

PERFORMANCE  
MADE  
SMARTER

Product manual

**5334**

***2-wire programmable transmitter***



TEMPERATURE | I.S. INTERFACES | COMMUNICATION INTERFACES | MULTIFUNCTIONAL | ISOLATION | DISPLAY

No. 5334V111-UK  
Ser. no. 141365001-212022168

**PR**  
electronics

# 6 Product Pillars

## *to meet your every need*

### Individually outstanding, unrivalled in combination

With our innovative, patented technologies, we make signal conditioning smarter and simpler. Our portfolio is composed of six product areas, where we offer a wide range of analog and digital devices covering over a thousand applications in industrial and factory automation. All our products comply with or surpass the highest industry standards, ensuring reliability in even the harshest of environments and have a 5-year warranty for greater peace of mind.



Our range of temperature transmitters and sensors provides the highest level of signal integrity from the measurement point to your control system. You can convert industrial process temperature signals to analog, bus or digital communications using a highly reliable point-to-point solution with a fast response time, automatic self-calibration, sensor error detection, low drift, and top EMC performance in any environment.



We deliver the safest signals by validating our products against the toughest safety standards. Through our commitment to innovation, we have made pioneering achievements in developing I.S. interfaces with SIL 2 Full Assessment that are both efficient and cost-effective. Our comprehensive range of analog and digital intrinsically safe isolation barriers offers multifunctional inputs and outputs, making PR an easy-to-implement site standard. Our backplanes further simplify large installations and provide seamless integration to standard DCS systems.



We provide inexpensive, easy-to-use, future-ready communication interfaces that can access your PR installed base of products. All the interfaces are detachable, have a built-in display for readout of process values and diagnostics, and can be configured via push-buttons. Product specific functionality includes communication via Modbus and Bluetooth and remote access using our PR Process Supervisor (PPS) application, available for iOS and Android.



Our unique range of single devices covering multiple applications is easily deployable as your site standard. Having one variant that applies to a broad range of applications can reduce your installation time and training, and greatly simplify spare parts management at your facilities. Our devices are designed for long-term signal accuracy, low power consumption, immunity to electrical noise and simple programming.



Our compact, fast, high-quality 6 mm isolators are based on microprocessor technology to provide exceptional performance and EMC-immunity for dedicated applications at a very low total cost of ownership. They can be stacked both vertically and horizontally with no air gap separation between units required.



Our display range is characterized by its flexibility and stability. The devices meet nearly every demand for display readout of process signals, and have universal input and power supply capabilities. They provide a real-time measurement of your process value no matter the industry, and are engineered to provide a user-friendly and reliable relay of information, even in demanding environments.

# 2-wire programmable transmitter 5334

## Table of contents

Application .....	4
Technical characteristics .....	4
Mounting / installation .....	4
Applications .....	4
Order .....	5
Electrical specifications .....	5
Connections .....	8
Block diagram .....	8
Programming .....	9
Mechanical specifications .....	9
Mounting of sensor wires .....	9
ATEX Installation Drawing - 5334A .....	10
ATEX Installation Drawing - 5334B .....	11
IECEX Installation Drawing - 5334A .....	13
IECEX Installation Drawing - 5334B .....	14
INMETRO Installation Drawing - 5334A .....	16
INMETRO Installation Drawing - 5334B .....	17
Document history .....	19

# 2-wire programmable transmitter 5334

- TC input
- High measurement accuracy
- Galvanic isolation
- Programmable sensor error value
- For DIN form B sensor head mountings

## Application

- Linearised temperature measurement with TC sensor.
- Amplification of bipolar mV signals to a 4...20 mA signal, optionally linearised according to a defined linearisation function..

