

Jumper programming 5202

Signal transmission	Channel 1 JP 11	Channel 2 JP 21	Cable error detection	Channel 1 JP 12	Channel 2 JP 22
Direct			ON		
Inverted			OFF		

Channel 1 signal to Channel 2	Channel 1 JP 13	Channel 2 function	Channel 2 JP 23
Cable error		Channel 1 to channel 2 ON, input 2 disabled	
Signal		Channel 1 to channel 2 OFF, input 2 active	

Relay function	N.O.	N.C.
Channel 1	Relay 1, JP41 	Relay 1, JP42
Channel 2	Relay 1, JP51 	Relay 2, JP52

DK Ex godkendelser **UK** I.S approvals **FR** Approbations S.I. **DE** Ex-Zulassungen

	ATEX	Wires into Area / Zone	Installation drawing	IECEx	Wires into Area / Zone	Installation drawing	UL 913		Control drawing	CCC	EAC Ex
5202B	DEKRA 20ATEX0018X	0, 1, 2, 20, 21, 22	5202QA02	IECEx DEK 24.0013X	0, 1, 2, 20, 21, 22	5202QI02	UL-US- 2422982-1	IS, Cl. I, Div. 1, Gr. A, B, C, D IS, Cl. I, zone 0 og 1, Gr. IIC IS, Cl. II, Div. 1, Group E, F, G	5202QU02	Pending	EAEU KZ 7500361.01.01.10203
5203B	DEMKO 99ATEX126257	0, 1, 2, 20, 21, 22	N.A.	N.A.	N.A.	N.A.	20170505- E233311	IS, Cl. I, Div. 1, Gr. A, B, C, D IS, Cl. I, zone 0 og 1, Gr. IIC IS, Cl. II, Div. 1, Group E, F, G	5203QU01	N.A.	EAEU KZ 7500361.01.01.08756
5223B	KEMA 04ATEX1001	0, 1, 2, 20, 21, 22	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	EAEU KZ 7500361.01.01.08756
5420B	DEMKO 99ATEX126256	0, 1, 2, 20, 21, 22	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	EAEU KZ 7500361.01.01.08756

DK Ex-data **UK** I.S data **FR** Données S.I. **DE** Ex-Daten

	5203B	5223B	5420B
ATEX	Ex II (1) GD [EEx ia] IIC Zone 0, 1, 2, 20, 21, 22	Ex II (1) GD [EEx ia] IIC Zone 0, 1, 2, 20, 21, 22	Ex II (1) GD [EEx ia] IIC Zone 0, 1, 2, 20, 21, 22
Um	250 V	250 V	250 V
Terminal	41..43 (51..53)	41..43 (51..53)	41..43 (51..53)
Uo	28 VDC	28 VDC	28 VDC
Io	115 mADC	110 mADC	93.0 mADC
Po	0.81 W	0.77 W	0.65 W
Lo	2 mH	2.6 mH	3 mH
Co	0.08 µF	0.08 µF	1.9 µF

PR **electronics** **5202QA02**
LERBAKKEN 10, 8410 RØNDE DENMARK

ATEX Installation drawing

For safe installation of 5202B 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: DEKRA 20ATEX0018 X
Standards: EN IEC 60079-0:2018
EN 60079-11:2012
Marking: II (1) G [Ex ia Ga] IIC/II/IIA
II (1) D [Ex ia Da] IIC

Hazardous Area: Zone 0, 1, 2, 20, 21, 22
Non-hazardous Area: -20 ≤ Ta ≤ 60°C

Uo: 10.6 V
Io: 13.8 mA
Po: 38 mW

Uo: 10.6 V
Io: 13.8 mA
Po: 38 mW

IC: 180 mH, IB: 740 mH, IA: 1.4 H
Ca: 2.3 µF, 16.0 µF, 72 µF

5202B1 NPN
5202B2 Relay

Terminal: 11, 12, 21, 22, 11, 12, 13, 21, 22, 23
AC voltage: NA, NA, 250 V, 250 V
AC current: NA, NA, 2 A, 2 A
Power: NA, NA, 100 VA, 100 VA
DC voltage: 30 V, 30 V, 24 V, 24 V
DC current: 80 mA, 80 mA, 1 A, 1 A

PR **electronics** **5202QA02**
LERBAKKEN 10, 8410 RØNDE DENMARK

IECEx Installation drawing

For safe installation of 5202B 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.

