

HLP-EX-20A-2P3W-24VDC

Hazardous Location Plug, 2-Pole 3-Wire, 20 Amp, 24V DC, C1D2 ATEX IEC-Ex Rated

Product ID: 272824



Image: HLP-EX-20A-2P3W-24VDC

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

HLP-EX-20A-2P3W-24VDC Hazardous Location Rated Plug

Listing: NRTL Listed for North America, Europe, Brazil, Korea & International Locations

Device Series: IEC 60309 (International Standard)

Device Type: Hazardous Location Plug

Dimensions: 6.83"-L x 3.99"-W x 3.99"-H

Weight: -

Amperage Rating: 20A

Voltage: 24V DC

Frequency: 50/60 Hz

Phase: Single Phase

Configuration: 2P3W

of Poles: 2-Pole

of Wires: 3-Wire

Max Voltage Rating: 30V DC

Clock Hour: 10H

Color Code: White

Cord Range: .350 - .860

of Operations: > 5000 connects/disconnects under load, at full rated current and voltage

Minimum Withdrawal Force: 5lbs

Temperature Rise: Max +30°C at full-rated current after 50 cycles of OL at 150% rated current

Operating Temperature Range: -55°C to +65°C

Waterproof Rating: IP65, NEMA 4X

Shock Resistance: IK09

Flammability: V-2 Rated

Cable Secureness: "Force: 30lb; Torque: 0.4 ft-lb; Max Disp: <= 3/32"

Seals: Neoprene

Ratings/Approvals

NEC, CEC, ATEX, IEC Ex Rated

Class I, Division 2, Groups A, B, C, D

Class I, Zone 1 & 2, Groups IIC, IIB, IIA

Class II, Divisions 1 & 2, Groups E, F, G

Class III, Divisions 1 & 2

Approved for Zone 1 and 2

Approved for Zone 21 and 22

Ex db eb IIC T6 Gb

Ex tb IIIC T80 °C Db

Ex II 2 G Ex db eb IIC T6 Gb

Ex II 2 D Ex tb IIIC T80 °C Db

NRTL Certified to IEC 60079

NRTL Certified to EN 60079

CE Certified

RoHS Certified

NEMA 3, 4, 4X

IP66 Weatherproof

Compatible with IEC 60309 Compliant Products

Certified for Full Load Interrupting



Material, Housing Body: Polyamide
Material, Housing Cover: Polyamide
Material, Contacts: Brass
Material, Contact Carrier: Nylon
Material, External Screws: Acid-Proof Stainless Steel
Material, Internal Screws: Stainless Steel
Material, Phase/Ground Sleeves: Brass
Material, Sleeve Spring: Stainless Steel
Material, Terminal Screws: Stainless Steel
Shipping Dimensions: -
Shipping Weight: -