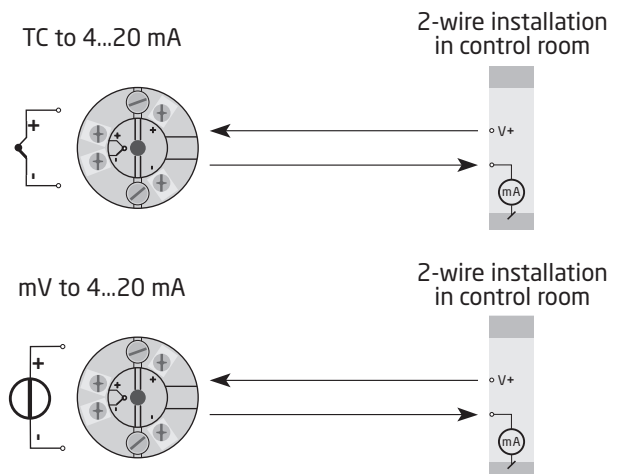
## Technical characteristics

- Within a few seconds the user can program PR5334 to measure temperatures within all TC ranges defined by the norms.
- Cold junction compensation (CJC) with a built-in temperature sensor.
- Continuous check of vital stored data for safety reasons.

## Mounting / installation

- For DIN form B sensor head mounting. In non-hazardous areas the 5334 can be mounted on a DIN rail with the PR fitting type 8421.

## Applications



## Order

Type	Version	Ambient temperature	Galvanic isolation
5334	Zone 2 / Div. 2 : A	-40°C...+85°C : 3	1500 VAC : B
	Zone 0, 1, 2, 20, 21, 22, M1 : B		

## Electrical specifications

### Environmental conditions:

Operating temperature . . . . .	-40°C to +85°C
Calibration temperature. . . . .	20...28°C
Humidity. . . . .	< 95% RH (non-cond.)
Protection degree, enclosure / terminals. . . . .	IP68 / IP00

### Mechanical specifications:

Dimensions . . . . .	Ø 44 x 20.2 mm
Weight . . . . .	50 g
Max. wire size. . . . .	1 x1.5 mm <sup>2</sup> stranded wire
Screw terminal torque. . . . .	0.4 Nm
Vibration. . . . .	IEC 60068-2-6
2...25 Hz. . . . .	±1.6 mm
25...100 Hz. . . . .	±4 g

### Common specifications:

Supply voltage, DC	
5334A3B . . . . .	7.2...35 VDC
5334B3B . . . . .	7.2...30 VDC
Internal power dissipation	
5331A3B . . . . .	25 mW...0.8 W
5331D3B . . . . .	25 mW...0.7 W
Voltage drop . . . . .	7.2 VDC
Isolation voltage, test / operation. . . . .	1.5 kVAC / 50 VAC
Warm-up time. . . . .	5 min.
Programming . . . . .	Loop Link
Signal / noise ratio. . . . .	Min. 60 dB
Response time (programmable) . . . . .	1...60 s
EEPROM error check . . . . .	< 3.5 s
Signal dynamics, input . . . . .	18 bit
Signal dynamics, output . . . . .	16 bit
Effect of supply voltage variation. . . . .	< 0.005% of span / VDC

Accuracy, the greater of general and basic values:

General values		
Input type	Absolute accuracy	Temperature coefficient
All	≤ ±0.05% of span	≤ ±0.01% of span / °C

Basic values		
Input type	Basic accuracy	Temperature coefficient
Volt	$\leq \pm 10 \mu V$	$\leq \pm 1 \mu V / ^\circ C$
TC type: E, J, K, L, N, T, U	$\leq \pm 1^\circ C$	$\leq \pm 0.05^\circ C / ^\circ C$
TC type: B, R, S, W3, W5, Lr	$\leq \pm 2^\circ C$	$\leq \pm 0.2^\circ C / ^\circ C$
EMC - immunity influence. . . . . $< \pm 0.5\%$ of span		
Extended EMC immunity: NAMUR NE 21, A criterion, burst . . . . . $< \pm 1\%$ of span		

**Electrical specifications, input:**

**TC input:**

Type	Min. temperature	Max. temperature	Min. span	Standard
B	+400°C	+1820°C	100°C	IEC584
E	-100°C	+1000°C	50°C	IEC584
J	-100°C	+1200°C	50°C	IEC584
K	-180°C	+1372°C	50°C	IEC584
L	-100°C	+900°C	50°C	DIN 43710
Lr	-200°C	+800°C	50°C	GOST 3044-84
N	-180°C	+1300°C	50°C	IEC584
R	-50°C	+1760°C	100°C	IEC584
S	-50°C	+1760°C	100°C	IEC584
T	-200°C	+400°C	50°C	IEC584
U	-200°C	+600°C	50°C	DIN 43710
W3	0°C	+2300°C	100°C	ASTM E988-90
W5	0°C	+2300°C	100°C	ASTM E988-90

