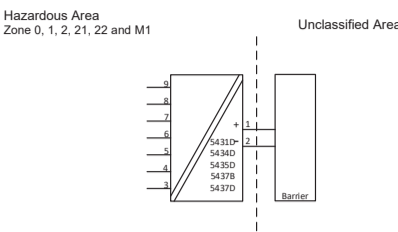


ATEX Installation drawing 5437QA01-V7R0

ATEX Certificate DEKRA 16ATEX 0047X
Standards: EN 60079-0:2012, EN 60079-1:2012, EN 60079-15:2010, EN 60079-7:2015 + A1:2018

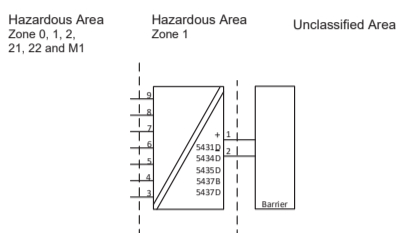
Ex ia Installation
For safe installation of the 5431D...5434D... 5435D... 5437B... and 5437D... the following must be observed.

Marking: II 1 G Ex ia IIC T6...T4 Ga or II 2 I G Ex ia [Ia Ga] IIC T6...T4 Gb
II 2 D Ex ia IIC Db
I M1 Ex ia I Ma



Terminal 3,4,5,6 and 3,7,8,9
Uo: 7.2 VDC
Io: 7.3 mA
Po: 13.2 mW
Lo: 667 mH
Co: 13.5 uF

Ex ib Installation



Terminal 3,4,5,6 and 3,7,8,9
Uo: 7.2 VDC
Io: 7.3 mA
Po: 13.2 mW
Lo: 667 mH
Co: 13.5 uF

Terminal 1,2
Ex ia and Ex ib Installation
Ui: 30 VDC; II: 120 mA; LI: 0 uH; CI: 1 nF

General installation instructions
Year of manufacture can be taken from the first two digits in the serial number.

For EPL Ga, if the enclosure is made of aluminum, it must be installed such, that ignition sources due to impact and friction sparks are excluded.

The distance between terminals, inclusive the wire's bare part, shall be at least 3 mm separated from any earthed metal.

For installation in a potentially explosive gas atmosphere, the following instructions apply:
The transmitter shall be mounted in an enclosure form B according to DIN43729 or equivalent that is providing a degree of protection of at least IP20 according to EN60529.

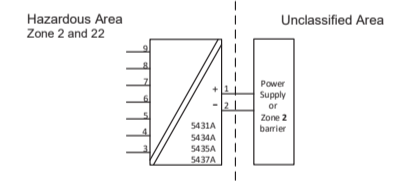
For installation in a potentially explosive dust atmosphere, the following instructions apply:
If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Dc, the transmitter shall be mounted in enclosure that provides a degree of protection of at least IP54 according to IEC60079-0, and that is suitable for the application and correctly installed.

For installation in mines the following instructions apply:
The transmitter shall be mounted in a metal enclosure that is providing a degree of protection of at least IP54 according to EN60529.

Ex nA / Ex ec / Ex ic Installation

ATEX Certificate DEKRA 18ATEX0135X
For safe installation of the 5431A... 5434A... 5435A... and 5437A... the following must be observed.

Marking: II 3 G Ex nA IIC T6...T4 Gc
II 3 G Ex ec IIC T6...T4 Gc
II 3 G Ex ic IIC T6...T4 Gc
II 3 D Ex ic IIIC Dc



Terminal 1,2
Ex nA & ec
Uo: 37 VDC
Io: 0 uH
Co: 1 nF

Terminal 3,4,5,6,7,8,9
Ex nA & Ex ec
Uo: 7.2 VDC
Io: 7.3 mA
Po: 13.2 mW
Lo: 667 mH
Co: 13.5 uF

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

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 distance between terminals, inclusive the wire's bare part, shall be at least 3 mm separated from any earthed metal.

For installation in a potentially explosive gas atmosphere, the following instructions apply:
The transmitter shall be installed in an enclosure providing a degree of protection of at least IP54 according to EN60079-0, and that is suitable for the application and correctly installed.

