



FM Approval HLC 8/02 3010829

Flameproof

Enclosure Nema 4X, T5, Max 82° C
Class I, Div 1, Grp C-D

Intrinsically Safe

Enclosure Nema 4X, T5, Max 82° C
Class I, II, III, Div 1, Grp A-B-C-D-E- F- G

Non Incendive

Enclosure Nema 4X, T4, Max 85° C
Class I, Div 2, Grp A-B-C-D
Class II, III, Div 2, Grp F-G

Dust Ignition Proof

Enclosure Nema 4X, T5, Max 82° C
Class II, III, Div 1, Grp E-F-G

CSA Certification 1393920

Flameproof

Enclosure Nema 4X, T5, Max 85° C
Class I, Div 1, Grp C-D
Class II, Div 1, Grp E-F-G
Class III

Intrinsically Safe

Enclosure Nema 4X, T5, Max 82° C
Class I, Div 1, Grp A-B-C-D
Class II, Div 1, Grp E-F-G
Class III

ATEX (GOST Russia/Ukraine)

Prototype test certificate

Type:

Device Class:

Temperature Class:

Permissible Ambient Temp

II 2G EEx d II C T4/T5/T6

DMT 02 ATEX E 029 X

Flameproof Enclosure

II G (EEx ib IIC)

T4, T5, T6

T4: -40°C<T amb <85°C

T5: -40°C<T amb <80°C

T6: -40°C<T amb <65°C

II 2G EEx ib IIC T6

TÜV 98 Atex 1370 X

Intrinsically Safe Equipment

II 2G (EEx ib IIC)

T4, T5, T6

T4: -40°C<T amb <85°C

T5: -40°C<T amb <50°C

T6: -40°C<T amb <35°C

Ex ib IIC T6

IECEx TUN 04, 0015X, Iss No 0

Intrinsically Safe

T4, T5, T6

T4: -40°C<T amb <85°C

T5: -40°C<T amb <50°C

T6: -40°C<T amb <35°C

ATEX

Prototype test certificate

Type:

Device Class:

Temperature Class:

Permissible Ambient Temp

IECEx

Prototype test certificate

Type:

Temperature Class:

Permissible Ambient Temp

FM Approval HLC 7/04 3019164

Explosion proof

Enclosure Nema 4X, T5, Max 82° C
Class I, Div 1, Grp C-D

Dust Ignition Proof

Enclosure Nema 4X, T5, Max 82° C
Class II, III, Div 1, Grp E-F-G

CSA Certification 1555690

Explosion Proof

Enclosure Nema 4X

Temperature range -40...85°C

T5, max 85°C; T6, max. 70°C

Class I, Div 1, Grp C-D

Class II, Div 1, Grp E-F-G

Class III

ATEX(GOST Russia/Ukraine)

Prototype test certificate

Type:

Device Class:

Temperature Class:

Permissible Ambient Temp

II 2G EEx d II C T4/T5/T6
DMT 02 ATEX E 029 X

Flameproof Enclosure

II G (EEx ib IIC)

T4, T5, T6

T4: -40°C<T amb <85°C

T5: -40°C<T amb <80°C

T6: -40°C<T amb <65°C

II 2G EEx ia IIC T6

TÜV 02 Atex 1831 X

Intrinsically Safe Equipment

II 2G (EEx ia IIC)

T4, T5, T6

T4: -40°C<T amb <85°C

T5: -40°C<T amb <55°C

T6: -40°C<T amb <40°C

Ex ia IIC T6

IECEx TUN 04, 0015X, Iss No 0

Intrinsically Safe

T4, T5, T6

T4: -40°C<T amb <85°C

T5: -40°C<T amb <55°C

T6: -40°C<T amb <40°C

ATEX

Prototype test certificate

Type:

Device Class:

Temperature Class:

Permissible Ambient Temp

IECEx

Prototype test certificate

Type:

Temperature Class:

Permissible Ambient Temp

Signal circuit for Foundation Fieldbus/Profibus only for connecting a certified intrinsically safe circuit (e.g. FISCO power supply or barriers) with max. values acc. to:

	FISCO power supply ia/ib For Grp IIB/IIC	FISCO power supply ia/ib for Grp IIB/IIC	Barriers of power supply ia/ib for Grp IIB/IIC
Voltage	Ui = 17.5 V	Ui = 17.5 V	Ui = 24 V
Current	Ii = 380 mA	Ii = 360 mA	Ii = 250 mA
Power	Pi = 5.32 W	Pi = 2.52 W	Pi = 1.2 W
Characteristic	Rectangular	Trapezoidal	Linear



FM J.I. 3005029 (3610,3611)

Intrinsically Safe

Class I, Div. 1, Grp A-B-C-D

Class II, Div. 1 Grp E-F-G

Class III, Div. 1

Non-incendive, suitable for use in Div 2 environment.