Max. offset . . . . . 50% of selec. max. value

Cold junction compensation . . . . .  $< \pm 1.0^\circ C$

Sensor error detection . . . . . Yes

Sensor error current:

When detecting . . . . . Nom. 33  $\mu A$

Else. . . . . 0  $\mu A$

**Voltage input:**

Measurement range . . . . . -12...150 mV

Min. span . . . . . 5 mV

Max. offset . . . . . 50% of selec. max. value

Input resistance . . . . . 10 M $\Omega$

**Output:**

**Current output:**

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

Min. signal range . . . . . 16 mA

Updating time . . . . . 440 ms

Output signal at EEprom error . . . . .  $\leq 3.5$  mA

Load resistance. . . . .  $\leq (V_{supply} - 7.2) / 0.023 [\Omega]$

Load stability . . . . .  $< \pm 0.01\%$  of span / 100  $\Omega$

**Sensor error detection:**

Programmable . . . . . 3.5...23 mA

Namur NE43 Upscale . . . . . 23 mA

Namur NE43 Downscale . . . . . 3.5 mA

Of span = Of the presently selected range

**Observed authority requirements:**

EMC . . . . .	2014/30/EU
RoHS . . . . .	2011/65/EU
ATEX . . . . .	2014/34/EU
EAC . . . . .	TR-CU 020/2011
EAC Ex . . . . .	TR-CU 012/2011

**Marine approval:**

DNV-GL, Ships & Offshore . . . . .	TAA0000101
------------------------------------	------------

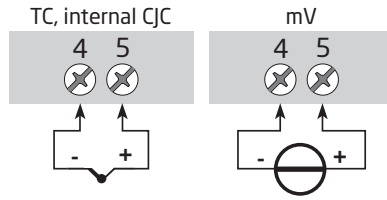
**Ex / I.S. approvals:**

ATEX:

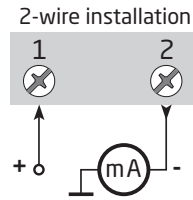
5334A . . . . .	KEMA 10ATEX0002 X
5334B . . . . .	KEMA 06ATEX0062 X
IECEX . . . . .	DEK 13.0035 X
INMETRO . . . . .	DEKRA 16.0013 X
EAC Ex . . . . .	RU C-DK.HA65.B.00355/19

# Connections

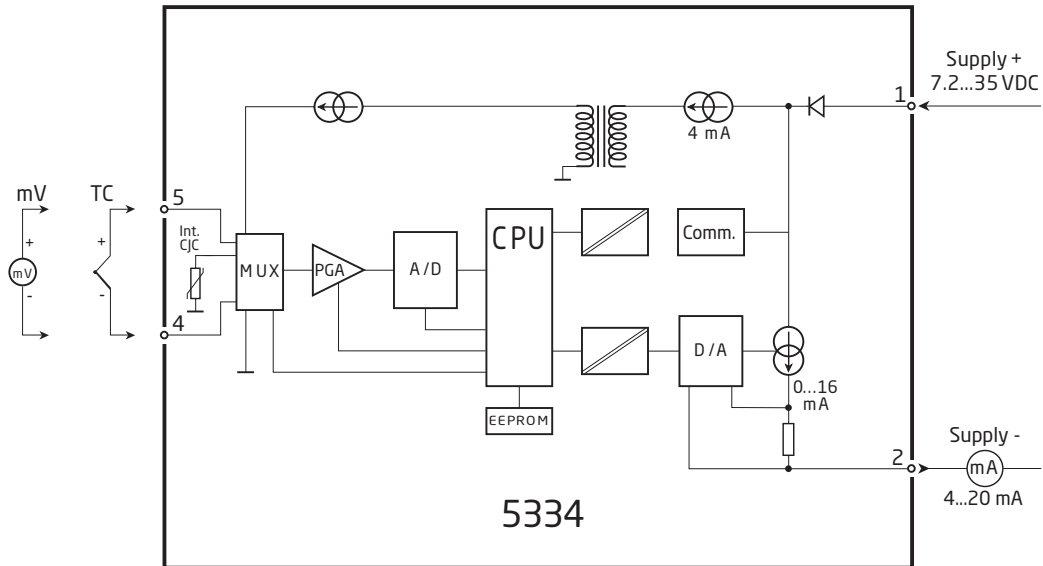
Input:



Output:



# Block diagram







## ATEX Installation drawing

For safe installation of 5331A3B or 5334A3B 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 10ATEX 0002 X

Marking



II 3 G Ex nA [ic] IIC T4 ... T6 Gc  
II 3 G Ex ic IIC T4...T6 Gc  
II 3 D Ex ic IIIC Dc

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

T4: $-40 \leq T_a \leq 85^\circ\text{C}$	<b>Terminal: 3,4,5,6</b>	<b>Terminal: 1,2</b>	<b>Terminal: 1,2</b>
T6: $-40 \leq T_a \leq 60^\circ\text{C}$	Ex nA [ic]	Ex nA	Ex ic
	Uo: 9.6 V	Umax $\leq$ 35 VDC	Ui = 35 VDC
	Io: 25 mA		Ii = 110 mA
	Po: 60 mW		Li = 10 $\mu\text{H}$
	Lo: 33 mH		Ci = 1.0 nF
	Co: 2.4 $\mu\text{F}$		

### Special conditions for safe use.

For type of protection Ex nA, the transmitter shall be mounted in a metal enclosure providing a degree of protection of at least IP54 according to EN60529.

For use in the presence of combustible dusts the transmitter shall be mounted in an enclosure providing a degree of protection of at least IP6X in accordance with EN60529, the surface temperature of the outer enclosure is 20 K above the ambient temperature.

For an ambient temperature  $\geq 60^\circ\text{C}$ , heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

## ATEX Installation drawing



For safe installation of 5331D or 5334B 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 06ATEX 0062 X

Marking



II 1 G Ex ia IIC T4...T6 Ga  
II 1 D Ex ia IIIC Da  
I M1 Ex ia I Ma

Standards

EN 60079-0 : 2012, EN 60079-11 : 2012, EN 60079-26 : 2007,  
EN 60079-15 :2010

Hazardous area

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

T4:  $-40 \leq T_a \leq 85^\circ\text{C}$

T6:  $-40 \leq T_a \leq 60^\circ\text{C}$

**Terminal: 3,4,5,6**

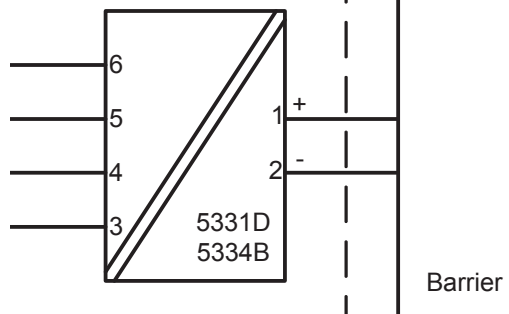
Uo: 9.6 VDC

Io: 25 mA

Po: 60 mW

Lo: 33 mH

Co: 2.4µF



**Terminal: 1,2**

Ui: 30 VDC

Ii: 120 mA

Pi: 0.84 W

Li: 10 µH

Ci: 1.0 nF

**Installation notes.**

The sensor circuit is not infallibly galvanic isolated from the input circuit. However, the galvanic isolation between the circuits is capable of withstanding a test voltage of 500Vac during 1 minute.

In a potentially explosive gas atmosphere, the transmitter shall be mounted in an enclosure in order to provide a degree of protection of at least IP20 according to EN60529.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment of category 1 G, 1 M or 2 M, 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 enclosure is made of non-metallic materials, electrostatic charging shall be avoided.

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

The transmitter shall be mounted in a metal enclosure form B according to DIN43729 that is providing a degree of protection of at least IP6X according to EN60529, that is suitable for the application and correctly installed.