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 form B according to DIN 43729 or equivalent that provides a degree of protection of at least IP54 according to IEC 60079-0.

For installation in mines the following instructions apply:
The transmitter shall be mounted in a metal enclosure that is providing a degree of protection of at least IP54 according to EN60529.

For installation in a potentially 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 enclosure that provides a degree of protection of at least IP54 according to EN60079-0, and that is suitable for the application and correctly installed.

Hazardous Substances

Table with 4 columns: Part Name, Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium (Cr (VI)), Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE)

This table is prepared in accordance with the provisions of 5/17 11364
O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.
X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

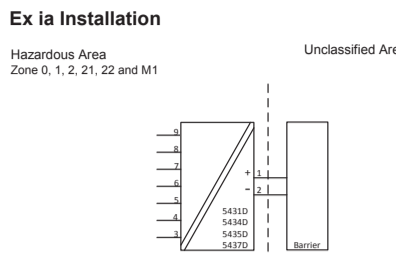
The product's Environmentally Friendly Use Period (EFUP) is 50 years

IECEX Installation drawing 5437QI01-V7R0

IECEX Certificate IECEX DEK 16.0029X
Standards: IEC60079-0:2017, IEC60079-11:2011, IEC60079-15:2010, IEC60079-7:2017

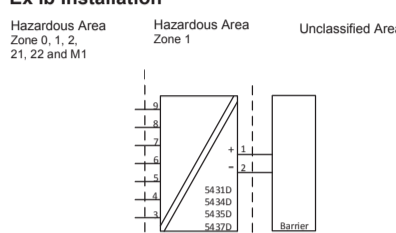
For safe installation of the 5431D...5434D... 5435D... and 5437D... the following must be observed.

Marking: Ex ia IIC T6...T4 Ga or Ex ib [Ia Ga] IIC T6...T4 Gb
Ex ia IIC Db
Ex ia I Ma



Terminal 3,4,5,6 and 3,7,8,9
Uo: 7.2 VDC
Io: 7.3 mA
Po: 13.2 mW
Lo: 667 mH
Co: 13.5 uF

Ex ib Installation



Terminal 3,4,5,6 and 3,7,8,9
Uo: 7.2 VDC
Io: 7.3 mA
Po: 13.2 mW
Lo: 667 mH
Co: 13.5 uF

Terminal 1,2
Ex ia and Ex ib Installation
Ui: 30 VDC; II: 120 mA; LI: 0 uH; CI: 1 nF

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

For EPL Ga, if the enclosure is made of aluminum, it must be installed such, that ignition sources due to impact and friction sparks are excluded.

The distance between terminals, inclusive the wire's bare part, shall be at least 3 mm separated from any earthed metal.

For installation in a potentially explosive gas atmosphere, the following instructions apply:
The transmitter shall be mounted in an enclosure form B according to DIN43729 or equivalent that is providing a degree of protection of at least IP20 according to EN60529.

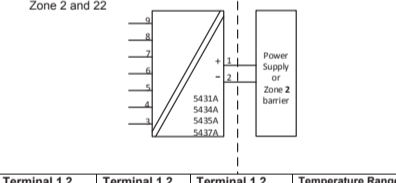
For installation in a potentially explosive dust atmosphere, the following instructions apply:
If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Dc or Dc and applied in type of protection Ex ia or Ex ec, the transmitter shall be mounted in enclosure that provides a degree of protection of at least IP54 according to IEC 60079-0, and that is suitable for the application and correctly installed.

For installation in mines the following instructions apply:
The transmitter shall be mounted in a metal enclosure that is providing a degree of protection of at least IP54 according to IEC60529.

Ex nA / Ex ec / Ex ic Installation

For safe installation of the 5431A... 5434A... 5435A... and 5437A... the following must be observed.

