

Certificate of Compliance

Certificate: 2557737 (LR104031) **Master Contract:** 182407

Issued to: Hummel AG

Lise-Meitner-Strasse 2 Denzlingen, 79211

Germany

Attention: Klaus Gehri

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.



Marin Banu

Issued by: Marin Banu, P. Eng.

PRODUCTS

CLASS 4418 05 - CABLE - Hardware - For Hazardous Locations

CLASS 4418 85 - CABLE-Hardware - For Hazardous Locations-Certified to U.S. Standards

CLASS 4418 05 - CABLE - Hardware - For Hazardous Locations

Ex de IIC Gb

Ex ta IIIC Da IP66/68

Class I, Div 2, Groups A, B, C, D; Class II, Div 1 or 2, Groups E, F and G; Encl Type 4, 4X and 6

Cable gland connectors, for use with armored cables, series type EXIOS 20-1, type EXIOS 20-2, type EXIOS 20-3, type EXIOS 25, type EXIOS 32, type EXIOS 40, type EXIOS 50, type EXIOS 63 and type EXIOS 75. IP 66 and IP68.

Notes:

- 1. Permitted temperature range of the cable glands is -60°C to +105°C.
- 2. The ambient temperature of electrical equipment is usually limited to -20° C to $+40^{\circ}$ C. The maximum ambient temperature permitted for these cable glands may be exceeded or fall below as long as the permitted temperature range of the cable glands meets the range -60° C to $+105^{\circ}$ C



Project: 2603166 **Date Issued:** May 3, 2013

3. Cable glands can be used on enclosures of up to 20 bar reference pressure.

4. Cable Glands material may be of brass, nickel-plated brass or stainless steel.

- 5. Cable Glands will be restricted to Hazardous Location Areas stated under the NEC/CEC Part I, Installation Code under WIRING METHOD.
- Cable gland connectors, series type EXIOS BARRIER for use with armored cable and series type EXIOS BARRIER and EXIOS A2F for use with non-armored cables. IP 66 and IP68.

Notes:

- 1. Permitted temperature range of the cable glands is -60°C to +85 °C for series type EXIOS BARRIER and -60°C to +105 °C for series type EXIOS A2F.
- 2. The ambient temperature of electrical equipment is usually limited to -20° C to $+40^{\circ}$ C. The maximum ambient temperature permitted for these cable glands may be exceeded or fall below as long as the permitted temperature range of the cable glands meets the range -60° C to $+85^{\circ}$ C for series type EXIOS BARRIER and -60° C to $+105^{\circ}$ C for series type EXIOS A2F.
- 3. Cable glands can be used on enclosures of up to 20 bar reference pressure.
- 4. Cable Glands material may be of brass, nickel-plated brass or stainless steel.
- 5. Cable Glands will be restricted to Hazardous Location Areas stated under the NEC/CEC Part I, Installation Code under WIRING METHOD.

CLASS 4418 85 - CABLE - Hardware - For Hazardous Locations - US Requirements

Class I, Zone 1, AEx de IIC Gb

Zone 20, AEx ta IIIC, T125°C; Da

Class I, Div 2, Groups A, B, C, D; Class II, Div 1 or 2, Groups E, F and G; Encl Type 4, 4X and 6

Cable gland connectors, for use with armored cables, series type EXIOS 20-1, type EXIOS 20-2, type EXIOS 20-3, type EXIOS 25, type EXIOS 32, type EXIOS 40, type EXIOS 50, type EXIOS 63 and type EXIOS 75. IP 66 and IP68.

Notes:

1. Permitted temperature range of the cable glands is -60°C to +105°C.



Project: 2603166 **Date Issued:** May 3, 2013

2. The ambient temperature of electrical equipment is usually limited to -20° C to $+40^{\circ}$ C. The maximum ambient temperature permitted for these cable glands may be exceeded or fall below as long as the permitted temperature range of the cable glands meets the range -60° C to $+105^{\circ}$ C

- 3. Cable glands can be used on enclosures of up to 20 bar reference pressure.
- 4. Cable Glands material may be of brass, nickel-plated brass or stainless steel.
- 5. Cable Glands will be restricted to Hazardous Location Areas stated under the NEC/CEC Part I, Installation Code under WIRING METHOD.
- Cable gland connectors, series type EXIOS BARRIER for use with armored cable and series type EXIOS BARRIER and EXIOS A2F for use with non-armored cables. IP 66 and IP68.