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

For an ambient temperature  $\geq 60^{\circ}\text{C}$ , heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

The surface temperature of the enclosure is equal to the ambient temperature plus 20 K, for a dust layer with a thickness up to 5 mm

## IECEX Installation drawing



For safe installation of 5331A or 5334A 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 13.0035X
Marking	Ex nA [ic] IIC T4..T6 Gc Ex ic IIC T4..T6 Gc Ex ic IIIC Dc
Standards	IEC 60079-0 : 2011, IEC 60079-11 : 2011, IEC 60079-15 : 2010

T4:  $-40 \leq T_a \leq 85^\circ\text{C}$   
T6:  $-40 \leq T_a \leq 60^\circ\text{C}$

**Terminal: 3,4,5,6**

Uo: 9.6 V  
Io: 25 mA  
Po: 60 mW  
Lo: 33 mH  
Co: 2.4  $\mu\text{F}$

**Terminal: 1,2**

Ex nA  
  
Umax =35 VDC

**Terminal: 1,2**

Ex ic  
  
Ui = 35 VDC  
Ii = 110mA  
Li = 10  $\mu\text{H}$   
Ci = 1.0 nF

### Installation note:

For installation in a potentially explosive gas atmosphere, the following instructions apply:  
For nA installation the transmitter must be installed in an metal enclosure, e.g. a form B enclosure providing a degree of protection of at least IP54 according to IEC60529 or in an enclosure with type of protection Ex n or Ex e.

For ic installation the transmitter must be installed in enclosure providing a degree of protection of at least IP20 according to IEC60529 and that is suitable for the application.

Cable entry devices and blanking elements shall fulfill the same requirements  
For an ambient temperature  $\geq 60^\circ\text{C}$ , heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

For installation in a potentially explosive dust atmosphere, the following instructions apply:  
The surface temperature of the enclosure is equal to the ambient temperature plus 20 K, for a dust layer with a thickness up to 5 mm.  
The transmitter must be mounted in a enclosure according to DIN 43729 that provides a degree of protection of at least IP6X according to IEC60529, and that is suitable for the application. Cable entry devices and blanking elements shall fulfill the same requirements.

## IECEX Installation drawing



For safe installation of 5331D or 5334B 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.

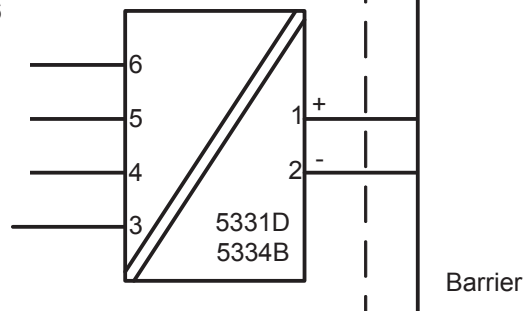
Certificate	IECEX DEK 13.0035X
Marking	Ex ia IIC T4...T6 Ga Ex ia IIIC Da Ex ia I Ma
Standards	IEC 60079-0 : 2011, IEC 60079-11 : 2011, IEC 60079-26:2006

Hazardous area  
Zone 0, 1, 2, 20, 21, 22, M1

T4:  $-40 \leq T_a \leq 85^\circ\text{C}$   
T5:  $-40 \leq T_a \leq 60^\circ\text{C}$   
T6:  $-40 \leq T_a \leq 45^\circ\text{C}$

**Terminal: 3,4,5,6**

U<sub>o</sub>: 9.6 VDC  
I<sub>o</sub>: 25 mA  
P<sub>o</sub>: 60 mW  
L<sub>o</sub>: 33 mH  
C<sub>o</sub>: 2.4  $\mu\text{F}$



**Terminal: 1,2**

U<sub>i</sub>: 30 VDC  
I<sub>i</sub>: 120 mA  
P<sub>i</sub>: 0.84 W  
L<sub>i</sub>: 10  $\mu\text{H}$   
C<sub>i</sub>: 1.0 nF

**Installation notes.**

The sensor circuit is not infallibly galvanic isolated from the input circuit. However, the galvanic isolation between the circuits is capable of withstanding a test voltage of 500Vac during 1 minute.

In a potentially explosive gas atmosphere, the transmitter shall be mounted in a metal form B enclosure in order to provide a degree of protection of at least IP20 according to IEC60529. If however the environment requires a higher degree of protection, this shall be taken into account.

If the transmitter is installed in an explosive atmosphere requiring the use of equipment protection level Ga, Ma and Mb, and if the enclosure is made of aluminum, it must be installed such, that ignition sources due to impact and friction sparks are excluded.

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

For explosive dust atmospheres, the surface temperature of the outer enclosure is 20 K above the ambient temperature.