Marking: Ex nA IIC T6...T4 Gc
Ex ec IIC T6...T4 Gc
Ex ic IIC Dc



Terminal 1,2
Ex nA & ec
Uo: 37 VDC
Io: 0 uH
Co: 1 nF

Terminal 3,4,5,6,7,8,9
Ex nA & Ex ec
Uo: 7.2 VDC
Io: 7.3 mA
Po: 13.2 mW
Lo: 667 mH
Co: 13.5 uF

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

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 distance between terminals, inclusive the wire's bare part, shall be at least 3 mm separated from any earthed metal.

For installation in a potentially explosive gas atmosphere, the following instructions apply:
The transmitter shall be installed in an enclosure providing a degree of protection of at least IP54 according to EN60079-0, which is suitable for the application and correctly installed.

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 form B according to DIN 43729 or equivalent that provides a degree of protection of at least IP54 according to IEC 60079-0.

For installation in mines the following instructions apply:
The transmitter shall be mounted in a metal enclosure that is providing a degree of protection of at least IP54 according to EN60529.

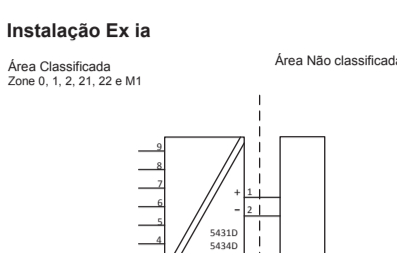
For installation in a potentially explosive atmosphere requiring the use of equipment protection level Gc and applied in type of protection Ex nA or Ex ec, the transmitter shall be mounted in enclosure that provides a degree of protection of at least IP54 according to EN60079-0, and that is suitable for the application and correctly installed.

Instalação INMETRO 5437QB01-V4R1

INMETRO Certificado DEKRA 23.0002X
Normas: ABNT NBR IEC 60079-0:2020 Versão Corrigida:2023
ABNT NBR IEC 60079-7:2018 Versão Corrigida:2022
ABNT NBR IEC 60079-11:2019 Versão Corrigida:2017

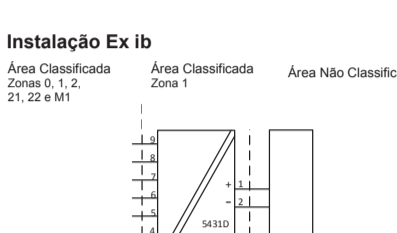
Para a instalação segura do 5431D...5434D... 5435D... e 5437D... os seguintes pontos devem ser observados:

NOTAS: Ex ia IIC T6...T4 Ga ou Ex ib [Ia Ga] IIC T6...T4 Gb
Ex ia IIC Db
Ex ia I Ma



Terminais 3,4,5,6 e 3,7,8,9
Uo: 7,2 VDC
Io: 7,3 mA
Po: 13,2 mW
Lo: 667 mH
Co: 13,5 uF

Instalação Ex ib



Terminais 3,4,5,6 e 3,7,8,9
Uo: 7,2 VDC
Io: 7,3 mA
Po: 13,2 mW
Lo: 667 mH
Co: 13,5 uF

Terminais 1,2
Instalações Ex ia e Ex ib
Ui: 30 VDC; II: 120 mA; LI: 0 uH; CI: 1,0 nF

Instruções Gerais de Instalação
Se o invólucro for feito de materiais não metálicos ou de metal com uma camada de tinta mais espessa que 0,2 mm (grupo IIC) ou 2 mm (grupo IIB, IIA, I) ou qualquer espessura (grupo III), cargas eletrostáticas devem ser evitadas.

Para EPL Ga, se o invólucro for de alumínio, ele deve ser instalado de forma que as fontes de ignição devido a faíscas de impacto e fricção sejam excluídas.

A distância entre terminais, nos inclusivos não isolados, deve ser separada por pelo menos 3 mm de qualquer metal aterrado.

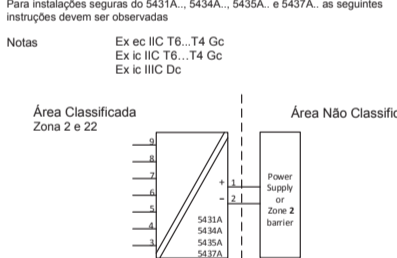
Para instalações em uma atmosfera explosiva, a seguinte instrução se aplica:
O transmissor deverá ser montado em um gabinete de formato tipo B de acordo com a norma DIN43729 ou equivalente que possibilite um grau mínimo de proteção IP20 de acordo com a ABNT NBR IEC60529.