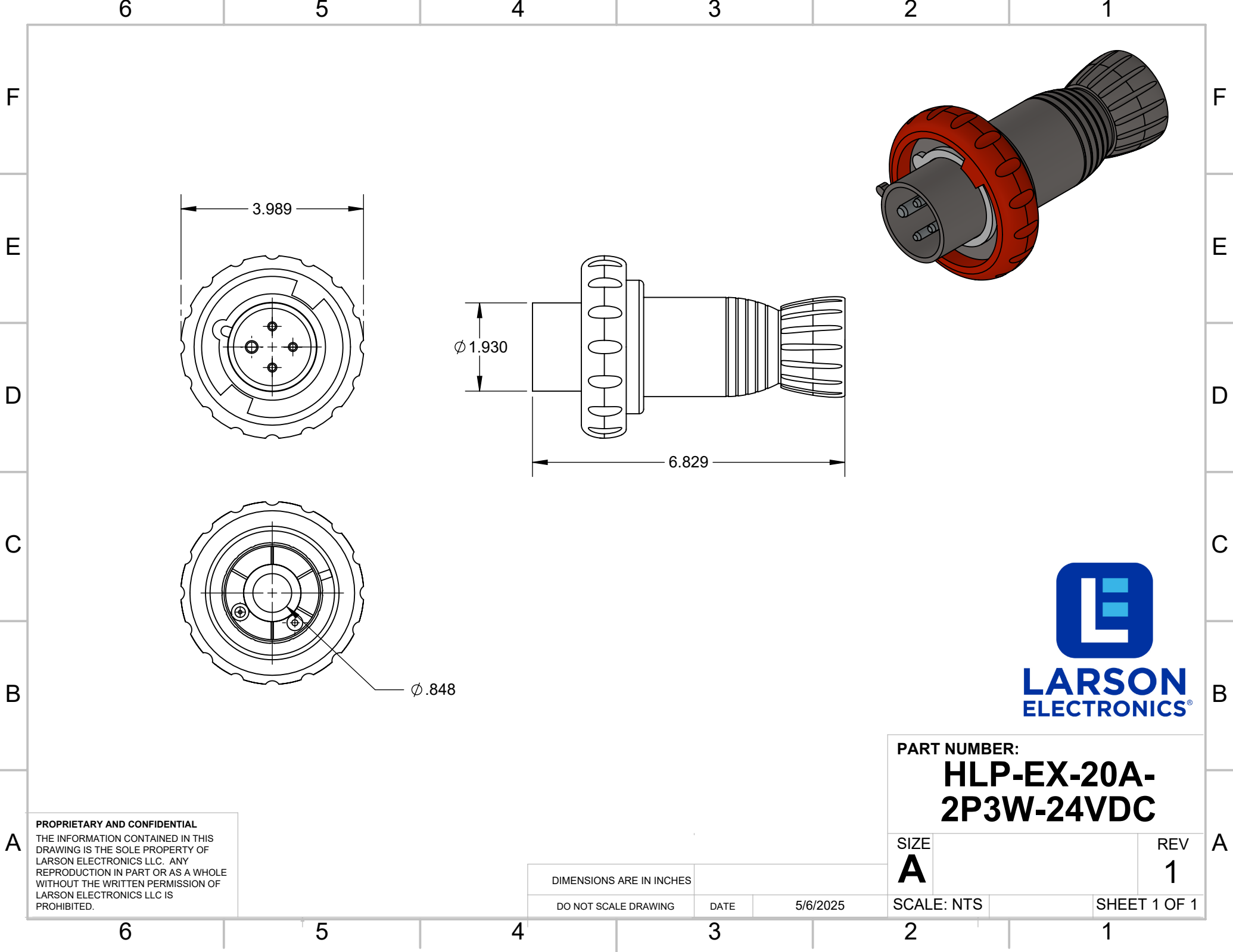
Special Orders - Special Requirements

Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-765-7664
E-mail: sales@larsonelectronics.com

The Larson Electronics HLP-EX-20A-2P3W-24VDC Hazardous Location Pin and Sleeve Plug is a Class 1, Division 2 and Class 2, Divisions 1 & 2 rated cord cap approved for use in hazardous environments where flammable or explosion gases, vapors, or dusts stand the potential to exist and where flammable dusts, fibers, or flyings exist. This 2-pole, 3-wire plug is designed to provide a secure connection for electrical equipment within the hazardous location. This plug is certified for NEC, CEC, ATEX, and IEC Ex rated hazardous locations.

This hazardous location 2-pole 3-wire pin and sleeve plug is compatible with our HLO-EX-20A-2P3W-24V hazardous location power receptacles. This plug is rated for 20 amps and is suitable for Class I, Division 2, Class II, Divisions 1 & 2, Zones 1 & 2, and Zones 21 & 22 locations. With NEMA Type 3, 4, 4x and IP66 ratings, this plug is suitable for outdoor, marine and wet location. This hazardous location plug features polyamide construction, a 20 amp current rating, and is operates on 24V DC. This plug is coded white to indicate its voltage rating and ground pin position of 10. The color coding of these units makes it impossible to connect different voltages and current ratings, to ensure safe power connection.

Suggested Applications: Chemical and pharmaceutical manufacturing, petrochemical operations, offshore applications, coal mining and other refinery or industrial operations.



PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS
DRAWING IS THE SOLE PROPERTY OF
LARSON ELECTRONICS LLC. ANY
REPRODUCTION IN PART OR AS A WHOLE
WITHOUT THE WRITTEN PERMISSION OF
LARSON ELECTRONICS LLC IS
PROHIBITED.

DIMENSIONS ARE IN INCHES			
DO NOT SCALE DRAWING	DATE	5/6/2025	
SCALE: NTS		SHEET 1 OF 1	





Certificate of Conformity

Manufacturer: Larson Electronics LLC
Address: 9419 US-HWY 175
Kemp, Texas 75143

Declare the following equipment conforms to the standard(s) as listed:

Model: HLP-EX, HLO-EX Series
Description: Hazardous Location Plugs and Receptacles

Evaluated Listings:

FM: 0R6A2.AX – NEC / United States standards

CSA: 1729614 (LR 99480) – CEC / Canada standards

PTB: PTB 03 ATEX 1227 – ATEX standards

PTB: IECEX PTB 05.0023 – IEC Ex standards

RACS: 200410799_E2004000983 – Emirates Conformity Assessment Scheme (ECAS) standards

UL: ULBR130267X – Brazilian standards

KGS: 18GA4BO0437X-0439X – Korean standards

The HLP-EX, HLO-EX Series is certified to NEC, CEC, ATEX, and IEC Ex standards for hazardous locations.

The HLP-EX, HLO-EX Series is comprised of a RStalh 8570/8571 series device. This may include custom mounting, equipped accessories, contact blocks, or factory wiring assemblies. This assembly is built to NEC, CEC, ATEX, and IEC standards for hazardous locations.

