

CERTIFICATE OF CONFORMITY




- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM19US0025X
- Equipment:**
(Type Reference and Name) 6080 Series Instrument Enclosure
7080RRV Process Indicator
5080 Series Terminal Assembly
- Name of Listing Company:** International Metal Engineering Pte Ltd
- Address of Listing Company:** Blk 13 Toa Payoh Lorong 8
#06-05 Braddell Tech Park
Singapore 319261
- The examination and test results are recorded in confidential report number:

PR450889 dated 27th March 2019
- 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 3615:2018, FM Class 3810:2018,
ANSI/NEMA 250:2014, ANSI/IEC 60529:2004, ANSI/ISA-61010-1:2012
- 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:**

Explosionproof for Class I, Division 1, Groups B, C and D; Dust-ignitionproof for Class II/III, Division 1, Groups E, F and G, hazardous (classified) locations, indoors and outdoors (Type 4X, IP66) with an ambient temperature rating of -40°C to +85°C for the 6080 Series and -40°C to +75°C for the 7080RRV and 5080 Series.

Certificate issued by:



J. E. Marquedant
VP, Manager - Electrical Systems

27 March 2019

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

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SCHEDULE



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11. The marking of the equipment shall include:

6080 Series Instrument Enclosure:

Class I Division 1, Groups B, C, D; Ta = -40°C to +85°C; Type 4X, IP66
Class II/III, Division 1, Groups E, F, G; Ta = -40°C to +85°C; Type 4X, IP66

7080RRV and 5080 Series Terminal Assembly:

Class I Division 1, Groups B, C, D; T6 Ta = -40°C to +75°C; Type 4X, IP66
Class II/III, Division 1, Groups E, F, G; T6 Ta = -40°C to +75°C; Type 4X, IP66

12. **Description of Equipment:**

The 6080 Series Instrument Enclosure is a cylindrical, single compartment enclosure consisting of a base and threaded cover (with or without window) with an approximate internal volume of 230 cm³. The enclosure is constructed of aluminium or stainless steel and is available with up to four entries in various sizes. The 6080 Series Instrument Enclosure is nearly identical to the 7080 Series Instrument Enclosure which is FM Approved under FM Approvals Project ID 3028184 as Explosionproof for Class I, Division 1, Groups B, C and D; Dust-Ignitionproof for Class II/III, Division 1, Groups E, F and G hazardous (classified) locations, indoors and outdoors (Type 4X, IP66). The 6080 Series Instrument Enclosure adds an option for 1-inch NPT entries and has a slightly modified base. When used on the 7080RRV Process Indicator, the base of the 6080 Instrument Enclosure is further modified with a small rectangular void in the enclosure base to accommodate the electronics. All other aspects of the 6080 Series Instrument Enclosure are identical to the FM Approved 7080 Series Instrument Enclosure.

6080a-b-c-d. Instrument Enclosure.

a = Model AM, SM, TM or WM.
b = Conduit size 01 or 02.
c = Entries description 00, 01, 02, 03 or 04.
d = Conduit entry 05, 07, 18, 22, 25 or 26.

The 7080RRV Process Indicator can be used for various process measurement applications. The assembly operates on 24 Vdc, 4-20 mA current loop and can display the process value while providing user configured control outputs. The 7080RRV electronics are mounted inside a 6080 Series Instrument Enclosure.

7080RRV-a-b. Process Indicator.

a = Entries description 00, 01, 02, 03 or 04.
b = Conduit entry 05, 07, 18, 22 or 25.

The 5080 Series Terminal Assembly is a 6080 Series Instrument Enclosure with two to six terminals mounted inside. The terminals can be either Model MBK 3/E-Z manufactured by Phoenix Contact and are UL certified under E60425 or Model AKZ 2.5 manufactured by Weidmuller Interface and are UL certified under E60693. The 5080 Series is rated for 250 V, 20A.

5080a-b-c-d-e. Terminal Assembly.

a = Model AM, SM, TM or WM.
b = Conduit size 01 or 02.
c = Entries description 00, 01, 02, 03 or 04.
d = Conduit entry 05, 07, 18, 22, 25 or 26.
e = Number of terminals 02, 03, 04 or 06.

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13. Specific Conditions of Use:

6080 Series Instrument Enclosure:

1. The enclosure service temperature range is -40°C to +85°C. The user/installer shall take the necessary precautions to ensure that the enclosure service temperature limits are not exceeded in the end use application.
2. A conduit seal is required within 18 inches of the enclosure. However, the enclosure must be sealed at the enclosure wall when supplied with 1-inch NPT entries.

7080RRV Process Indicator:

A conduit seal is required within 18 inches of the enclosure. However, the enclosure must be sealed at the enclosure wall when supplied with 1-inch NPT entries.

5080 Series Terminal Assembly:

1. Voltage and current supplied to the device shall not exceed 250 V, 20 A.
2. A conduit seal is required within 18 inches of the enclosure. However, the enclosure must be sealed at the enclosure wall when supplied with 1-inch NPT entries.

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
27 th March 2019	Original Issue.

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