



|       | 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<br>IS, Cl. I, zone 0 og 1, Gr. IIC<br>IS, Cl. II, Div. 1, Group E, F, G | 5202QU02        | 2026322310007185 | EAEU KZ 7500361.01.01.10203 |
| 5203B | N.A.               | N.A.                   | N.A.                 | N.A.               | N.A.                   | N.A.                 | 20170505-E233311 | IS, Cl. I, Div. 1, Gr. A, B, C, D<br>IS, Cl. I, zone 0 og 1, Gr. IIC<br>IS, Cl. II, Div. 1, Group E, F, G | 5203QU01        | N.A.             | N.A.                        |
| 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 |

|      |                          | 5420B              |
|------|--------------------------|--------------------|
| ATEX | Ex II (1) GD [EE ia] IIC | DEMKO 99ATEX126256 |
|      | Um                       | 250 V              |
|      |                          |                    |
|      | Terminal                 | 41..43<br>(51..53) |
|      | Uo                       | 28 VDC             |
|      | Io                       | 93 mA DC           |
|      | Po                       | 0.65 W             |
|      | Lo                       | 3 mH               |
|      | Co                       | 0.08 µF            |

#### Jumper programming 5202

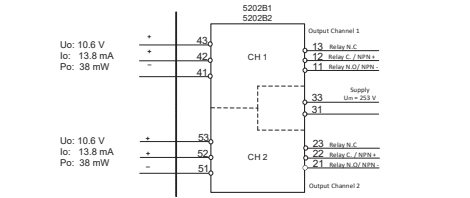
|                               |                 |                                             |                       |                 |                 |
|-------------------------------|-----------------|---------------------------------------------|-----------------------|-----------------|-----------------|
| 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  |                       |                 |                 |
| 5202B4                        |                 |                                             |                       |                 |                 |
| Relay function                |                 | N.O.                                        |                       | N.C.            |                 |
| Channel 1                     | Relay 1, JP41   |                                             |                       |                 |                 |
|                               | Relay 2, JP42   |                                             |                       |                 |                 |
| Channel 2                     | Relay 1, JP51   |                                             |                       |                 |                 |
|                               | Relay 2, JP52   |                                             |                       |                 |                 |

#### PRelectronics 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<br>EN 60079-11:2012                     |
| Marking          | II (1) G [Ex ia Ga] IIC/IIIB/IIA<br>II (1) D [Ex ia Da] IIC |
| Hazardous Area   | Non-hazardous Area                                          |
| Zone             | 0, 1, 2, 20, 21, 22                                         |
|                  | -20 ≤ Ta ≤ 60°C                                             |



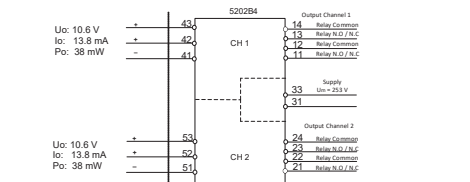
|    | IC     | IB, IIC | IIA   |
|----|--------|---------|-------|
| Lo | 180 mH | 740 mH  | 1.4 H |
| Co | 2.3 µF | 16.0 µF | 72 µF |

|            |                | 5202B1 NPN             | 5202B2 Relay |
|------------|----------------|------------------------|--------------|
| Terminal   | 11, 12, 21, 22 | 11, 12, 13, 21, 22, 23 |              |
| AC voltage | NA             | NA                     | 250 V        |
| AC current | NA             | NA                     | 2 A          |
| Power      | NA             | NA                     | 100 VA       |
| DC voltage | 30 V           | 30 V                   | 24 V         |
| DC current | 80 mA          | 80 mA                  | 1 A          |

|                |                  |              |       |
|----------------|------------------|--------------|-------|
| Revision date: | Version Revision | Prepared by: | Page: |
| 2024-12-17     | V4R0             | JALA         | 1/2   |

#### PRelectronics 5202QA02 LERBAKKEN 10, 8410 RØNDE DENMARK

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



|    | IC     | IB, IIC | IIA   |
|----|--------|---------|-------|
| Lo | 180 mH | 740 mH  | 1.4 H |
| Co | 2.3 µF | 16.0 µF | 72 µF |

|            |        | Relay output | Terminal       | Terminal       |
|------------|--------|--------------|----------------|----------------|
|            |        |              | 11, 12, 13, 14 | 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.

