

Certificate of Compliance

Certificate: 2700364 Master Contract: 178267

Project: 80074392 **Date Issued:** 2022-01-21

Issued To: Hawke International A Division of Hubbell Limited

Oxford St W

Ashton-Under-Lyne, Manchester, OL7 0NA

United Kingdom

Attention: Simukai Mashanga

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Issued by: Jimmy Solanki Jimmy Solanki



PRODUCTS

CLASS - C441803 - CONDUIT FITTINGS Fittings - For Hazardous Locations

CLASS - C441883 - CONDUIT FITTINGS Fittings - For Hazardous Locations - Certified to US Standards

Markings for Canada (NPT Thread Type)

Ex eb IIC Gb; Ex tb IIIC Db;

Class II Groups E,F, and G; Class III;

IP66



Markings for Canada (NPSM Thread Type)

Ex eb IIC Gb;
Ex db IIC Gb;
Ex tb IIIC Db;
Class II Groups E,F, and G; Class III;
IP66

Markings for US (NPT Thread Type)

Class I, Zone 1, AEx eb IIC Gb Zone 21, AEx tb IIIC Db; Class II Groups E,F, and G; Class III IP66

Markings for US (NPSM Thread Type)

Class I, Zone 1, AEx eb IIC Gb Zone 21, AEx tb IIIC Db; Class II Groups E,F, and G; Class III IP66

Markings for US and Canada (Metric Thread Type)

Ex db/Ex eb IIC Gb; Ex tb IIIC Db; Class I, Zone 1, AEx db/AEx eb IIC Gb Zone 21, AEx tb IIIC Db; Class II Groups E,F, and G; Class III IP66

Type 487 Range of Stopping Plugs, with metric thread; M16 to M130, or North American Trade sizes ½" to 6" NPT and NPSM for Brass, Stainless Steel and aluminium material. M16 to M100, or North American Trade sizes ½" to 4" NPT and NPSM for alternate aluminium 6061-T6 Material.

Condition of Acceptability:

- 1. Stopping plugs without the machined groove and not provided with a seal are permitted for Class I, Zone 1, AEx/Ex d applications only and are not permissible for Class I, Zone 1, AEx/Ex e or any Class II or IP 66/67 applications.
- 2. The maximum operating temperature range of the stopping plug when fitted with a nitrile O-ring is -60° C to $+80^{\circ}$ C.
- 3. The maximum operating temperature range of the stopping plug when fitted with a silicone O-ring is -60° C to $+160^{\circ}$ C.
- 4. The maximum operating temperature range of the stopping plug without an O-ring fitted is -60° C to $+200^{\circ}$ C.



- 5. When the stopping plug is fitted in plain holes in increased safety or dust protected enclosures, the sealing face of the enclosure is to be smooth and the hole no larger than 0.7 mm above the major diameter of the male thread on the stopping plug. The stopping plug is to be secured with a locknout and optional locking washer.
- 6. When fitted in parallel threaded holes, the sealing face of the enclosure is to be smooth, the parallel threaded hole perpendicular to the wall of the enclosure and the thread medium fit.
- 7. End user must follow manufacturer's instruction sheets AI 411 (487series).
- 8. Anti-seize spray shall be applied to 'the equipment' manufactured from aluminium.

Ex eb IIC Gb Ex tb IIIC Db; Class I, Zone 1, AEx eb IICGb Zone 21, AEx tb IIIC Db; IP66/67

• Type 375 Range of Stopping Plugs, with metric thread sizes; M16 to M75, Natural black plastic

Condition of Acceptability:

- 1. When the stopping plug is fitted in plain holes in increased safety or dust protected enclosures, the sealing face of the enclosure is to be smooth and the hole no larger than 0.7 mm above the major diameter of the male thread on the stopping plug. The stopping plug is to be secured with a locknut and optional locking washer.
- 2. When fitted in parallel threaded holes, the sealing face of the enclosure is to be smooth, the parallel threaded hole perpendicular to the wall of the enclosure and the thread medium fit.
- 3. End user must follow manufacturer's instruction sheets and D2555(375 series)
- 4. For Series 375 Warning: M50, M63, and M75 stopping are a potential static ignition risk, Clean only with a damp cloth
- 5. End user must follow manufacturer's instruction sheets AI 410

Ex eb IIC Gb; Ex tb IIIC Db; Class 1 Zone 1 AEx eb IIC Gb; Zone 21 AEx tb IIIC Db; IP66

