

# CERTIFICATE

## (1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 08ATEX0023 X** Issue Number: 4

(4) Product: **Field Display Type RIA14 and Type RIA16.**

(5) Manufacturer: **Endress+Hauser Wetzler GmbH+Co. KG**

(6) Address: **Obere Wank 1, 87484 Nesselwang, Germany**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/KEM/ExTR10.0013/01.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0 : 2018**

**EN 60079-11 : 2012**

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



**II 1(2) G Ex ib [ia Ga] IIC T6...T4 Gb**

Date of certification: 2 December 2021

DEKRA Certification B.V.

R. Schuller  
Certification Manager



(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 08ATEX0023 X**

Issue No. 4

(15) **Description**

The Field display Type RIA14 and Type RIA16 displays the value that is derived from the supply/input signal, and it also provides an open collector output signal.

The equipment consists of an enclosure including electronic circuits, a terminal board and a display.

For more information see Annex 1 to Report No. NL/KEM/ExTR10.0013/01.

**Installation instructions**

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/KEM/ExTR10.0013/01.

(17) **Specific conditions of use**

When the enclosure is provided with a non-conductive coating, electrostatic charges on the equipment enclosure shall be avoided. For more details see safety instructions.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/KEM/ExTR10.0013/01.

(20) **Certificate history**

Issue 1 - 211159900	initial certificate
Issue 2 - 212401500	update to the latest standards
Issue 3 - 212401500	update to the latest standards
Issue 4 - 225648900	update to the latest standards, X-conditions changed, minor constructional changes

**Thermal data**

Ambient temperature range for type of protection Ex i:	-40 °C to +50 °C for T6, -40 °C to +60 °C for T5, -40 °C to +85 °C for T4.
Ambient temperature range for type of protection Ex db:	-40 °C to +55 °C for T6, -40 °C to +70 °C for T5, -40 °C to +80 °C for T4,
Ambient temperature range for type of protection Ex tb:	-40 °C to +80 °C for T110 °C.

**Electrical data**

For Field Displays in type of protection Ex tb and Ex db:  
U max = 35 Vdc; P max = 3 W

For Field Displays in type of protection Ex-i:

Supply/input circuit (terminals +, - and 1):

In type of protection intrinsic safety Ex ib IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 30 \text{ V}$ ;  $I_i = 100 \text{ mA}$ ;  $P_i = 750 \text{ mW}$ ;  $C_i = 15,2 \text{ nF}$ ;  $L_i = 0 \text{ mH}$ .

Open Collector output circuit (terminals 2 and 3)

In type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 30 \text{ V}$ ;  $I_i = 100 \text{ mA}$ ;  $P_i = 375 \text{ mW}$ ;  $C_i = 0 \text{ nF}$ ;  $L_i = 0 \text{ mH}$ .

The intrinsically safe Supply/input circuit and the Open Collector output circuit are infallibly galvanically isolated from each other.

Type designation

Series No      Suffix Code       
**RIA14-** **aabcddeeffgghhijj**

Designation	Explanation	Value	Explanation
aa	Approval	BA	ATEX II2(1)G Ex ib [ia Ga] IIC T6 Gb
		BD	ATEX II2G Ex db IIC T6 Gb
		BF	ATEX II2G Ex tb IIIC Db
		IB	IECEX Ex ib [ia Ga] IIC T6 Gb
		ID	IECEX Ex db IIC T6 Gb
		IF	IECEX Ex tb IIIC Db
b	Housing	3	Field, Alu die cast
		4	Field, 316L
		9	Combination of 3 or 4 + Non-conductive varnish
c	Cable Entry	B	NPT1/2 female thread
		C	M20 female thread
		D	G1/2 female thread (Excluded for option BD and ID)
dd	Accessory Mounted	/	Not relevant for Explosion Safety
ee	Calibration	/	Not relevant for Explosion Safety
ff	Service	/	Not relevant for Explosion Safety
gg	Additional Approval	/	Not relevant for Explosion Safety
hh	Accessory enclosed	/	Not relevant for Explosion Safety
ii	Test, Certificate	/	Not relevant for Explosion Safety
jj	Marking	/	Not relevant for Explosion Safety

Series No      Suffix Code       
**RIA16-** **aabcddeeffgghhijj**

Designation	Explanation	Value	Explanation
aa	Approval	BA	ATEX II 2(1) G Ex ib [ia Ga] IIC T6 Gb
		IB	IECEX Ex ib [ia Ga] IIC T6 Gb
b	Housing	2	Alu
		9	Combination of 2 + Non-conductive varnish
c	Cable Entry	/	Not relevant for Explosion Safety
dd	Accessory Mounted	/	Not relevant for Explosion Safety
ee	Calibration	/	Not relevant for Explosion Safety
ff	Service	/	Not relevant for Explosion Safety
gg	Additional Approval	/	Not relevant for Explosion Safety
hh	Accessory enclosed	/	Not relevant for Explosion Safety
ii	Test, Certificate	/	Not relevant for Explosion Safety
jj	Marking	/	Not relevant for Explosion Safety