The transmitter shall be mounted in a metal enclosure form B according to DIN43729 that is providing a degree of protection of at least IP6X according to IEC60529, that is suitable for the application and correctly installed.

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

For an ambient temperature  $\geq 60^{\circ}\text{C}$ , heat resistant cables shall be used with a rating of at least 20 K above the ambient temperature.

## Desenho de Instalação INMETRO



Para instalação segura do 5331A ou 5334A o seguinte deve ser observado. O modelo deve apenas ser instalado por pessoas qualificadas que são familiarizadas com as leis nacionais e internacionais, diretrizes e padrões que se aplicam a esta área.  
O ano de fabricação pode ser pego dos dois primeiros dígitos do número de série.

Certificado            DEKRA 16.0013 X

Marcas                Ex nA [ic] IIC T4..T6 Gc  
                            Ex ic IIC T4..T6 Gc  
                            Ex ic IIIC Dc

Normas    ABNT NBR IEC 60079-0 : 2013; ABNT NBR IEC 60079-11 : 2013  
              ABNT NBR IEC60079-15 : 2012

T4: $-40 \leq T_a \leq 85^{\circ}\text{C}$	<b>Terminais:</b>	<b>Terminais: 1,2</b>	<b>Terminais: 1,2</b>
T6: $-40 \leq T_a \leq 60^{\circ}\text{C}$	<b>3,4,5,6</b>	Ex nA	Ex ic
	Uo: 9,6 V	U $\leq$ 35 VDC	Ui = 35 VDC
	Io: 25 mA		Ii = 110 mA
	Po: 60 mW		Li = 10 $\mu$ H
	Lo: 33 mH		Ci = 1,0 nF
	Co: 2,4 $\mu$ F		

### Notas para instalação

Para a instalação em uma atmosfera de gás potencialmente explosivo, aplicam-se as instruções a seguir:

Para a instalação nA o transmissor deve ser instalado em um invólucro de metal, por exemplo, gabinete em forma B que forneça um grau de proteção de pelo menos IP54 de acordo com ABNT NBR IEC60529 ou em um invólucro com tipo de proteção Ex n ou Ex e.

Para a instalação Ex ic o transmissor deve ser instalado em um invólucro proporcionando um grau de proteção IP20 de acordo com a norma ABNT NBR IEC60529. E o invólucro deve, pelo menos, ser adequado para a aplicação e corretamente instalado.

Dispositivos de entrada de cabos e elementos de supressão devem cumprir os mesmos requisitos.

Para temperatura ambiente  $\geq 60^{\circ}\text{C}$ , fios de resistência ao calor devem ser usados com uma faixa de pelo menos 20K acima da temperatura ambiente.

Para a instalação em uma atmosfera de poeira potencialmente explosiva, aplicam-se as instruções a seguir:

O transmissor deve ser montado em invólucro de metal forma B de acordo com DIN43729 que está fornecendo pelo menos um grau de proteção IP6X de acordo com ABNT NBR IEC60529.

O invólucro deve ser adequado para aplicação e instalado corretamente.

As entradas dos cabos e os elementos de obturação que podem ser utilizados devem ser adequados à aplicação pretendida e corretamente instalados.

A temperatura da superfície do invólucro é igual à temperatura ambiente mais 20 K, para uma camada de pó, com uma espessura de até 5 mm.



## Desenho de Instalação INMETRO



Para instalação segura do 5331D ou 5334B o seguinte deve ser observado. O modelo deve apenas ser instalado por pessoas qualificadas que são familiarizadas com as leis nacionais e internacionais, diretrizes e padrões que se aplicam a esta área.  
O ano de fabricação pode ser pego dos dois primeiros dígitos do número de série.