• Type 383 Earth Adaptors with metric thread; M16 to M75, or North American Trade sizes ½" to 3" NPT or NPSM. made from Brass, Nickel plated Brass or Stainless Steel

Operating ambient range: -60°C to +80° C

Nomenclature

383-ab where

a – male thread size

b – female thread size



Condition of Acceptability:

1. End user must follow manufacturer's instruction sheets AI 413

• Type 387 Stopping Plugs with metric thread; M16 to M75, or North American Trade sizes ½" to 3" NPT or NPSM. made from Brass, Nickel plated Brass or Stainless Steel
Ambient range: -60°C to +160° C (when Silicon ring used) see Note 2

Nomenclature

387-a where a – male thread size

Condition of Acceptability:

- End user must follow manufacturer's instruction sheets AI 378.
- Operating range is -60°C to +80°C when Nitrile ring is used.
- **389 Increased safety Breather Drains** with M20 or M25 or North American ½" or ¾" NPT made from Brass, Nickel plated Brass or Stainless Steel Operating ambient range: -60°C to +160° C

Condition of Acceptability:

- 1. End user must follow manufacturer's instruction sheets AI 408
- 2. The Breather Drain Device must only be mounted on the bottom face of an enclosure.
- **385 Increased safety Breather Drains** with M20 or M25 or North American ¾" or 1" NPT made from Nylon

Ambient range: -60°C to +80° C

Condition of Acceptability:

- 1. End user must follow manufacturer's instruction sheets AI 487
- 2. The Breather Drain Device must only be mounted on the bottom face of an enclosure.
- 390 Hex Stopping Plugs with metric thread; M16 to M130, or North American Trade sizes ½" to 6"
 NPT or NPSM. made from Brass, Nickel plated Brass, Aluminum, or Stainless Steel
 Ambient range: -60°C to +160° C

TEMPERATURE RATINGS

 -60° C to + 160° C

with Red silicone (70 IRHD- less than 10% fillers) O-Ring fitted with Silicon O- Ring (EMI Reference S707)



-60°C to + 80°C With Nitrile O- Ring (BS2751 BA70)

Condition of Acceptability:

- 1. End user must follow manufacturer's instruction sheets AI 412.
- 2. Temperature rating -60°C to +200°C when no O-ring fitted. IP 54 only when o-ring removed
- 3. Anti-seize spray shall be applied to 'the equipment' manufactured from aluminium.

Class I, Zone 1, AEx db/Ex db IIC Gb;

• **481 Male to Male & 482 Female to Female Unions** with metric thread; M16 to M75, or North American Trade sizes ½" to 3 "NPT or NPSM threads made from Brass, Nickel plated Brass, Aluminum or Stainless Steel.

Operating ambient range: -60°C to + 80°C

Condition of Acceptability:

- 1. End user must follow manufacturer's instruction sheets AI 407.
- 2. Anti-seize spray shall be applied to 'the equipment' manufactured from Aluminum.

Class I Zone 1 AEx db /Ex db IIC Gb Zone 21 AEx tb/Ex tb IIIC Db; IP66 Or

Class I Zone 1 AEx db/Ex db IIB + H2 Gb see Note 2 below; Zone 21 AEx tb/Ex tb IIIC Db; IP66

489 Flameproof Breather Drain with M20 or M25 or North American½" or ¾" NPT/NPSM made from Brass, Nickel plated Brass, Aluminum (see Note 4), or Stainless Steel
 Operating ambient range: -60°C to +60° C

Condition of Acceptability:

- 1. End user must follow manufacturer's instruction sheets AI 409
- 2. Only parts with SS sintered part may be IIC. Bronze sintered breather are IIB + H2 only
- 3. The Breather Drain Device must only be mounted on the bottom face of an enclosure maximum enclosure volume 2500 cubic cm.
- 4. Aluminum is Group II rated only
- 5. Anti-seize spray shall be applied to 'the equipment' manufactured from Aluminum.



