35/EU
	ATEX..... 2014/34/EU
	RoHS..... 2011/65/EU

## FR AVERTISSEMENT

Ce module est conçu pour supporter une connexion à des tensions électriques dangereuses. Si vous ne tenez pas compte de cet avertissement, cela peut causer des dommages corporels ou des dégâts mécaniques.

Pour éviter les risques d'électrocution et d'incendie, conformez-vous aux consignes de sécurité et suivez les instructions mentionnées dans ce guide. Vous devez vous limiter aux spécifications indiquées et respecter les instructions d'utilisation de ce module, telles qu'elles sont décrites dans ce guide. Il est nécessaire de lire ce guide attentivement avant de mettre ce module en marche.

## FR TENSION DANGEREUSE

Jusqu'à ce que l'appareil soit fixé, ne connectez pas des tensions dangereuses. 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.  
Recherche de pannes sur le module.  
Seule PR electronics SARL est autorisée à réparer le module et à remplacer les fusibles.

## FR AVERTISSEMENT

Né pas ouvrir la plaque avant du module au risque de dommages à la façade de programmation PR 45xx. Les modules ne contiennent ni de commutateurs DIP ni de cavaliers.

## FR CONSIGNES DE SECURITE

**Réception et déballage**  
Déballé 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.

## FR Environnement

N'exposez pas votre module aux rayons directs du soleil et choisissez un endroit à l'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.

## FR Montage

Seuls les 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, close to the device. The power switch shall be marked as the disconnecting unit for the device.

## FR Spécifications

Specifications range..... -20°C to +60°C  
Supply voltage..... 19.2...31.2 VDC  
Max. required power, 1 / 2 ch..... ≤ 1.1 W / 1.9 W  
Max. power dissipation, 1 / 2 ch..... ≤ 0.8 W / 1.2 W  
Fuse..... 400 mA SB / 250 VAC  
Isolation voltage, test / operation..... 2.6 kVAC / 300 VAC  
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## FR 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.

## FR Normal operation

Operators are only allowed to adjust and operate devices that are safely fixed in panels, etc., thus avoiding the danger of personal injury and damage. This means there is no electrical shock hazard, and the device is easily accessible.

## FR Cleaning

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

Strømindgang	Programmerbare måleområder..... 3.5...23 mA
	Indgangsmodstand..... Nom. 20 Ω + PTC 50 Ω
Strømodgang	Programmerbare signalområder..... 3.5...23 mA
	Load..... ≤ 600 Ω
	Load stability..... ≤ 0.01% of span / 100 Ω
	Current limit..... ≤ 28 mA

Statusrelæ udgangsklemme 33-34	Max. voltage..... 110 VDC / 125 VAC
	Max. current..... 0.3 ADC / 0.5 AAC
	Max. voltage, Ex-installation..... 32 VDC / 32 VAC
	Max. current, hazardous installation..... 1 ADC / 0.5 AAC

Godkendelser	DNV-GL Marine..... TAA00000JD
	ClassNK..... TA18527M
	c UL us, UL 61010-1..... E314307
	EAC..... TR-CU 020/2011
	EAC LVD..... TR-CU 004/2011
	EAC Ex..... TR-CU 012/2011
	SIL..... IEC 61508

Observed authority requirements	EMC..... 2014/30/EU
	LVD..... 2014/35/EU
	ATEX..... 2014/34/EU
	RoHS..... 2011/65/EU

## DE WARNUNG

Dieses Gerät ist für den Anschluss an lebensgefährliche elektrische Spannungen gebaut. Missachtung dieser Warnung kann zu schweren Verletzungen oder mechanischer Zerstörung führen. Um eine Gefährdung durch Stromstöße oder Brand zu vermeiden müssen die Sicherheitsregeln der Installationsanleitung eingehalten, und die Anweisungen befolgt werden.

## DE GEFÄHRLICHE SPANNUNG

Bis das Gerät sicher montiert ist, dürfen keine gefährlichen Spannungen angeschlossen werden, und folgende Maßnahmen sollten nur in spannungslosem Zustand des Gerätes und unter ESD-sicheren Verhältnissen durchgeführt werden.