Para instalação em uma atmosfera de poeira potencialmente explosiva, as seguintes instruções se aplicam:
Se o transmissor for instalado em uma atmosfera explosiva que exija o uso de nível de proteção de equipamento Dc ou Dc e aplicado no tipo de proteção Ex ia ou Ex ec, o transmissor deverá ser montado em gabinete que forneça um grau de proteção de pelo menos IP54 de acordo com IEC 60079-0, e que seja adequado à aplicação e instalado corretamente.

Para instalações em Minas, as instruções abaixo se aplicam:
O transmissor deverá ser montado em um gabinete de metal que possibilite um grau mínimo de proteção IP54 de acordo com a ABNT NBR IEC60529.

Instalações Ex ec / Ex ic

Para instalações seguras do 5431A... 5434A... 5435A... e 5437A... as seguintes instruções devem ser observadas



Terminais 1,2
Ex ec
Uo: 37 VDC
Io: 0 uH
Co: 1 nF

Terminais 3,4,5,6,7,8,9
Ex ec
Uo: 7,2 VDC
Io: 7,3 mA
Po: 13,2 mW
Lo: 667 mH
Co: 13,5 uF

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

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 distance between terminals, inclusive the wire's bare part, shall be at least 3 mm separated from any earthed metal.

For installation in a potentially explosive gas atmosphere, the following instructions apply:
The transmitter shall be installed in an enclosure providing a degree of protection of at least IP54 according to EN60079-0, which is suitable for the application and correctly installed.

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 form B according to DIN 43729 or equivalent that provides a degree of protection of at least IP54 according to IEC 60079-0.

For installation in mines the following instructions apply:
The transmitter shall be mounted in a metal enclosure that is providing a degree of protection of at least IP54 according to EN60529.

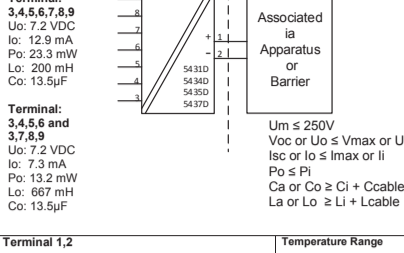
For installation in a potentially explosive atmosphere requiring the use of equipment protection level Gc and applied in type of protection Ex ec or Ex ic, the transmitter shall be mounted in enclosure that provides a degree of protection of at least IP54 according to EN60079-0, and that is suitable for the application and correctly installed.

FM Installation drawing 5437QF01-V5R0

FM Certificates FM16CA0146X and FM16US0287X
Division1 / Zone 0, Intrinsic Safe Installation

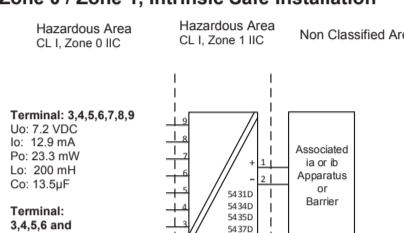
For safe installation of the 5431D...5434D... 5435D... and 5437D... the following must be observed.

Marking: CL I, Div 1, Gp A,B,C,D
CL I, Zone 0 AEx ia IIC T6...T4
CL I, Zone 1 [0] AEx ib [Ia] IIC T6...T4
Ex ia IIC T6...T4 Ga
Ex ib [Ia] IIC T6...T4 Gb



Terminal: 3,4,5,6,7,8,9
Uo: 7.2 VDC
Io: 12.9 mA
Po: 23.3 mW
Lo: 200 mH
Co: 13.5 uF

Zone 0 / Zone 1, Intrinsic Safe Installation



Terminal: 3,4,5,6 and 3,7,8,9
Uo: 7.2 VDC
Io: 12.9 mA
Po: 23.3 mW
Lo: 200 mH
Co: 13.5 uF

Terminal 1,2
Ex ib [Ia Ga] IIC T6...T4 Gb;
Ui: 30 VDC; II: 120 mA; PI: 900 mW
LI: 0 uH; CI: 1.0 nF

IS Installation instructions
• Install in accordance with the US the National Electrical Code (NEC) or for Canada the Canadian Electrical Code (CEC).