Certificado .....DEKRA 16.0013 X

Marcas  
Ex ia IIC T6...T4 Ga  
Ex ia IIIC Da  
Ex ia I Ma

Normas ABNT NBR IEC 60079-0: 2013; ABNT NBR IEC 60079-11: 2013

Áreas classificadas

Zona 0, 1, 2, 20, 21, 22,

T4:  $-40 \leq T_a \leq 85^\circ\text{C}$

T5:  $-40 \leq T_a \leq 60^\circ\text{C}$

T6:  $-40 \leq T_a \leq 45^\circ\text{C}$

**Terminais 3,4,5,6**

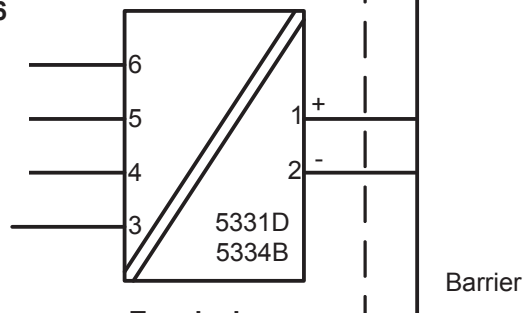
Uo: 9,6 VDC

Io: 25 mA

Po: 60 mW

Lo: 33 mH

Co: 2,4µF



**Terminais:**

**1,2**

Ui: 30 VDC

Ii: 120 mA

Pi: 0,84 W

Li: 10µH

Ci: 1,0nF

**Notas de instalação**

O circuito do sensor não é isolado galvanicamente do circuito de entrada de forma infalível. Contudo, a isolamento galvânica entre os circuitos é capaz de resistir a um ensaio de tensão de 500Vac durante 1 minuto.

Em uma atmosfera de gás potencialmente explosiva, o transmissor deve ser montado em um invólucro a fim de garantir um grau de proteção de no mínimo IP20 de acordo com a ABNT NBR IEC60529. Se contudo, o ambiente necessitar de um nível de proteção maior, isso deve ser levado em consideração.

Se o transmissor é instalado em uma atmosfera explosiva exigindo o uso de equipamento de proteção de nível Ga e se o invólucro é feito de alumínio, ele deve ser instalado de modo que, mesmo em caso remoto de avaria, fontes de ignição devido ao impacto e fricção, faíscas são eliminadas.

Se o invólucro é feito de materiais não metálicos, cargas eletroestáticas devem ser evitadas.

Para instalação em atmosfera de poeira potencialmente explosiva, as instruções a seguir são aplicáveis:

O transmissor deve ser montado em invólucro de metal forma B de acordo com DIN43729 que está fornecendo um grau de proteção de pelo menos IP6X de acordo com ABNT NBR IEC60529. O invólucro deve ser adequado para aplicação pretendida e instalado corretamente.

As entradas dos cabos e os elementos de obturação que podem ser utilizados devem ser adequados à aplicação pretendida e corretamente instalados.

Para temperatura ambiente  $\geq 60^{\circ}\text{C}$ , fios de resistência ao calor devem ser usados com uma faixa de pelo menos 20K acima da temperatura ambiente.

A temperatura da superfície do invólucro é igual à temperatura ambiente mais 20 K, por uma camada de pó, com espessura de até 5 mm.

## Document history

The following list provides notes concerning revisions of this document.

<b>Rev. ID</b>	<b>Date</b>	<b>Notes</b>
108	1345	IECEX and INMETRO approvals added.
109	1514	PESO/CCOE approval added. GOST approval replaced with EAC approval.
110	1707	INMETRO installation drawings updated.
111	2004	PESO/CCOE approval discontinued. INMETRO installation drawing updated.

# We are near you, *all over the world*

**Our trusted red boxes are supported wherever you are**

All our devices are backed by expert service and a 5-year warranty. With each product you purchase, you receive personal technical support and guidance, day-to-day delivery, repair without charge within the warranty period and easily accessible documentation.

We are headquartered in Denmark, and have offices and authorized partners the world over. We are a local

business with a global reach. This means that we are always nearby and know your local markets well. We are committed to your satisfaction and provide PERFORMANCE MADE SMARTER all around the world.

For more information on our warranty program, or to meet with a sales representative in your region, visit [prelectronics.com](http://prelectronics.com).

# Benefit today from *PERFORMANCE MADE SMARTER*

PR electronics is the leading technology company specialized in making industrial process control safer, more reliable and more efficient. Since 1974, we have been dedicated to perfecting our core competence of innovating high precision technology with low power consumption. This dedication continues to set new standards for products communicating, monitoring and connecting our customers' process measurement points to their process control systems.

Our innovative, patented technologies are derived from our extensive R&D facilities and from having a great understanding of our customers' needs and processes. We are guided by principles of simplicity, focus, courage and excellence, enabling some of the world's greatest companies to achieve PERFORMANCE MADE SMARTER.