Installation, Montage und Demontage von Leitungen.  
Fehlersuche im Gerät.  
Reparaturen des Gerätes und Austausch von Sicherungen dürfen nur von PR electronics A/S vorgenommen werden.

## DE WARNUNG

Die Frontplatte des Gerätes darf nicht geöffnet werden, weil hierdurch die Kontakte zur Kontaktierung des Frontdisplays 45xx werden können. Die Geräte enthalten keine internen DIP-Schalter oder Programmierbrücken.

## DE SICHERHEITSREGELN

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

## DE Umgebungsbedingungen

Vermeiden Sie direkte Sonneneinstrahlung, starke Staubentwicklung oder Hitze, mechanische Erschütterungen und Stöße sind zu vermeiden; das Gerät darf nicht Regen oder starker Feuchtigkeit ausgesetzt werden.

## DE Installation

Nur qualifiziertes Personal darf das Gerät installieren. Die Frontplatte des Gerätes darf nicht geöffnet werden, weil hierdurch die Kontakte zur Kontaktierung des Frontdisplays 45xx werden können. Die Geräte enthalten keine internen DIP-Schalter oder Programmierbrücken.

## DE Spécifications

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## DE Cleaning

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	Indgangsmodstand..... Nom. 20 Ω + PTC 50 Ω
Strømodgang	Programmerbare signalområder..... 3.5...23 mA
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Godkendelser	DNV-GL Marine..... TAA00000JD
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	SIL..... IEC 61508

Observed authority requirements	EMC..... 2014/30/EU
	LVD..... 2014/35/EU
	ATEX..... 2014/34/EU
	RoHS..... 2011/65/EU

### EU DECLARATION OF CONFORMITY

(9106Dc\_102)

As manufacturer  
PR electronics A/S, Lerbakken 10, DK-8410 Rønde  
hereby declares that the following products:  
Type: 9106  
Name: HART transparent repeater  
From serial no.: 15133003  
is in conformity with the following directives and standards:  
EN 61326-1: 2013  
The EMC Directive 2014/30/EU and later amendments  
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 Low Voltage Directive 2014/35/EU and later amendments  
EN 61010-1: 2010  
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 certificates: ATEXE0101 X (9106A)  
ATEX certificate: DEKRA 11ATEX0244 X (9106B)  
ATEX notified body (type approval)  
DEKRA Certification B.V.  
Meander 1051, 6825 MJ Arnhem  
P.O. Box 5185, 6802 ED Arnhem  
The Netherlands  
The RoHS Directive 2011/65/EU and later amendments  
EN 50581: 2012  
Notified body 0344  
DEKRA Certification B.V.  
Meander 1051, 6825 MJ Arnhem  
P.O. Box 5185, 6802 ED Arnhem  
The Netherlands  
  
Rønde, 16 January 2018  
Slip Lindemann, CTO  
Manufacturer's signature

	DK Ex-godkendelser	UK I.S approvals	FR Approbations S.I.	DE Ex-Zulassungen
IECEx	[Ex ia Ga] IIC/IB/IIA Ex nA nC IIC T4 Gc [Ex ia Da] IIC / [Ex ia Ma] I	IECEx DEK 11.0084 X Installation Drawing: 9106Q01		
ATEX	II (1) G [Ex ia Ga] IIC/IB/IIA II 3G Ex nA nC IIC T4 Gc II (1) D [Ex ia Da] IIC [Pt1] [Ex ia Ma] I	DEKRA 11ATEX0244 X Installation Drawing: 9106QAO1	II 3 G Ex nA nC IIC T4 Gc	PR 14ATEX0101 X II 3 G Ex nA nC IIC T4 Gc
FH	Install in CL I Div. 2, Gr. A-D T4 Provides IS circuits to CL III, Div. 1/2, Gr. A-G or CL I, Zn2 AEx/Ex nA nC [Da] IIC T4	FM16US0465X / FM16CA0213X Installation Drawing: 9106QF01	Install in CL I, Div. 2, Gr. CL I, Zone 2, AEx nA nC IIC T4	FM16US0465X / FM16CA0213X Installation Drawing: 9106QF01
INMETRO	[Ex ia Ga] IIC/IB/IIA [Ex ia Da] IIC / [Ex ia Ma] I Ex nA nC IIC T4 Gc	DEKRA 16.0011X Installation Drawing: 9106QB01		
UL (9106Axxx-U9) (9106Bxxx-U9)	Install in CL I Div2 GP A-D T4 provides IS circuits to CL III Div 1 GP A-G or install in CL I Zn2 GP IIC T4 provides IS circuits to CL I Zn0 GP IIC/Zn20 GP IIC	E233311 Installation Drawing: 9106Q001	Install	



