

UL CONTROL DRAWING 5104QU01

Hazardous (Classified) Location

Class I, Division 1, Group A,B,C,D
Class I, Zone 0 and 1, Group IIC
Class II, Division 1 Group E, F, G

Nonhazardous Associated apparatus Galvanically Isolated

Intrinsically safe apparatus entity parameters:

$$V_{max}(U_i) \geq V_t(U_o)$$

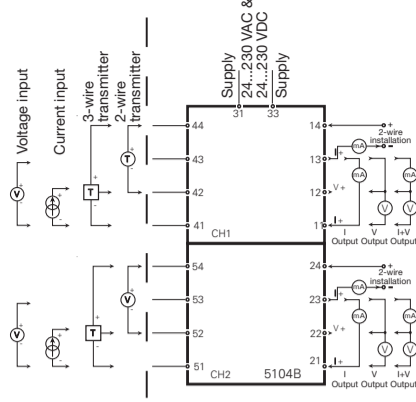
$$I_{max}(I_i) \geq I_t(I_o)$$

$$P_i \geq P_o$$

$$C_a \geq C_{cable} + C_i$$

$$L_a \geq L_{cable} + L_i$$

The sum of capacitance and inductance of cable and intrinsic safe equipment must be less or equal to C_a and L_a



5104B Associated apparatus parameters			
CH1	Terminals 41 to 44		
CH2	Terminals 51 to 54		
Vt (Uo)	28 V		
It (Io)	93 mA		
Po	0.65 W		
	IIC / grp. A,B	IIB / grp. C	IIA / grp.D
Ca (Co)	0.052 μF	0.44 μF	1.45 μF
La (Lo)	2.4 mH	12 mH	20 mH

Installation notes:

- 1) The maximum nonhazardous location voltage is 250VAC/DC.
- 2) The installation shall be in accordance with the National Electrical Code NFPA 70, Articles 504 and 505.
- 3) The terminals of the two individual channels shall not be interconnected in any way.
- 4) Install in Pollution degree 2 or better
- 5) Use 60 / 75 °C copper conductors with wire size AWG: (26 - 14).
- 6) Warning: Substitution of components may impair intrinsic safety.

Rev. AA 2003-02-12

UL CONTROL DRAWING 5105QU01

Hazardous (Classified) Location

Class I, Division 1, Group A,B,C,D
Class I, Zone 0 and 1, Group IIC
Class II, Division 1 Group E, F, G

Nonhazardous Associated apparatus Galvanically isolated

Intrinsically safe apparatus entity parameters:

$$V_{max}(U_i) \geq V_{oc}(U_o)$$

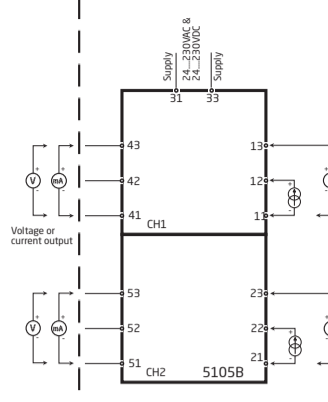
$$I_{max}(I_i) \geq I_{sc}(I_o)$$

$$P_i \geq P_o$$

$$C_a \geq C_{cable} + C_i$$

$$L_a \geq L_{cable} + L_i$$

The sum of capacitance and inductance of cable and intrinsic safe equipment must be less or equal to C_a and L_a



5105B Associated apparatus parameters			
CH1	Terminals 41 to 43		
CH2	Terminals 51 to 53		
Voc (Uo)	28 V		
Isc (Io)	93 mA		
Po	0.65 W		
	IIC / grp. A,B	IIB / grp. C	IIA / grp.D
Ca (Co)	0.052 μF	0.44 μF	1.45 μF
La (Lo)	2.4 mH	12 mH	20 mH

Installation notes:

- 1) The maximum nonhazardous location voltage is 250 VAC/DC.
- 2) The installation shall be in accordance with the National Electrical Code NFPA 70, Articles 504 and 505.
- 3) The terminals of the two individual channels shall not be interconnected in any way.
- 4) Install in Pollution degree 2 or better
- 5) Use 60 / 75 °C copper conductors with wire size AWG: (26 - 14).
- 6) Warning: Substitution of components may impair intrinsic safety.