• Equipment that is FM-approved for intrinsic safety may be connected to barriers based on the ENTITY CONCEPT. This concept permits interconnection of approved transformers, meters and other devices in combination which have not been specifically examined by FM, provided that the agency's criteria are met.

The distance between terminals, inclusive the wire's bare part, shall be at least 3 mm separated from any earthed metal.

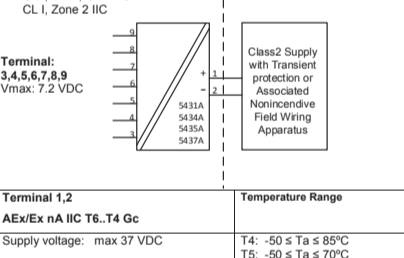
For installation in a potentially explosive gas atmosphere, the following instructions apply:
The transmitter shall be mounted in an enclosure form B according to DIN43729 or equivalent that is providing a degree of protection of at least IP20 according to EN60529.

For installation in a potentially explosive dust atmosphere, the following instructions apply:
If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Dc or Dc and applied in type of protection Ex ia or Ex ec, the transmitter shall be mounted in enclosure that provides a degree of protection of at least IP54 according to IEC 60079-0, and that is suitable for the application and correctly installed.

For installation in mines the following instructions apply:
The transmitter shall be mounted in a metal enclosure that is providing a degree of protection of at least IP54 according to EN60529.

Division 2 / Zone 2, Non Sparking Installation

For safe installation of the 5431A... 5434A... 5435A... and 5437A... the following must be observed.



Terminal 1,2
AEx/Ex nA IIC T6...T4 Gc
Supply voltage: max 37 VDC

Terminal 3,4,5,6,7,8,9
Ex ec
Uo: 7.2 VDC
Io: 7.3 mA
Po: 13.2 mW
Lo: 667 mH
Co: 13.5 uF

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

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 distance between terminals, inclusive the wire's bare part, shall be at least 3 mm separated from any earthed metal.

For installation in a potentially explosive gas atmosphere, the following instructions apply:
The transmitter shall be installed in an enclosure providing a degree of protection of at least IP54 according to IEC60079-0, which is suitable for the application and correctly installed.

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 form B according to DIN 43729 or equivalent that provides a degree of protection of at least IP54 according to IEC 60079-0.

For installation in mines the following instructions apply:
The transmitter shall be mounted in a metal enclosure that is providing a degree of protection of at least IP54 according to EN60529.

For installation in a potentially explosive atmosphere requiring the use of equipment protection level Gc and applied in type of protection Ex ec or Ex ic, the transmitter shall be mounted in enclosure that provides a degree of protection of at least IP54 according to EN60079-0, and that is suitable for the application and correctly installed.

EU DECLARATION OF CONFORMITY

As manufacturer: PE electronics A/S, Leberkøben 10, DK-6410 Rande
hereby declares that the following product:
Type: 5437
Name: 2-wire HART 7 temperature transmitter
From serial no.: 211346810
is in conformity with the following directives and standards:

The EMC Directive 2014/53/EU and later amendments
EN 61326-1: 2013
The Electromagnetic Compatibility Regulations 2016 (UK SI 2010/1091) and later amendments
EN 61326-1: 2013
The Machinery Test requirements for equipment intended to be used in an industrial electromagnetic environment.
For specification of the acceptable EMC performance level, refer to the electrical specifications for the device.