## ATEX Installation drawing 9106QA01 – V5R0

For safe installation of 9106B 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.

**4501**  
For installation in Zone 2 the following must be observed.  
The 4501 programming module is to be used solely with PR electronics modules. It is important that the module is undamaged and has not been altered or modified in any way. Only 4501 modules free of dust and moisture shall be installed.

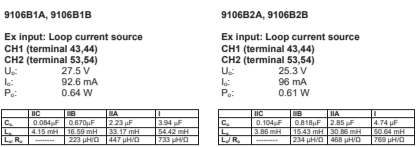
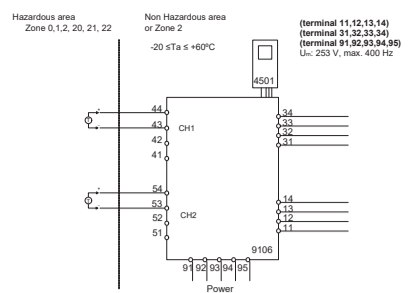
9106B1A: 1 channel HART®-transparent repeater (27.5 V Barre)  
9106B1B: 2 channel HART®-transparent repeater (27.5 V Barre)  
9106B2A: 1 channel HART®-transparent repeater (25.3 V Barre)  
9106B2B: 2 channel HART®-transparent repeater (25.3 V Barre)

**ATEX Certificate** DEKRA 14TE02044X  
**Marking** II (1) G, [Ex ia Ga] IIC/IB/IIA  
II 3 G, Ex ia AC, IIC T4 Gc  
II (1) G, [Ex ia Mb]  
I (M1) [Ex ia Mb]  
**Standards** IEC 60079-20:2014-11, EN 60079-11: 2012, EN 60079-15:2010  
**Supply terminal (31.32)**  
Voltage: 19.2 – 31.2VDC

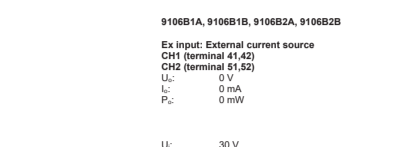
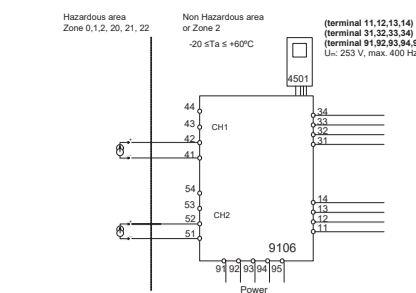
**Status Relay terminal (33.34)** Zone 2 installation  
Voltage max: 125 VAC / 110 VDC  
Voltage min: 82.5 VAC / 72 VDC  
Current max: 0.5 A AC / 0.3 A DC

**Installation notes:**  
Install in pollution degree 2, overvoltage category 1 as defined in EN 60664-1  
Do not separate connectors when energized and an explosive gas mixture is present.  
Do not mount or remove modules from the Power Rail when an explosive gas mixture is present.  
Disconnect power before servicing.  
The wiring of unused terminals is not allowed.  
The Loop Supply and Current Input terminals for the same channel shall not be applied at the same time.