Rev. AA 2003-02-12

UL CONTROL DRAWING 5106QU01

Hazardous (Classified) Location

Class I, Division 1, Group A,B,C,D
Class I, Zone 0 and 1, Group IIC
Class II, Division 1 Group E, F, G

Nonhazardous Associated apparatus Galvanically Isolated

Intrinsically safe apparatus entity parameters:

$$V_{max}(U_i) \geq V_t(U_o)$$

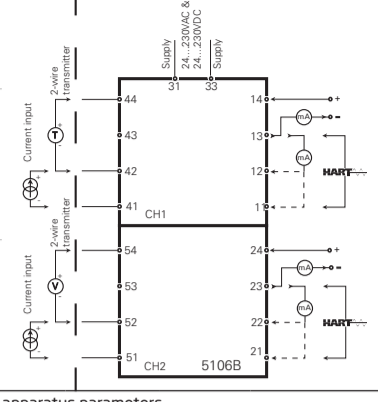
$$I_{max}(I_i) \geq I_t(I_o)$$

$$P_i \geq P_o$$

$$C_a \geq C_{cable} + C_i$$

$$L_a \geq L_{cable} + L_i$$

The sum of capacitance and inductance of cable and intrinsic safe equipment must be less or equal to C_a and L_a



5106B Associated apparatus parameters			
CH1	Terminals 44 to 41,42		
CH2	Terminals 54 to 51,52		
Vt (Uo)	28 V		
It (Io)	93 mA		
Po	0.65 W		
	IIC / grp. A, B	IIB / grp. C	IIA / grp.D
Ca (Co)	0.06 μF	0.52 μF	1.72 μF
La (Lo)	2.4 mH	12 mH	20 mH

Installation notes:

- 1) The maximum nonhazardous location voltage is 250VAC/DC.
- 2) The installation shall be in accordance with the National Electrical Code NFPA 70, Articles 504 and 505.
- 3) The terminals of the two individual channels shall not be interconnected in any way.
- 4) Install in Pollution degree 2 or better
- 5) Use 60 / 75 °C copper conductors with wire size AWG: (26 - 14).
- 6) Warning: Substitution of components may impair intrinsic safety.

UL CONTROL DRAWING 5107QU01

Hazardous (Classified) Location

Class I, Division 1, Group A,B,C,D
Class I, Zone 0 and 1, Group IIC
Class II, Division 1 Group E, F, G

Nonhazardous Associated apparatus Galvanically isolated

Intrinsically safe apparatus entity parameters:

$$V_{max}(U_i) \geq V_{oc}(U_o)$$

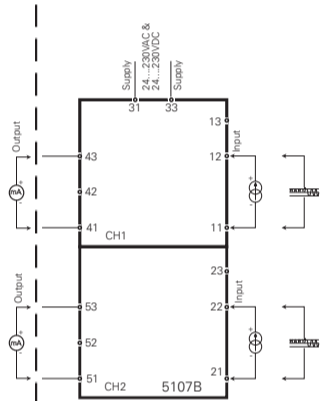
$$I_{max}(I_i) \geq I_{sc}(I_o)$$

$$P_i \geq P_o$$

$$C_a \geq C_{cable} + C_i$$

$$L_a \geq L_{cable} + L_i$$

The sum of capacitance and inductance of cable and intrinsic safe equipment must be less or equal to C_a and L_a



5107B Associated apparatus parameters			
CH1	Terminals 41 to 43		
CH2	Terminals 51 to 53		
Voc (Uo)	28 V		
Isc (Io)	93 mA		
Po	0.65 W		
	IIC / grp. A,B	IIB / grp. C	IIA / grp.D
Ca (Co)	0.06 μF	0.52 μF	1.72 μF
La (Lo)	2.4 mH	12 mH	20 mH

Installation notes:

- 1) The maximum nonhazardous location voltage is 250 VAC/DC.
- 2) The installation shall be in accordance with the National Electrical Code NFPA 70, Articles 504 and 505.
- 3) The terminals of the two individual channels shall not be interconnected in any way.
- 4) Install in Pollution degree 2 or better
- 5) Use 60 / 75 °C copper conductors with wire size AWG: (26 - 14).
- 6) Warning: Substitution of components may impair intrinsic safety.