IECEx certificate: IECEx DEK 24.0013X
Standards: IEC 60079-0:2017
IEC 60079-11:2011
Marking: [Ex ia Ga] IIC/II/IIA
[Ex ia Da] IIC

Hazardous Area: Zone 0, 1, 2, 20, 21, 22
Non-hazardous Area: -20 ≤ Ta ≤ 60°C

Uo: 10.6 V
Io: 13.8 mA
Po: 38 mW

Uo: 10.6 V
Io: 13.8 mA
Po: 38 mW

IC: 180 mH, IB: 740 mH, IA: 1.4 H
Ca: 2.3 µF, 16.0 µF, 72 µF

5202B1 NPN
5202B2 Relay

Relay output: Terminal 11, 12, 13, 14
Terminal 21, 22, 23, 24
AC voltage: 250 V, 250 V
AC current: 2 A, 2 A
Power: 100 VA, 100 VA
DC voltage: 24 V, 24 V
DC current: 1 A, 1 A

Installation notes:
The protection degree of the housing is IP20.
The circuits connected in the non-hazardous area shall be limited to overvoltage category II.
The module shall be installed within a controlled environment with reduced pollution, limited to pollution degree 2.
Power supply, inputs and outputs are all galvanically isolated from each other.
When two or more units are placed next to each other, it has to be assured that all the Ex-terminal numbers 41...44 and 51...54 are placed on the same side and are separated from the non-intrinsically safe circuits of the units which could be mounted above or below it.

PR **electronics** **5202QI02**
LERBAKKEN 10, 8410 RØNDE DENMARK

IECEx Installation drawing

For safe installation of 5202B 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.

IECEx certificate: IECEx DEK 24.0013X
Standards: IEC 60079-0:2017
IEC 60079-11:2011
Marking: [Ex ia Ga] IIC/II/IIA
[Ex ia Da] IIC

Hazardous Area: Zone 0, 1, 2, 20, 21, 22
Non-hazardous Area: -20 ≤ Ta ≤ 60°C

Uo: 10.6 V
Io: 13.8 mA
Po: 38 mW

Uo: 10.6 V
Io: 13.8 mA
Po: 38 mW

IC: 180 mH, IB: 740 mH, IA: 1.4 H
Ca: 2.3 µF, 16.0 µF, 72 µF

5202B1 NPN
5202B2 Relay

Terminal: 11, 12, 21, 22, 11, 12, 13, 21, 22, 23
AC voltage: NA, NA, 250 V, 250 V
AC current: NA, NA, 2 A, 2 A
Power: NA, NA, 100 VA, 100 VA
DC voltage: 30 V, 30 V, 24 V, 24 V
DC current: 80 mA, 80 mA, 1 A, 1 A

Installation notes:
The protection degree of the housing is IP20.
The circuits connected in the non-hazardous area shall be limited to overvoltage category II.
The module shall be installed within a controlled environment with reduced pollution, limited to pollution degree 2.
Power supply, inputs and outputs are all galvanically isolated from each other.
When two or more units are placed next to each other, it has to be assured that all the Ex-terminal numbers 41...44 and 51...54 are placed on the same side and are separated from the non-intrinsically safe circuits of the units which could be mounted above or below it.

PR **electronics** **5202QI02**
LERBAKKEN 10, 8410 RØNDE DENMARK

IECEx Installation drawing

For safe installation of 5202B 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.