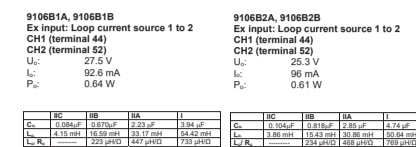
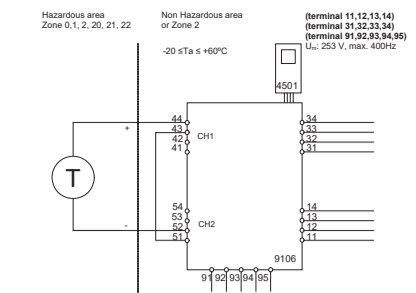
In type of protection (Ex ia Ga) the parameters for intrinsic safety for gas group IIB are applicable.  
For installation in Zone 2, the module shall be installed in an enclosure in type of protection Ex n or Ex e, providing a degree of protection of at least IP54. Cable entry devices and blanking elements shall fulfil the same requirements.  
For installation on Power Rail in Zone 2, only Power Rail type 9400 supplied by Power Control Unit type 9410 (Type Examination Certificate KEMA 07ATEX0152 X) is allowed.



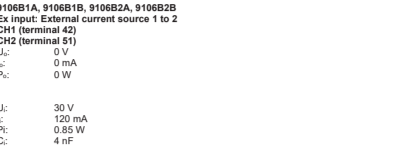
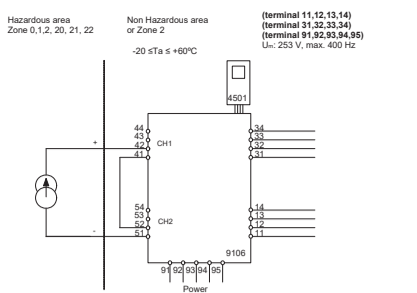
IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li



IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li



IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li



IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li

## IECEX Installation drawing 9106QI01 – V5R0

For safe installation of 9106B 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.

**4501**  
For installation in Zone 2 the following must be observed.  
The 4501 programming module is to be used solely with PR electronics modules. It is important that the module is undamaged and has not been altered or modified in any way. Only 4501 modules free of dust and moisture shall be installed.

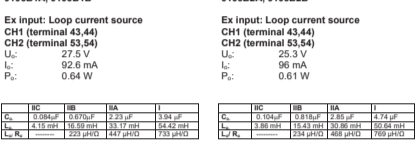
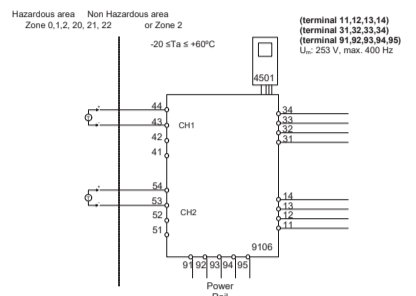
9106B1A: 1 channel HART®-transparent repeater (27.5 V Barre)  
9106B1B: 2 channel HART®-transparent repeater (27.5 V Barre)  
9106B2A: 1 channel HART®-transparent repeater (25.3 V Barre)  
9106B2B: 2 channel HART®-transparent repeater (25.3 V Barre)

**IECEX Certificate** IECEx DEK 11.0084X  
**Marking** Ex ia Ga IIC/IB/IIA  
Ex ia AC, IIC T4 Gc  
Ex ia Mb  
I (M1) [Ex ia Mb]  
**Standards** IEC60079-15:2010, IEC60079-11:2011, IEC60079-0:2011  
**Supply terminal (31.32)**  
Voltage: 19.2 – 31.2VDC

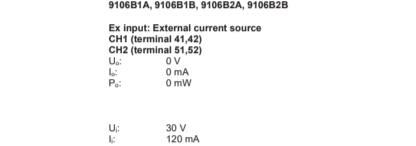
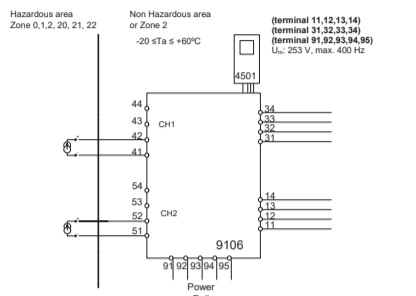
**Status Relay terminal (33.34)** Zone 2 installation  
Voltage max: 125 VAC / 110 VDC  
Voltage min: 82.5 VAC / 72 VDC  
Current max: 0.5 A AC / 0.3 A DC

**Installation notes:**  
Install in pollution degree 2, overvoltage category 1 as defined in IEC 60664-1  
Do not separate connectors when energized and an explosive gas mixture is present.  
Do not mount or remove modules from the Power Rail when an explosive gas mixture is present.  
Disconnect power before servicing.  
The wiring of unused terminals is not allowed.  
The Loop Supply and Current Input terminals for the same channel shall not be applied at the same time.