Rev. AA 2003-01-22

EU DECLARATION OF CONFORMITY (5104DoC_102)



As manufacturer
PR electronics A/S, Lerbakken 10, DK-8410 Rønde
hereby declares that the following products:
Type: 5104
Name: Repeater / Power Supply
From serial no.: 161885188
is in conformity with the following directives and standards:
The EMC Directive 2014/30/EU and later amendments
EN 61326-1 : 2013
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 50014 : 1997 E incl. A1+A2, EN 50020 : 2002 E and EN 50281-1-1 : 1998 incl. A1
ATEX certificate: DEMKO 99ATEX126013 (5104B)
No changes are required to enable compliance with the replacement standards:
EN 60079-0 : 2012 + A11 : 2013 and EN 60079-11 : 2012
ATEX notified body (type approval)
UL International Demko A/S
Borupvang 5
DK-2750 Ballerup
The RoHS2 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, 6 December 2017

Stig Lindemann
Stig Lindemann, CTO
Manufacturer's signature

EU DECLARATION OF CONFORMITY (5105DoC_102)



As manufacturer
PR electronics A/S, Lerbakken 10, DK-8410 Rønde
hereby declares that the following products:
Type: 5105
Name: Ex-isolated driver
From serial no.: 161843007
is in conformity with the following directives and standards:
The EMC Directive 2014/30/EU and later amendments
EN 61326-1 : 2013
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 50014 : 1997 E incl. A1+A2, EN 50020 : 2002 E and EN 50281-1-1 : 1998 incl. A1
ATEX certificate: DEMKO 99ATEX126014
No changes are required to enable compliance with the replacement standards:
EN 60079-0 : 2012 + A11 : 2013 and EN 60079-11 : 2012
ATEX notified body (type approval)
UL International Demko A/S
Borupvang 5
DK-2750 Ballerup
The RoHS2 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, 11 December 2017

Stig Lindemann
Stig Lindemann, CTO
Manufacturer's signature

EU DECLARATION OF CONFORMITY (5106DoC_102)



As manufacturer
PR electronics A/S, Lerbakken 10, DK-8410 Rønde
hereby declares that the following products:
Type: 5106
Name: HART transparent repeater
From serial no.: 161629068
is in conformity with the following directives and standards:
The EMC Directive 2014/30/EU and later amendments
EN 61326-1 : 2013
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 50014 : 1997 E incl. A1+A2, EN 50020 : 2002 E and EN 50281-1-1 : 1998 incl. A1
ATEX certificate: DEMKO 00ATEX127483 (5106B)
No changes are required to enable compliance with the replacement standards:
EN 60079-0 : 2012 + A11 : 2013 and EN 60079-11 : 2012
ATEX notified body (type approval)
UL International Demko A/S
Borupvang 5
DK-2750 Ballerup
The RoHS2 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, 11 December 2017

Stig Lindemann
Stig Lindemann, CTO
Manufacturer's signature

EU DECLARATION OF CONFORMITY (5107DoC_102)



As manufacturer
PR electronics A/S, Lerbakken 10, DK-8410 Rønde
hereby declares that the following products:
Type: 5107
Name: HART transparent repeater
From serial no.: 161282013
is in conformity with the following directives and standards:
The EMC Directive 2014/30/EU and later amendments
EN 61326-1 : 2013
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 50014 : 1997 E incl. A1+A2, EN 50020 : 2002 E and EN 50281-1-1 : 1998 incl. A1
ATEX certificate: DEMKO 01ATEX127484
No changes are required to enable compliance with the replacement standards:
EN 60079-0 : 2012 + A11 : 2013 and EN 60079-11 : 2012
ATEX notified body (type approval)
UL International Demko A/S
Borupvang 5
DK-2750 Ballerup
The RoHS2 Directive 2011/65/EU and later amendments
EN 50581 : 2012
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Meander 1051, 6825 MJ Arnhem
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The Netherlands
Rønde, 11 December 2017

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