IECEx certificate: IECEx DEK 24.0013X
Standards: IEC 60079-0:2017
IEC 60079-11:2011
Marking: [Ex ia Ga] IIC/II/IIA
[Ex ia Da] IIC

Hazardous Area: Zone 0, 1, 2, 20, 21, 22
Non-hazardous Area: -20 ≤ Ta ≤ 60°C

Uo: 10.6 V
Io: 13.8 mA
Po: 38 mW

Uo: 10.6 V
Io: 13.8 mA
Po: 38 mW

IC: 180 mH, IB: 740 mH, IA: 1.4 H
Ca: 2.3 µF, 16.0 µF, 72 µF

5202B1 NPN
5202B2 Relay

Relay output: Terminal 11, 12, 13, 14
Terminal 21, 22, 23, 24
AC voltage: 250 V, 250 V
AC current: 2 A, 2 A
Power: 100 VA, 100 VA
DC voltage: 24 V, 24 V
DC current: 1 A, 1 A

Installation notes:
The protection degree of the housing is IP20.
The circuits connected in the non-hazardous area shall be limited to overvoltage category II.
The module shall be installed within a controlled environment with reduced pollution, limited to pollution degree 2.
Power supply, inputs and outputs are all galvanically isolated from each other.
When two or more units are placed next to each other, it has to be assured that all the Ex-terminal numbers 41...44 and 51...54 are placed on the same side and are separated from the non-intrinsically safe circuits of the units which could be mounted above or below it.

PR **electronics** **Control Drawing 5202QU02**
LERBAKKEN 10, 8410 RØNDE DENMARK

Control Drawing 5202QU02

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

Unclassified Location

Associated apparatus
MATERIEL ASSOCIE

5202

Intrinsically safe apparatus
entity parameters:

Vmax (Ui) ≥ Vt (Uo)
Imax (Ii) ≥ It (Io)
Pi ≥ Po
Ca ≥ Ccable + Ci
La ≥ Lcable + Li

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

5202B Associated apparatus parameters

CH1	Terminals 41 to 43
CH2	Terminals 51 to 53
Vt (Uo)	10.6 V
It (Io)	13.8 mA
Po	0.038 W
IC / grp. A,B	IB / grp. C IIA / grp. D
Ca (Co)	2.3 µF 16.0 µF 72 µF
La (Lo)	180 mH 740 mH 1.0 H
Relay output 11 - 14, 21 - 24	
Voltage	250V AC, 100 VA
Current	2 A AC, 100 VA
24VDC	1 A DC
NPN output 11 - 12, 21 - 22	
General purpose	30V DC, 80 mA
Pilot duty	30V DC, 80 mA

Installation notes:

Revision date: 2025-06-24
Version Revision: V1R0
Prepared by: PB
Page: 1/2

EU DECLARATION OF CONFORMITY
(5203DoC_102)

As manufacturer **PR electronics A/S, Lerbakken 10, DK-8410 Rønde** hereby declares that the following products:
Type: 5203B
Name: Ex solenoid / alarm driver
From serial no.: 171283076

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 99ATEX126257

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, 16 January 2018
Stig Lindemann, CTO
Manufacturer's signature

PR **electronics** **Control Drawing 5202QU02**
LERBAKKEN 10, 8410 RØNDE DENMARK

Control Drawing 5202QU02

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

Unclassified Location

Associated apparatus
MATERIEL ASSOCIE

5202

Intrinsically safe apparatus
entity parameters:

Vmax (Ui) ≥ Vt (Uo)
Imax (Ii) ≥ It (Io)
Pi ≥ Po
Ca ≥ Ccable + Ci
La ≥ Lcable + Li

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

5202B Associated apparatus parameters

CH1	Terminals 41 to 43
CH2	Terminals 51 to 53
Vt (Uo)	10.6 V
It (Io)	13.8 mA
Po	0.038 W
IC / grp. A,B	IB / grp. C IIA / grp. D
Ca (Co)	2.3 µF 16.0 µF 72 µF
La (Lo)	180 mH 740 mH 1.0 H
Relay output 11 - 14, 21 - 24	
Voltage	250V AC, 100 VA
Current	2 A AC, 100 VA
24VDC	1 A DC
NPN output 11 - 12, 21 - 22	
General purpose	30V DC, 80 mA
Pilot duty	30V DC, 80 mA

