



EU DECLARATION OF CONFORMITY



(5114DoC\_102)

As manufacturer PR electronics A/S, Lerbakken 10, DK-8410 Rønde

hereby declares that the following products:

Type: 5114  
Name: Programmable transmitter  
From serial no.: 161966001

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 99ATEX124571 (5114B)

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

*Stig Lindemann*

Stig Lindemann, CTO  
Manufacturer's signature

Rønde, 16 March 2018

EU DECLARATION OF CONFORMITY



(5115DoC\_102)

As manufacturer PR electronics A/S, Lerbakken 10, DK-8410 Rønde

hereby declares that the following products:

Type: 5115  
Name: Signal calculator  
From serial no.: 161966001

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 00ATEX128567 (5115B)

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

*Stig Lindemann*

Stig Lindemann, CTO  
Manufacturer's signature

Rønde, 16 March 2018

EU DECLARATION OF CONFORMITY



(5116DoC\_104)

As manufacturer PR electronics A/S, Lerbakken 10, DK-8410 Rønde

hereby declares that the following products:

Type: 5116  
Name: Programmable transmitter  
From serial no.: 201864001

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 IEC 60079-0 : 2018 and EN 60079-11 : 2012  
ATEX certificate: KEMA 04ATEX1316 X (5116B)

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

*Stig Lindemann*

Stig Lindemann, CTO  
Manufacturer's signature

Rønde, 3 March 2021

EU DECLARATION OF CONFORMITY



(5131DoC\_102)

As manufacturer PR electronics A/S, Lerbakken 10, DK-8410 Rønde

hereby declares that the following products:

Type: 5131  
Name: 2-wire programmable transmitter  
From serial no.: 161966001

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 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 99ATEX124572 (5131B)

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

*Stig Lindemann*

Stig Lindemann, CTO  
Manufacturer's signature

Rønde, 16 March 2018

ATEX Installation drawing 5116QA01-V3R0



**5116B**  
For safe installation of 5116B 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 04ATEX1316X

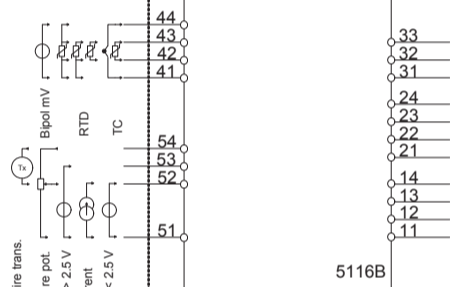
Marking

II (1) G [Ex ia Ga] IIC/IIB/IIA  
II (1) D [Ex ia Da] IIIC

Standards EN 60079-0 : 2018, EN 60079-11 : 2012

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

Non Hazardous Area  
-20 ≤ Ta ≤ 60°C



Supply / Output / Relay  
(terminal 31, 32, 33)  
(terminal 11, 12, 13, 14)  
(terminal 21, 22, 23, 24)

Um: 253 VAC

Terminal	Uo	Io	Po	Lo			Co		
				IIC	IIB	IIA	IIC	IIB	IIA
41, 42, 44, 43	7.5 V	2.2 mA	4.2 mW	1 H	1 H	1 H	6 μF	6 μF	6 μF
51, 52, 53	7.5 V	2.2 mA	4.2 mW	1 H	1 H	1 H	6 μF	6 μF	6 μF
51, 52, 53, 54	28 V	93 mA	650 mW	3 mH	16 mH	31 mH	75 nF	645 nF	2 μF

Terminal (31, 33)

Supply:

AC Voltage 21.6 – 253 VAC  
DC Voltage 19.2 – 300 VDC  
Power max. 3.0 W

Terminal (11, 12, 13, 14)

Analog output:

Current 0/4 – 20 mADC  
Voltage 0 – 10 VDC

Terminal (21, 22) and (23, 24)

Relay 1 and 2:

Voltage max. 250 VAC / VDC  
AC Power max. 500 VA  
AC Current max. 2 AAC  
DC Current @ ≤ 30VDC 2ADC  
DC Current @ ≥ 30VDC 1380 \* U<sup>-2</sup> \* 1.0085<sup>U</sup>

Installation notes

The intrinsically safe circuits are galvanically connected to the communications interface unit.

The communications interface may only be connected temporarily, under the condition that the connectors with terminal numbers 41...44 and 51...54 are disconnected on the 5116B.

When a higher ingress protection than IP20 is required, this has to be achieved by an additional enclosure which is suitable for the applicable environmental conditions.

In type of protection [Ex ia Da] the parameters for intrinsic safety for gas group IIB are applicable

When two or more units are placed next to each other it has to be assured that all the 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.

Each combination of circuits (to terminations 41...44 or to terminations 51...53 or to terminations 51...54) shall be connected via separated cables or if the combinations are in one cable shall be type A or B in accordance with EN60079-14.

Programming of the 5116B module is done by use of Loop Link 5909 outside hazardous area. If the module is installed in hazardous area programming is allowed only if the area is known to be safe.

FM CONTROL DRAWING NO. 5116QF01

Hazardous (Classified) Location

Unclassified Location

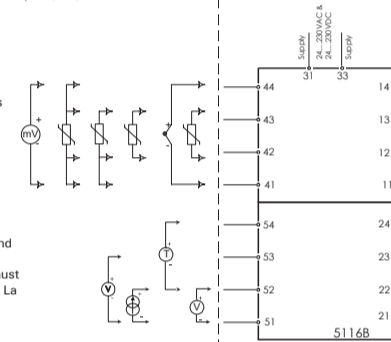
Class I, Division 1, Group A,B,C,D  
Class II, Division 1 Group E, F, G  
Class III, Division 1  
Class I, Zone 0 and 1, Group IIC, IIB, IIA  
Class II, Zone 20 and 21

Hazardous (Classified) Location  
Class I, Division 2, Group A,B,C,D  
Class I, Zone 2, Group IIC, IIB, IIA

Simple Apparatus or  
Intrinsically safe apparatus  
with entity parameters:

Vmax (Uj) ≥ Vt (Uo)  
Imax (Ij) ≥ 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



Terminal	Voc (V)	Isc (mA)	Po (mW)	La (mH)			Ca (μF)		
				A,B	C,E	D,F,G	A,B	C,E	D,F,G
41, 42, 43, 44	7.5	2.2	4.2	1000	1000	1000	6	36	445
51, 52, 53	7.5	2.2	4.2	1000	1000	1000	6	36	445
51, 52, 53, 54	28	93.0	650	3	16	31	0.075	0.645	2

Installation notes:

- 1) The maximum non hazardous location voltage is 250Vac/dc.
- 2) The installation shall be in accordance with the National Electrical Code NFPA 70, Articles 504 and 505.
- 3) 5116B is galvanic isolated and does not require grounding
- 4) For Installation in Div 2 or Zone 2 the 5116B must be installed in an enclosure according to ANSI/ISA SB2.
- 5) Install in Pollution degree 2 or better
- 6) Use 60 / 75 °C Copper Conductors with Wire Size AWG: (26 – 14).
- 7) Warning: Substitution of components may impair intrinsic safety.

Rev. AA 2005-07-20