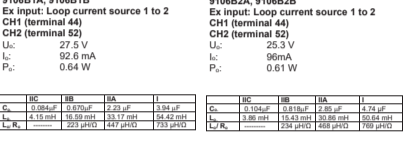
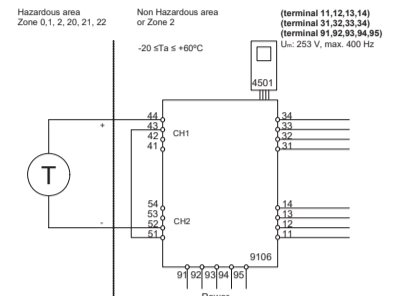
In type of protection (Ex ia Ga) the parameters for intrinsic safety for gas group IIB are applicable.  
For installation in Zone 2, the module shall be installed in an enclosure in type of protection Ex n or Ex e, providing a degree of protection of at least IP54. Cable entry devices and blanking elements shall fulfil the same requirements.  
For installation on Power Rail in Zone 2, only Power Rail type 9400 supplied by Power Control Unit type 9410 (Type Examination Certificate KEMA 07ATEX0152 X) is allowed.



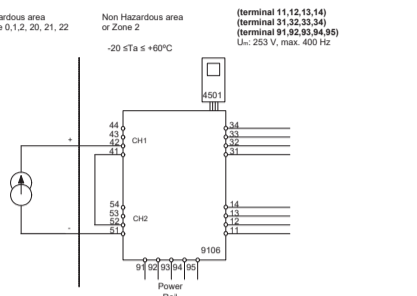
IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li



IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li



IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li



IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li

## FM Installation drawing 9106QF01 – V5R0

For safe installation of 9106B 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.

**4501**  
For installation in Zone 2 the following must be observed.  
The 4501 programming module is to be used solely with PR electronics modules. It is important that the module is undamaged and has not been altered or modified in any way. Only 4501 modules free of dust and moisture shall be installed.

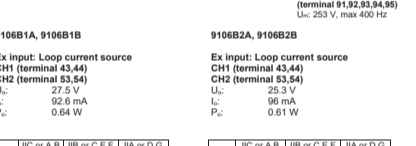
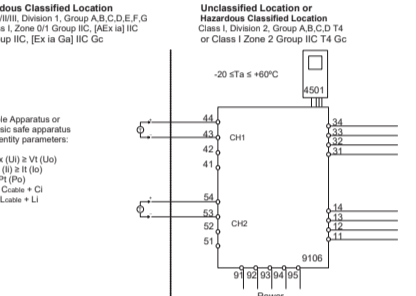
9106B1A: 1 channel HART®-transparent repeater (27.5 V Barre)  
9106B1B: 2 channel HART®-transparent repeater (27.5 V Barre)  
9106B2A: 1 channel HART®-transparent repeater (25.3 V Barre)  
9106B2B: 2 channel HART®-transparent repeater (25.3 V Barre)

**FM Certificate** IECEx DEK 11.0084X  
**Marking** Ex ia Ga IIC/IB/IIA  
Ex ia AC, IIC T4 Gc  
Ex ia Mb  
I (M1) [Ex ia Mb]  
**Standards** IEC60079-15:2010, IEC60079-11:2011, IEC60079-0:2011  
**Supply terminal (31.32)**  
Voltage: 19.2 – 31.2VDC

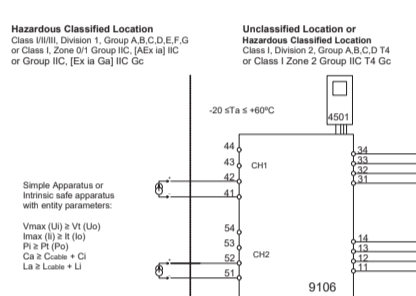
**Status Relay terminal (33.34)** Zone 2 installation  
Voltage max: 125 VAC / 110 VDC  
Voltage min: 82.5 VAC / 72 VDC  
Current max: 0.5 A AC / 0.3 A DC