Installation notes:

Revision date: 2025-06-24
Version Revision: V1R0
Prepared by: PB
Page: 2/2

EU DECLARATION OF CONFORMITY
(5223DoC_102)

As manufacturer **PR electronics A/S, Lerbakken 10, DK-8410 Rønde** hereby declares that the following products:
Type: 5223
Name: Programmable f/I - f/I converter
From serial no.: 171361020

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, **EN 50020: 2002** and **EN 50284: 1999**
ATEX certificate: KEMA 04ATEX1001 (5223B)

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)
DEKRA Certification B.V.
Meander 1051, 6825 MJ Arnhem
P.O. Box 5185, 6802 ED Arnhem
The Netherlands

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, 16 January 2018
Stig Lindemann, CTO
Manufacturer's signature

Control Drawing 5203QU01

Control Drawing 5203QU01

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
Galvanic Isolated

Intrinsically safe apparatus
entity parameters:

Vmax (Ui) ≥ Vt (Uo)
Imax (Ii) ≥ It (Io)
Pi ≥ Po
Ca ≥ Ccable + Ci
La ≥ Lcable + Li

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

5203B Associated apparatus parameters

Type	F	I
Vt (Uo)	28 V	28 V
It (Io)	110 mA	110 mA
Po	0.81 W	0.77 W
Group A,B and C and Ia	0 and Ia	0 and Ia
La (Lo)	1.6 mH 5.0 mH 16mH 2.0 mH 8 mH 20 mH 2.4 mH 9 mH 25 mH	0.06 µF 0.52 µF 1.7 µF 0.06 µF 0.52 µF 1.7 µF 0.06 µF 0.52 µF 1.7 µF

Installation notes:

1) The maximum nonhazardous location voltage is 250V ac/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.
7) If cable parameters are unknown Ccable may be set to 60pF/ft and Lcable may be set to 0.20 µH/ft

Rev. AA 2003-09-19

EU DECLARATION OF CONFORMITY
(5225DoC_102)

As manufacturer **PR electronics A/S, Lerbakken 10, DK-8410 Rønde** hereby declares that the following products:
Type: 5225
Name: Programmable f/I - f/I converter
From serial no.: 171519001

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 RoHS2 Directive 2011/65/EU and later amendments
EN 50581: 2012

Rønde, 14 August 2017
Stig Lindemann, CTO
Manufacturer's signature

EU DECLARATION OF CONFORMITY
(5202DoC_103)

EU DECLARATION OF CONFORMITY
(5202DoC_103)

As manufacturer **PR electronics A/S, Lerbakken 10, DK-8410 Rønde** hereby declares that the following products:
Type: 5202
Name: Pulse isolator
From serial no.: 251584001-251599200
252183001

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 + A1: 2019

The ATEX Directive 2014/34/EU and later amendments
EN IEC 60079-0: 2018 + A11: 2024 and **EN 60079-11: 2012**
ATEX certificate: DEKRA 20ATEX0018X (5202B)

ATEX notified body (type approval)
DEKRA Certification B.V.
Meander 1051, 6825 MJ Arnhem
P.O. Box 5185, 6802 ED Arnhem
The Netherlands

The RoHS2 Directive 2011/65/EU and later amendments
EN IEC 63000: 2018

Notified body 0344
DEKRA Certification B.V.
Meander 1051, 6825 MJ Arnhem
P.O. Box 5185, 6802 ED Arnhem
The Netherlands

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Rønde, 20 August 2025
Stig Lindemann, CTO
Manufacturer's signature

EU DECLARATION OF CONFORMITY
(5420DoC_102)

As manufacturer **PR electronics A/S, Lerbakken 10, DK-8410 Rønde** hereby declares that the following products:
Type: 5420B
Name: Ex power supply
From serial no.: 151453059

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 99ATEX126256

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, 16 January 2018
Stig Lindemann, CTO
Manufacturer's signature