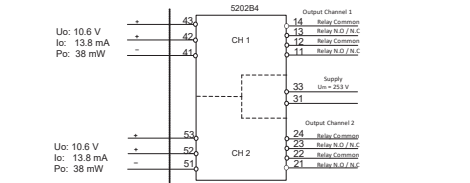
Power supply, inputs and outputs are all galvanically isolated from each other.

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.

|                |                  |              |       |
|----------------|------------------|--------------|-------|
| Revision date: | Version Revision | Prepared by: | Page: |
| 2024-12-17     | V4R0             | JALA         | 2/2   |

#### PRelectronics 5202QCC02 LERBAKKEN 10, 8410 RØNDE DENMARK

危险区域
 Zone 0, 1, 2, 20, 21, 22
 非危险区域
 -20 ≤ Ta ≤ 60°C



|    | IC     | IB, IIC | IIA   |
|----|--------|---------|-------|
| Lo | 180 mH | 740 mH  | 1.4 H |
| Co | 2.3 µF | 16.0 µF | 72 µF |

|       |        | 继电器输出  | 端子             | 端子             |
|-------|--------|--------|----------------|----------------|
|       |        |        | 11, 12, 13, 14 | 21, 22, 23, 24 |
| AC 电压 | 250 V  | 250 V  |                |                |
| AC 电流 | 2 A    | 2 A    |                |                |
| 功率    | 100 VA | 100 VA |                |                |
| DC 电压 | 24 V   | 24 V   |                |                |
| DC 电流 | 1 A    | 1 A    |                |                |

安装注意事项：  
 外壳防护等级为 IP20。  
 非危险区域连接的电路应限制在过电压类别 II 内。  
 模块应安装在污染程度较低的受控环境中，污染等级应限制在 2 级。  
 电源、输入与输出端之间均采用电气隔离设计。  
 当两个或多个单元相邻放置时，必须确保所有的41、44和51号Ex终端...54个被放置在同一侧，并可与安装在其上方或下方的单元的非本质安全电路分开。

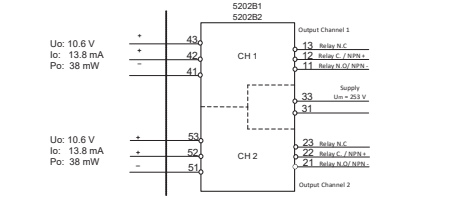
|                |                  |              |       |
|----------------|------------------|--------------|-------|
| Revision date: | Version Revision | Prepared by: | Page: |
| 2025-12-30     | V1R0             | THDE         | 2/2   |

#### PRelectronics 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<br>IEC 60079-11:2011     |
| Marking           | [Ex ia Ga] IIC/IIIB/IIA<br>[Ex ia Da] IIC |
| Hazardous Area    | Non-hazardous Area                        |
| Zone              | 0, 1, 2, 20, 21, 22                       |
|                   | -20 ≤ Ta ≤ 60°C                           |



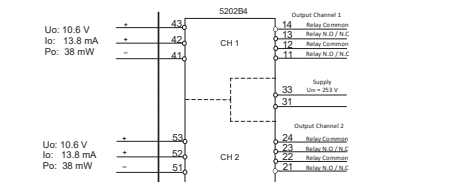
|    | IC     | IB, IIC | IIA   |
|----|--------|---------|-------|
| Lo | 180 mH | 740 mH  | 1.4 H |
| Co | 2.3 µF | 16.0 µF | 72 µF |

|            |                | 5202B1 NPN             | 5202B2 Relay |
|------------|----------------|------------------------|--------------|
| Terminal   | 11, 12, 21, 22 | 11, 12, 13, 21, 22, 23 |              |
| AC voltage | NA             | NA                     | 250 V        |
| AC current | NA             | NA                     | 2 A          |
| Power      | NA             | NA                     | 100 VA       |
| DC voltage | 30 V           | 30 V                   | 24 V         |
| DC current | 80 mA          | 80 mA                  | 1 A          |

|                |                  |              |       |
|----------------|------------------|--------------|-------|
| Revision date: | Version Revision | Prepared by: | Page: |
| 2024-12-17     | V4R0             | JALA         | 1/2   |

#### PRelectronics 5202QI02 LERBAKKEN 10, 8410 RØNDE DENMARK

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



|    | IC     | IB, IIC | IIA   |
|----|--------|---------|-------|
| Lo | 180 mH | 740 mH  | 1.4 H |
| Co | 2.3 µF | 16.0 µF | 72 µF |

|            |        | Relay output | Terminal       | Terminal       |
|------------|--------|--------------|----------------|----------------|
|            |        |              | 11, 12, 13, 14 | 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.