**Installation notes:**  
Install in pollution degree 2, overvoltage category 1 as defined in IEC 60664-1  
Do not separate connectors when energized and an explosive gas mixture is present.  
Do not mount or remove modules from the Power Rail when an explosive gas mixture is present.  
Disconnect power before servicing.  
The wiring of unused terminals is not allowed.  
The Loop Supply and Current Input terminals for the same channel shall not be applied at the same time.

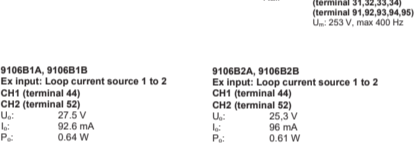
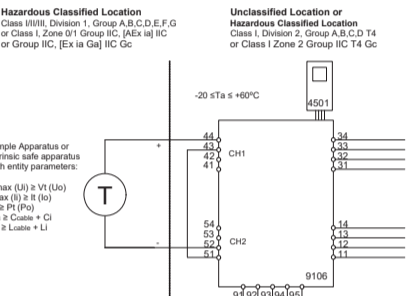
In Class I, Zone 2 installations, the subject equipment shall be mounted within a type of protection Ex n or Ex e, providing a degree of protection of at least IP54. Cable entry devices and blanking elements shall fulfil the same requirements.  
For installation on Power Rail in Zone 2, only Power Rail type 9400 supplied by Power Control Unit type 9410 (Type Examination Certificate KEMA 07ATEX0152 X) is allowed.



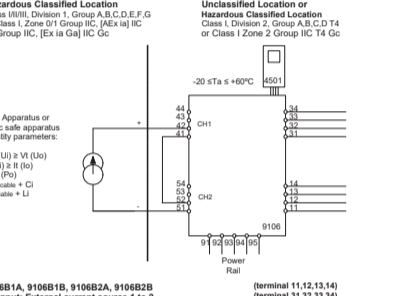
IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li



IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li



IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li



IC	IB	IIA	I
Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>	Ca > Ca <sub>0</sub>
Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci	Ca > Ca <sub>0</sub> + Ci
Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li	Ca > Ca <sub>0</sub> + Li

## INMETRO - Desenhos para Instalação 9106QB01 – V5R0

Para instalação segura do 9106B o manual seguinte deve ser observado. O módulo deve ser instalado somente por profissionais qualificados que estão familiarizados com as leis nacionais e internacionais, diretrizes e normas que se aplicam a esta área.

Ano de fabricação pode ser obtido a partir dos dois primeiros dígitos do número de série.

**4501**  
Para a instalação na Zona 2 o seguinte deve ser observado.  
O módulo de programação de 4501, deve ser utilizado apenas com os módulos PR eletrônica. É importante que o módulo esteja intacto e não tenha sido alterado ou modificado de qualquer maneira. Apenas os módulos 4501 livres de poeira e umidade devem ser instalados.

9106B1A: 1 canal HART®-repetidor transparente (Barreira 27.5 V)  
9106B1B: 2 canais HART®-repetidor transparente (Barreira 27.5 V)  
9106B2A: 1 canal HART®-repetidor transparente (Barreira 25.3 V)  
9106B2B: 2 canais HART®-repetidor transparente (Barreira 25.3 V)

**INMETRO Certificado** DEKRA 16.0001X  
**Marking** Ex ia Ga IIC/IB/IIA  
Ex ia AC, IIC T4 Gc  
Ex ia Mb  
I (M1) [Ex ia Mb]  
**Normas** ABNT NBR IEC60079-0:2013, ABNT NBR IEC60079-11:2013, ABNT NBR IEC60079-15:2012, ABNT NBR IEC60079-20:2008  
**Terminais de alimentação (31.32)**  
Voltagem: 19.2 – 31.2VDC  
**Relé de estado terminais (33.34)** Instalação