Notes:

- 1. Permitted temperature range of the cable glands is -60°C to +85 °C for series type EXIOS BARRIER and -60°C to +105 °C for series type EXIOS A2F.
- 2. The ambient temperature of electrical equipment is usually limited to -20° C to $+40^{\circ}$ C. The maximum ambient temperature permitted for these cable glands may be exceeded or fall below as long as the permitted temperature range of the cable glands meets the range -60° C to $+85^{\circ}$ C for series type EXIOS BARRIER and -60° C to $+105^{\circ}$ C for series type EXIOS A2F.
- 3. Cable glands can be used on enclosures of up to 20 bar reference pressure.
- 4. Cable Glands material may be of brass, nickel-plated brass or stainless steel.
- 5. Cable Glands will be restricted to Hazardous Location Areas stated under the NEC/CEC Part I, Installation Code under WIRING METHOD.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No 0-10 - General Requirements

CAN/CSA-C22.2 No 18.3-04 - Outlet Boxes, Conduit Boxes, and Fittings

CAN/CSA-C22.2 No.174-M1984 (R 2003) - Cables and Cable Glands for Use in Hazardous Locations

CAN/CSA-C22.2 No.94-M91 - Special Purpose Enclosures

CSA - C22.2 No. 213-M1987 (R 2004) - Non-incendive Electrical Equipment for Use in Class I,

Division 2 Hazardous Locations

CSA - C22.2 No. 25-1966 (R 2004) - Enclosures for Use in Class II, Groups E, F and G Hazardous



Project: 2603166 **Date Issued:** May 3, 2013

	Locations
CAN/CSA-C22.2 No. 60079-0:11	- Electrical apparatus for explosive gas atmospheres - Part 0:
	General requirements
CAN/CSA-C22.2 No. 60079-1:11	- Explosive atmospheres — Part 1: Equipment protection by
	Flameproof enclosures "d"
CAN/CSA-C22.2 No. 60079-7:12	- Explosive atmospheres - Part 7: Equipment
	protection by increased safety "e"
CAN/CSA-C22.2 No. 60079-31:12	- Explosive atmospheres - Part 31: Equipment dust
	ignition protection by enclosure "t"
ANSI/UL 514B, Edition 5	- Conduit, Tubing and Cable Fittings
UL 886, 10th Ed.,	- Outlet Boxes and Fitings For Use In Hazardous (Classified)
	Locations
UL 2225, 2nd Ed.,	- Cables and Cable-Fittings For Use In Hazardous (Classified)
	Locations
ISA 12.12.01: 2007	- Nonincendive Electrical Equipment for Use in Class I and II,
	Division 2 and Class III, Divisions 1 and 2
Std. UL 1203 4th ed	- Explosion-Proof and Dust-Ignition-Proof Electrical Equipment
	for Use in Hazardous (Classified) Locations
ANSI/UL 50 Edition 11	- Enclosures for Electrical Equipment
ANSI/UL 60079-0 (5th Ed. 2009)	- Explosive Atmospheres – Part 0: Equipment - General
	Requirements
ANSI/UL 60079-1 (6th Ed. 2009)	- Explosive Atmospheres – Part 1: Equipment Protection by
	Flameproof Enclosures "d"
ANSI/UL 60079-7:2008	- Electrical Apparatus for Explosive Gas Atmospheres - Part 7: Increased safety "e"



Project: 2603166 **Date Issued:** May 3, 2013

ANSI/UL 60079-31:2009

- Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

MARKINGS

- Manufacturer name or trade mark
- Catalogue number designation (provided on packaging or on the product)
- Hazardous Location designation (may be optionally marked with the addition of Class I, Zone 1, Groups IIC, IIB, IIA)
- Type
- Trade size
- CSA Monogram (provided on packaging or on the product)
- CSA12.2557737X (provided on packaging or on the product)