The ATEX Directive 2014/34/EU and later amendments
EN IEC 60079-0: 2018, EN 60079-7: 2015 + A1: 2018,
EN 60079-11: 2012 and EN 60079-15: 2010
ATEX certificate: DEKRA 16ATEX0047 X (5437B and 5437D)
ATEX certificate: DEKRA 16ATEX0135 X (5437A)

ATEX notified body (type approval)
DEKRA Certification B.V.
Nieder 1351, 6825 WJ Arnhem
P.O. Box 5185, 6802 ED Arnhem
The Netherlands

The RoHS Directive 2011/65/EU and later amendments
EN IEC 63000: 2018

Notified body 0344
DEKRA Certification B.V.
Nieder 1351, 6825 WJ Arnhem
P.O. Box 5185, 6802 ED Arnhem
The Netherlands

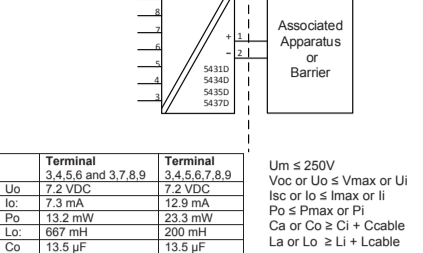
This declaration of conformity is issued under the sole responsibility of the manufacturer.
Rande, 23 September 2022
Sig Undemann, CTO
Manufacturer's signature

CSA Installation drawing 5437QC01-V5R0

CSA Certificate 16.70086286
Division1 / Ex ia, Intrinsic Safe Installation

For safe installation of the 5431D...5434D... 5435D... and 5437D... the following must be observed.

Marking: Class I Division 1, Group A,B,C,D
Ex ia IIC T6...T4
Class I, Zone 0: AEx ia IIC T6...T4
Ex ia IIC T6...T4 Ga
Class I Zone 1 AEx ib [Ia] IIC T6...T4



Terminal 1,2 Ex ia, Div1
Pi: 900 mW
Ui: 30 VDC; II: 120 mA LI: 0 uH; CI: 1.0 nF

IS Installation instructions

• Install in accordance with the US the National Electrical Code (NEC) or for Canada the Canadian Electrical Code (CEC).

• The transmitter must be installed in a suitable enclosure to meet installation codes stipulated in the Canadian Electrical Code (CEC) or for US the National Electrical Code (NEC).

• To establish Class II and Class III, Division 1 or IIC ratings, the equipment shall be installed in an enclosure that is approved for use in Class II and Class III hazardous (classified) locations.

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

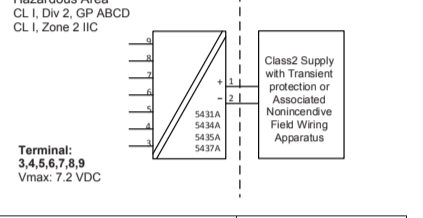
• Use supply wires with a rating of at least 5 K above the ambient temperature.

WARNING: Substitution of components may impair intrinsic safety.
AVERTISSEMENT: la substitution de composants peut nuire à la sécurité intrinsèque

Division 2 / Ex nA, Non Incendive Installation

For safe installation of the 5431A... 5434A... 5435A... and 5437A... the following must be observed.

Marking: Class I, Division 2, Groups A, B, C, D
Ex nA IIC T6...T4
Class I, Zone 2: AEx nA IIC T6...T4
Ex nA [Ic] IIC T6...T4
Class I, Zone 2: AEx nA [Ic] IIC T6...T4



Terminal 1,2
Ex nA
Supply voltage: max 37 VDC

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

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

• Use supply wires with a rating of at least 5 K above the ambient temperature.

WARNING: Substitution of components may impair intrinsic safety for Class I, Division 2.
AVERTISSEMENT: la substitution de composants peut nuire à la sécurité intrinsèque à la Classe I.

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

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

Terminal 1,2
Non Incendive Field wiring parameters
Vmax= 30 VDC, Ci=1nF, Li=0

Functional Ratings:
Unom <= 30 VDC; Inom <= 3.5 - 23 mA

NEPSI Installation drawing 5437QN01-V2R0

NEPSI 证书 GYJ23.1227X
防爆标志为 Ex ia IIC T4...T6 Ga
Ex ib [Ia Ga] IIC T4...T6 Gb
Ex ic IIC T4...T6 Gc
Ex ec [Ic Gc] IIC T4...T6 Gc
Ex ia IIIC T80°C/1130°C Db
Ex ib [Ia Iab] IIIC T80°C/1130°C Db