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APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No 0 - 10	General requirements – Canadian electrical code, part II
CAN/CSA 22.2 No. 60079-0:11	Explosive atmospheres –General Requirements
CAN/CSA 22.2 No. 60079-1:16	Explosive atmospheres – Equipment protection by flameproof enclosures "d"
CAN/CSA 22.2 No. 60079-7:16	Explosive atmospheres –Equipment protection by increased safety "e"
CAN/CSA-C22.2 No. 60079-31:12	Explosive atmospheres –Equipment dust ignition protection by enclosure "t"
UL 60079-0 6 th Ed	Explosive atmospheres –General Requirements
UL 60079-1 7 th Ed	Explosive atmospheres – Equipment protection by flameproof enclosures "d"
UL 60079-7 5 th Ed	Explosive atmospheres –Equipment protection by increased safety "e"
UL 60079-31 2 nd Ed	Explosive atmospheres –Equipment dust ignition protection by enclosure "t"
IEC 60529	Degrees of Protection Provided by Enclosures (IP Code) – Edition 2.2
UL 1203 Ed. 5	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations

MARKINGS

The manufacturer is required to apply the following markings:

- · Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.
- "WARNING" Potential electrostatic Hazard, clean only with a damp cloth.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Nameplate adhesive label material approval information:

Not Applicable

The following information shall be etched onto the external face of the product:

- -The CSA Mark(s) that are to be applied to the product;
- -Manufacturer's name or trade mark;
- Model number designation;
- Thread size
- Hazardous Location designation
- cCSAus Monogram.

An assembly guide shall be supplied with each unit, containing the following minimum marking information:

- · Manufacturer's name and address.
- · Model number: As specified in the PRODUCTS section, above.
- · Mounting and installation instructions, including relevant dimensions.

Markings permitted in addition to ratings

Note:

- 1. In accordance with UL60079-0 6th Edition, the following equivalent marking may be added.
- 2. In accordance with C22.2 N0 60079-0:11 mandatory additional marking is permitted
- 3. They shall not be used to replace the certification ratings

Type 487 Range of Stopping Plugs

- · Class I Div. 1* and Div. 2 Groups A, B, C, D; Class II Div. 2 Groups E,F, and G; Class III
- *Note: 1) Class I Div1 marking is allowed for Canada for NPSM and Metric Thread Types
 - 2) Class I Div1 marking is allowed for US for Metric Thread Types

Type 375 Range of Stopping Plugs

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

Type 383 Earth Adaptors

· Class I Division 2, Groups A, B, C, and D; Class II Division 2 Groups E, F, G; Class III

Type 387 Stopping Plugs

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

389 Increased safety Breather Drains

· Class I Division 2, Groups A, B, C, and D; Class II Division 2 Groups E, F, G; Class III

385 Increased safety Breather Drains

· Class I Division 2, Groups A, B, C, and D; Class II Division 2 Groups E, F, G; Class III



390 Hex Stopping Plugs

- · Class I Division 2, Groups A, B, C, and D; Class II Division 2 Groups E, F, G; Class III 481 Male to Male & 482 Female to Female Unions
 - · Class I Division 2 Groups A,B, C, and D

489 Flameproof Breather Drain

Class I Division 1 Groups A, B, C, D (aluminum only)

or

· Class I Division 1 Groups A, B, C, D; Class II Division 1 Groups F,G; Class II Division 2 Groups E, F, G and Class III

or

 Class I Division 1 Groups B, C, D; Class II Division 1 Groups F,G; Class II Division 2 Groups E, F, G and Class III

Notes:			



Supplement to Certificate of Compliance

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
80074392	2022-01-21	Update to cCSAus report # 2700364 (last project 70163398) to add following for flameproof and increased safety protected 487 Series stopping plugs for the addition of the weaker material (6061-T6 Aluminum) for existing metric, NPT and NPSM thread types.
		Add Killark, A Division of Hubbel Inc. (Delaware) located at 2112 Fenton Logistics Park Blvd., Fenton, MO, 63026, USA as an alternate manufacturing location. Assessment of Type 487 Stopping Plugs to UL 1203 and CSA C22.2 No. 25 to maintain Class II, Division 1 rating. Also update report # 2700364 to Edition 5, by copying the edition issued in project 70174499 (August 03, 2018) to the report issued in project 70163398 (March 27, 2018) and calling it Edition 4.
70174499	2018-08-03	Update certificate 2700364 to include the 385 Plastic breather Drain to be rated for Ex eb, Ex tb and Class I Div 2 Class II DIv 2 EFG Class III.
70163398	2018-05-02	Update report 2700364 to expand ratings of existing products to include Class and Div. as applicable and to add 375 series based on submitted information and testing.
70074131	2017-03-31	Update report 2700364 to add various fitting series to North American IEC listing based on submitted documentation
2700364	2014-02-12	Original Certification of Type 487 Range of Stopping Plugs, with metric threads only.