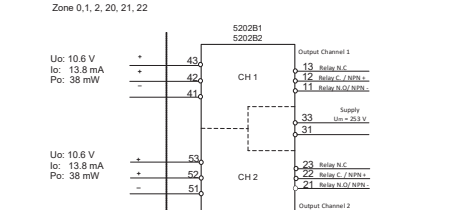
|                |                  |              |       |
|----------------|------------------|--------------|-------|
| Revision date: | Version Revision | Prepared by: | Page: |
| 2024-12-17     | V4R0             | JALA         | 2/2   |

#### PRelectronics 5202QCC02 LERBAKKEN 10, 8410 RØNDE DENMARK

#### CCC 安装图

为安全安装 5202B，必须遵守以下指南。  
 该模块仅由熟悉适用于该地区国家和国际法律、指令和标准的合格专业人员安装。  
 设备制造年份由序列号的前两位数字指示。

|        |                                           |
|--------|-------------------------------------------|
| CCC 证书 | XXX                                       |
| 标准     | GB/T 3836.1-2021<br>GB/T 3836.4-2021      |
| 标识     | [Ex ia Ga] IIC/IIIB/IIA<br>[Ex ia Da] IIC |
| 危险区域   | 危险区域                                      |
| Zone   | 0, 1, 2, 20, 21, 22                       |
|        | -20 ≤ Ta ≤ 60°C                           |



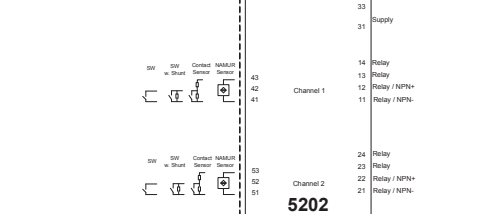
|    | IC     | IB, IIC | IIA   |
|----|--------|---------|-------|
| Lo | 180 mH | 740 mH  | 1.4 H |
| Co | 2.3 µF | 16.0 µF | 72 µF |

|       |                | 5202B1 NPN             | 5202B2 继电器 |
|-------|----------------|------------------------|------------|
| 继电器输出 | 11, 12, 21, 22 | 11, 12, 13, 21, 22, 23 |            |
| AC 电压 | NA             | NA                     | 250 V      |
| AC 电流 | NA             | NA                     | 2 A        |
| 功率    | NA             | NA                     | 100 VA     |
| DC 电压 | 30 V           | 30 V                   | 24 V       |
| DC 电流 | 80 mA          | 80 mA                  | 1 A        |

|                |                  |              |       |
|----------------|------------------|--------------|-------|
| Revision date: | Version Revision | Prepared by: | Page: |
| 2025-12-30     | V1R0             | THDE         | 1/2   |

#### PRelectronics Control Drawing 5202QU02 LERBAKKEN 10, 8410 RØNDE DENMARK

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



|    | IC     | IB, IIC | IIA   |
|----|--------|---------|-------|
| Lo | 180 mH | 740 mH  | 1.4 H |
| Co | 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        |
| AC current | NA             | NA                     | 2 A          |
| Power      | NA             | NA                     | 100 VA       |
| DC voltage | 30 V           | 30 V                   | 24 V         |
| DC current | 80 mA          | 80 mA                  | 1 A          |

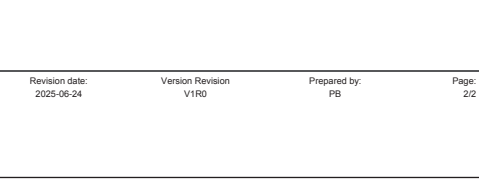
|                |                  |              |       |
|----------------|------------------|--------------|-------|
| Revision date: | Version Revision | Prepared by: | Page: |
| 2025-06-24     | V1R0             | PB           | 1/2   |