CSA Certification 1052414

Intrinsically safe; Enclosure 4X; T4, max 85°C

Class I, Div. 1 Grp. A-B-C-D

Class II, Div. 1 Grp. E-F-G

Class III, Div. 1

Non-incendive; Enclosure 4X, max 85°C

Class I, Div. 2 Grp. A-B-C-D

Class II, Div. 2 Grp. E-F-G

Class III

ATEX(GOST Russia/Ukraine)

Prototype test certificate:

Type:

Device Class:

Temperature Class

Permissible ambient temp:

II 2G EEx ib IIC T6

TÜV 98 ATEX 1370 X

Intrinsically safe equip

II 2G (EEx ib IIC)

T4, T5, T6

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

T5: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 50^{\circ}\text{C}$

T6: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 35^{\circ}\text{C}$

II 2G EEx ia IIC T6

TÜV 04 ATEX 2702 X

Intrinsically safe equip

II 2G (EEx ia IIC)

II 2G (EEx ia IIC)

T4, T5, T6

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

T5: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 50^{\circ}\text{C}$

T6: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 35^{\circ}\text{C}$

II 3G EEx n A II T6

TÜV 02 ATEX 1943 X

Explosion-proof equip

(Zone 2)

II 3G (EEx n A II)

T4, T5, T6

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

T5: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 65^{\circ}\text{C}$

T6: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 50^{\circ}\text{C}$

II 2 D IP 6X T 46°C

TÜV 04 ATEX 2702 X

Intrinsically safe

II 2 D (IP 6X)

ATEX

Prototype test certificate

Type:

Device Class:

Temperature Class

Permissible ambient temp:

ATEX

Prototype test certificate:

Type:

Device Class:

Temperature Class:

Permissible ambient temp:

ATEX

Prototype test certificate:

Type:

Device Class:

Permissible housing surface temperature	Permissible ambient temperature (II D)
T 81°C	-40...70°C
T 61°C	-40...50°C
T 46°C	-40...35°C

IECEx

Prototype test certificate:

Type:

Temperature Class:

Permissible ambient temp:

Ex b IIC T6

IECEx TUN 04.0015X, Iss No 0

Intrinsically safe

T4, T5, T6

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

T5: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 50^{\circ}\text{C}$

T6: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 35^{\circ}\text{C}$

Factory Mutual (FM)

Intrinsically Safe

Class I, Div. 1, Grp A-B-C-D-E-F-G

T6, T5, T4, Ta=40°C, 55°C, 85°C

901265 Entity, FISCO

Non Incendive

Class I, Div. 2, Grp A-B-C-D

T6, T5, T4, Ta=40°C, 55°C, 85°C

S

Class II, Div. 2, Grp E-F-G

T6, T5, T4, Ta=40°C, 55°C, 85°C

Enclosure Type 4X

Canadian Standard (CSA)

Intrinsically Safe

Class I, Div. 1, Grp A-B-C-D

Class II, Div. 1, Grp E-F-G

Class III, Div. 1

Enclosure Type 4X

ATEX(GOST Russia/Ukraine)

Prototype test certificate:

Type:

Device Class:

Temperature Class

Permissible ambient temp:

II 2G EEx ia IIC T6

TÜV 02 ATEX 1831 X

Intrinsically safe equip

II 2G (EEx ia IIC)

T4, T5, T6

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

T5: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 55^{\circ}\text{C}$

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

II 3G EEx n A II T6

TÜV 02 ATEX 1943 X

Explosion-proof equip

(Zone 2)

II 3G (EEx n A II)

T4, T5, T6

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

T5: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 65^{\circ}\text{C}$

T6: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 50^{\circ}\text{C}$

Ex ia IIC T6

IECEx TUN 04.0015X, Iss No 0

Intrinsically safe

T4, T5, T6

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

T5: $-40^{\circ}\text{C} \leq \text{Tamb} \leq 55^{\circ}\text{C}$

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

ATEX(GOST Russia/Ukraine)

Prototype test certificate:

Type:

Device Class:

Temperature Class

Permissible ambient temp:

IECEx

Prototype test certificate:

Type:

Temperature Class:

Permissible ambient temp:

Signal circuit for Foundation Fieldbus/Profibus only for connecting a certified intrinsically safe circuit (e.g. FISCO power supply or barriers) with max. values app. to:

	FISCO power supply ia/ib for Grp IIB/IIC	FISCO power supply ia/ib for Grp IIB/IIC	Barriers or power supply ia/ib for Grp IIB/IIC
Voltage	Ui = 17.5V	Ui = 17.5V	Ui = 24V
Current	li = 380 mA	li = 360 mA	li = 250 mA
Power	Pi = 5.32W	Pi = 2.52W	Pi = 1.2W
Characteristic	Rectangular	Trapezoidal	Linear