CERTIFICATE OF CONFORMITY



- 1. HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS
- 2. Certificate No:

4.

3. Equipment: (Type Reference and Name) FM17US0354X

Model ACT350xx Analog Transmitters

Model ACT350xx POWERCELL Transmitters

Name of Listing Company:

5. Address of Listing Company:

Im Langacher 44 Greifensee, CH-8606 Switzerland

Mettler-Toledo GmbH

6. The examination and test results are recorded in confidential report number:

3061820 dated 4th October 2018

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2018, FM Class 3611:2018, ANSI/ISA 12.12.01:2017, FM Class 3810:2018, ANSI/ISA 61010-1:2012

- 8. 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.
- 9. 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.
- 10. Equipment Ratings:

Model ACT350xx Analog Transmitters

Associated Non-Incendive for Class I, II, III, Division 2, Groups A, B, C, D, F and G using NIFW parameters for hazardous (classified) locations with an ambient temperature rating of -10°C to +40°C. Associated Non-Incendive for Zone 2, IIC using NIFW parameters for hazardous (classified) locations with an ambient

Certificate issued by:

Marguerah

J ∉ E. Marquedant VP, Manager - Electrical Systems 4 September 2019 Date

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

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FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: <u>information@fmapprovals.com</u> <u>www.fmapprovals.com</u>

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temperature rating of -10°C to +40°C using NIFW parameters. Associated Non-Incendive for Zone 22 IIIB for hazardous (classified) locations with an ambient temperature rating of -10°C to +40°C.

See Control Drawing 30315298 for NIFW parameters

Model ACT350xx POWERCELL Transmitters

Associated Non-Incendive for Class I, II, III Division 2, Groups C, D, F and G using NIFW parameters for hazardous (classified) locations with an ambient temperature rating of -10°C to +40°C. Associated Non-Incendive for Zone 2, IIB using NIFW parameters for hazardous (classified) locations with an ambient temperature rating of -10°C to +40°C using NIFW parameters. Associated Non-Incendive for Zone 22 IIIB for hazardous (classified) locations with an ambient temperature rating of -10°C to +40°C. See Control Drawing 30369059 for NIFW parameters.

See Control Drawing 30369059 for NIFW parameters

11. The marking of the equipment shall include:

Model ACT350xx Analog Transmitters

ANI, Class I, II, III Division 2, Groups A, B, C, D, F and G; NIFW.

Zone 2, IIC; NIFW.

Zone 22 IIIB; NIFW.

 $Ta = -10^{\circ}C$ to $+40^{\circ}C$.

See Control Drawing 30315298 for NIFW parameters

Model ACT350xx POWERCELL Transmitters

ANI, Class I, II, III Division 2, Groups C, D, F and G; NIFW.

Zone 2, IIB; NIFW.

Zone 22 IIIB; NIFW.

 $Ta = -10^{\circ}C$ to $+40^{\circ}C$.

See Control Drawing 30369059 for NIFW parameters

12. Description of Equipment:

Any variant of ACT350xx Transmitter includes a main board, a display board with OLED, an Analog load cell interface board with Power Supply or an POWERCELL load cell interface board with Power Supply and a keypad. There are two versions of the main board that provides two Fieldbus communication physical interfaces. With these two physical interfaces, three Fieldbus protocols can be supported: PROFIBUS DP, PROFINET and EtherNet/IP. The RS232 port is for Configuration/Service and manufacturing purposes. No external device will be connected to ACT350xx Transmitter via this serial port during normal operation. In addition, it provides DI/O interface with three discrete inputs and five solid state discrete outputs. The inputs and outputs are passive (voltage supplied by an external source).

Operation Temperature Ranges:

The ambient operating temperature range of the ACT350xxx Transmitter is -10°C to 40°C.

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Electrical data:

Model ACT350xx Analog Transmitters

Vmax = 30V NIFW Output Parameters: Vo= 5.16V, Isc = 221mA, Ca= 1uF, La = 0.6mH

Model ACT350xx POWERCELL Transmitters

Vmax = 12V

NIFW Output Parameters: LC_Vout&LC_GND Vo= 12.6V, Isc = 1187mA, Ca= 10uF, La = 150µH

LC_CANbus-Talking Vo= 5.16V, lsc = 200mA, Ca= 325uF, La = 0.4mH

Model Code Options:

Model ACT350xx DIN b (ACT350xx Analog Transmitters) b= PBDP(PROFIBUS PLC), PRNT(PROFINET PLC) or ETIP(EtherNet IP PLC)

Model ACT350xx POWERCELL DIN b (ACT350xx POWERCELL Transmitters) b= PBDP(PROFIBUS PLC), PRNT(PROFINET PLC) or ETIP(EtherNet IP PLC)

13. Specific Conditions of Use:

To prevent ignition of flammable or combustible atmosphere, disconnect power before servicing.

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:

Description

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Date





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4 th October 2018	Original Issue.
4 th September 2019	Supplement 1: Report Reference: – RR220299 dated 4 th September 2019. Description of the Change: 1) Corrected Error. 150mH changed to 150uH
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