#### PRelectronics Control Drawing 5202QU02 LERBAKKEN 10, 8410 RØNDE DENMARK

- The maximum non hazardous location voltage is 250Vac/dc.
- The equipment provides isolation in accordance with UL/CSA 60079-11 between non-I.S. and I.S. circuits.
- For installation in Canada the module must be installed according to the Canadian Electrical Code (CEC).
- For installation in the US the module must be installed according to the National Electrical Code (NEC).
- The terminals of the two individual channels shall not be interconnected in any way.
- Install in Pollution degree 2 or better
- The circuits connected in the non-hazardous area shall be limited to overvoltage category II.
- Use 60 / 75 °C Copper Conductors with Wire Size AWG: (26 – 14).
- Warning: Substitution of components may impair intrinsic safety.
- LA SUBSTITUTION DES COMPOSANTS PEUT NUIRE A LA SECURITE INTRINSEQUE.
- To prevent ignition of flammable or combustible atmospheres disconnect power before servicing
- Pour éviter l'inflammation des atmosphères inflammables ou combustibles, débranchez l'alimentation avant toute maintenance.
- If cable parameters are unknown C<sub>basic</sub> may be set to 60pF/ft and L<sub>basic</sub> may be set to 0.20 µH/ft

#### PRelectronics Control Drawing 5203QU01 LERBAKKEN 10, 8410 RØNDE DENMARK

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



|    | IC     | IB, IIC | IIA   |
|----|--------|---------|-------|
| Lo | 180 mH | 740 mH  | 1.4 H |
| Co | 2.3 µF | 16.0 µF | 72 µF |

|                                  |                   | 5203B Associated apparatus parameters |                |                |
|----------------------------------|-------------------|---------------------------------------|----------------|----------------|
| Type                             | F                 | 28 V                                  | I              |                |
| V <sub>I</sub> (U <sub>o</sub> ) |                   | 28 V                                  |                | 28 V           |
| I <sub>t</sub> (I <sub>o</sub> ) |                   | 115 mA                                |                | 93 mA          |
| P <sub>o</sub>                   |                   | 0.81 W                                |                | 0.65 W         |
| Group                            | A,B and IB        | A,B and IB                            | C and IB       | A,B and IB     |
| L <sub>a</sub> (L <sub>o</sub> ) | 1.8 mH / 5.0 µH   | 1.6mH / 2.0 µH                        | R <sub>o</sub> | 20 mH / 2.4 mH |
| C <sub>a</sub> (C <sub>o</sub> ) | 0.06 µF / 0.52 µF | 1.7µF / 0.06µF                        | 0.52 µF        | 1.7µF          |
|                                  |                   |                                       | 0.06 µF        | 0.52 µF        |

- Installation notes:
- The maximum nonhazardous location voltage is 250Vac/dc.
  - The installation shall be in accordance with the National Electrical Code NFPA 70, Articles 504 and 505.
  - The terminals of the two individual channels shall not be interconnected in any way.
  - Install in Pollution degree 2 or better
  - Use 60 / 75 °C Copper Conductors with Wire Size AWG: (26 – 14).
  - Warning: Substitution of components may impair intrinsic safety.
  - If cable parameters are unknown C<sub>basic</sub> may be set to 60pF/ft and L<sub>basic</sub> may be set to 0.20 µH/ft

Rev. AA    2003-09-19

### 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  
 252074001

is in conformity with the following directives and standards:

The EMC Directive 2014/30/EU and later amendments  
 EN 61326-1 : 2021  
 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.  
 Heander 1051, 6825 HJ 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.  
 Heander 1051, 6825 HJ Arnhem  
 P.O. Box 5185, 6802 ED Arnhem  
 The Netherlands

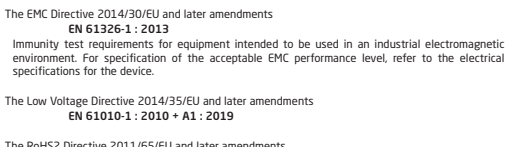
This declaration of conformity is issued under the sole responsibility of the manufacturer.

Rønde, 20 August 2025

*Stig Lindemann, CTO*  
 Manufacturer's signature

#### PRelectronics Control Drawing 5202QU02 LERBAKKEN 10, 8410 RØNDE DENMARK

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



EN IEC 63000 : 2018

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

  
Stig Lindemann, CTO  
Manufacturer's signature

Ronde, 9 January 2026