

CERTIFICATE OF CONFORMITY



- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM16US0317
- Equipment:** RIA15 and ORIA15 Process Display
(Type Reference and Name) Process Display
- Name of Listing Company:** Endress+Hauser Wetzer GmbH+Co KG
- Address of Listing Company:** Obere Wank 1
D87484 Nesselwang
Germany
- The examination and test results are recorded in confidential report number:

3048802 dated 16th September 2013
- FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2011, FM Class 3610:2010, FM Class 3611:2004, FM Class 3810:2005, ANSI/ISA 61010-1:2004, ANSI/ISA 60079-0:2009, ANSI/UL 60079-11:2011, ANSI/NEMA 250:2003, ANSI/IEC 60529:2004
- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
- Equipment Ratings:**

Intrinsically Safe for Class I, Division 1, Groups A, B, C, and D; Intrinsically Safe for Class I, Zone 1 AEx ib IIC T6, Nonincendive for Class I, Division 2, Groups A, B, C, and D hazardous (classified) locations, indoors and outdoors (Type 4X, IP65/66/67) with an ambient temperature rating of -40°C to +60°C.

Certificate issued by:

J. E. Marquedant
Manager, Electrical Systems

27 January 2017

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC, 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
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SCHEDULE



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11. The marking of the equipment shall include:

Intrinsically Safe for Class I, Division 1, Groups A, B, C, D; T6 Ta = -40°C to +60°C; Entity Class I, Zone 1, AEx ib IIC; T6 Ta = -40°C to +60°C; Entity NonIncendive for Class I, Division 2, Groups A, B, C, D; T6 Ta = -40°C to +60°C; NIFW Type 4X, IP65/66/67

12. **Description of Equipment:**

General - The Models RIA15 and ORIA15 Displays are used for measuring and displaying currents. The process display is loop powered and communicates via a 4 to 20mA circuit. The Type ORIA15 is identical to RIA15 in which it is the neutral variant of RIA15.

Construction - The Models RIA15 and ORIA15 Displays are mounted in an aluminium panel mount enclosure (96x48x41mm), aluminum field housing enclosure (130x80x55mm), or a plastic field housing enclosure (131x81.5x55.5mm). Each enclosure can accommodate 2 cable glands m16, NPT1/2, and M20.

Ratings - The Model RIA15 and ORIA15 Process Display operate with the following parameters:

Entity Parameters: per Control Drawing 10000005542 (XA01097K/09/EN)

$U_i \leq 30Vdc$; $I_i \leq 200mA$; $P_i \leq 900mW$; $C_i = 0$; $L_i = 35\mu H$

Nonincendive Field Wiring Parameters: per Control Drawing 10000005542 (XA01097K/09/EN)

$U_i \leq 30Vdc$; $P_i \leq 900mW$; $C_i = 0$; $L_i = 35\mu H$

The transmitters are rated for use in an ambient temperature range of -40°C to +60°C.

RIA15-abcdefghi Process Display

ORIA15-abcdefghi Process Display

IS / I / 1 / ABCD / T6; -40°C < Ta < +60°C; 10000005542 (XA01097K/09/EN); Entity;

I / 1 / AEx ib IIC T6; -40°C < Ta < +60°C; 10000005542 (XA01097K/09/EN); Entity;

NI / I / 2 / ABCD / T6; -40°C < Ta < +60°C; 10000005542 (XA01097K/09/EN); NIFW;

IP65, IP66, IP67, Type 4X

a	Approval	F1 (FM IS, NI I/1,2/ABCD T6)
b	Housing	A (IP65 panel 96x48x41mm); B(IP66/67 field housing Alu.130x80x55), C(IP66/67 field housing plastic 131x81,5x55,5mm)
c	Input	1 (4..20mA current signal); 2 (4..20mA current signal + HART)
d	Calibration:	F1 (Works calibration certificate)
e	Service:	H7 (Customized pre-configured HART +4...20mA) H8 (Customized pre-configured 4...20mA)
f	Test, Certificate	KJ (SIL interference freeness) *Not FM Approvals Verified
g	Additional Approval:	LE (GL marine certificate)

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h	Accessory Mounted:	NA (2x cable gland M16); NB (2x adapter M16 on NPT1/2); NC (2x adapter M16 on M20)
i	Accessory Enclosed:	PA (Blind plug M16); PB (Mounting kit wall/pipe 316L for field housing); PC (Weather protection cover); PD (HART communication resistor Ex)

13. **Specific Conditions of Use:**

None

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
16 th September 2013	Original Issue.
17 th October 2016	<u>Supplement 3:</u> Report Reference: – RR206622 dated 17 th October 2016 Description of the Change: 1) Updated wording on Control Drawing 1000005542 2) Corrected certificate error (Removed HART Modem Terminal Parameters) 3) Updated certificate to new format.
27 th January 2017	<u>Supplement 4:</u> Report Reference: – RR208137 dated 27 th January 2017 Description of the Change: 1) Clarified marking and installation drawings. The product cannot be installed in Zone 0.

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