Signed for and on behalf of: Larson Electronics, LLC
Place of issue: Kemp, TX

Signature: *James Thomas*

Name: James Thomas
Position: Operations Manager

FM Approvals
1151 Boston Providence Turnpike
P.O. Box 9102 Norwood, MA 02062 USA
T: 781 762 4300 F: 781-762-9375 www.fmaprovals.com

CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

8570/22-a. Plug.

8570/21-a. Receptacle.

85 708 05 76 0. Optional Auxiliary contact block NC

85 708 06 76 0. Optional Auxiliary contact block NO

85 708 07 76 0. Optional Auxiliary contact block NC for I.S. circuit

85 708 08 76 0. Optional Auxiliary contact block NO for I.S. circuit

S / I / 2 / ABCD / T6 Ta = -50 °C to +55 °C; DIP / II,III / 1 / EFG / T6 Ta = -50 °C to +55 °C;

I / 1 / AEx d e IIC / T6 Ta = -50 °C to +55 °C

a = Configuration 302, 304, 305, 306, 307, 309, 404, 405, 406, 407, 409, 411, 412, 504, 505, 506, 507, 509, and 511.

8570/5-a. Component Flange Receptacle.

85 708 05 76 0. Optional Auxiliary contact block NC

85 708 06 76 0. Optional Auxiliary contact block NO

85 708 07 76 0. Optional Auxiliary contact block NC for I.S. circuit

85 708 08 76 0. Optional Auxiliary contact block NO for I.S. circuit

S / I / 2 / ABCD / T6 Ta = -50 °C to +55 °C; DIP / II,III / 1 / EFG / T6 Ta = -50 °C to +55 °C;

I / 1 / AEx d e IIC / T6 Ta = -50 °C to +55 °C; — 85 706 06 30 0

a = Configuration 302, 304, 305, 306, 307, 309, 404, 405, 406, 407, 409, 411, 412, 504, 505, 506, 507, 509, and 511

8571/22-a. Plug.

8571/21-a. Receptacle.

85 708 05 76 0. Optional Auxiliary contact block NC

85 708 06 76 0. Optional Auxiliary contact block NO

85 708 07 76 0. Optional Auxiliary contact block NC for I.S. circuit

85 708 08 76 0. Optional Auxiliary contact block NO for I.S. circuit

S / I / 2 / ABCD / T6 Ta = -50 °C to +40 °C, T5 Ta = -50 °C to +55 °C;

DIP / II,III / 1 / EFG / T6 Ta = -50 °C to +40 °C, T5 Ta = -50 °C to +55 °C;

I / 1 / AEx d e IIC / T6 Ta = -50 °C to +40 °C, T5 Ta = -50 °C to +55 °C

a = Configuration 404, 405, 406, 407, 409, 411, 412, 504, 505, 506, 507, 509, and 511.

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

8571/5-a. Component Flange Receptacle.

85 708 05 76 0. Optional Auxiliary contact block NC

85 708 06 76 0. Optional Auxiliary contact block NO

85 708 07 76 0. Optional Auxiliary contact block NC for I.S. circuit

85 708 08 76 0. Optional Auxiliary contact block NO for I.S. circuit

S / I / 2 / ABCD / T6 Ta = -50 °C to +40 °C, T5 Ta = -50 °C to +55 °C;

DIP / II,III / 1 / EFG / T6 Ta = -50 °C to +40 °C, T5 Ta = -50 °C to +55 °C;

I / 1 / AEx d e IIC / T6 Ta = -50 °C to +40 °C, T5 Ta = -50 °C to +55 °C; — 85 716 05 30 0

a = Configuration 404, 405, 406, 407, 409, 411, 412, 504, 505, 506, 507, 509, and 511

8575/22-a. Plug.

8575/21-a. Receptacle.

S / I / 2 / ABCD / T6; DIP / II,III / 1 / EFG / T6; I / 1 / AEx d e IIC / T6

a = Configuration 100, 112, 200, 212, 304, 305, 306, 307, 309, 404, 405, 406, 407, 409, 412, 504, 505, 506, 507, and 509.

8578/22-b. Plug.

8578/21-b. Receptacle.

S / I / 2 / ABCD / T6; DIP / II,III / 1 / EFG / T6; I / 1 / AEx d e IIC / T6

b = Configuration 404, 405, 406, 407, 409, 412, 504, 505, 506, 507, 509, and 512.

8579/22-b. Plug.

8579/21-b. Receptacle.

8579/41-b. Receptacle.

S / I / 2 / ABCD / T6 Ta = -30 °C to +40 °C; DIP / II,III / 1 / EFG / T6 Ta = -30 °C to +40 °C;

I / 1 / AEx d e IIC / T6 Ta = -30 °C to +40 °C

b = Configuration 404, 405, 406, 407, 409, 412, 504, 505, 506, 507, 509, and 512.

8581/22-b. Plug.

8581/21-b. Receptacle.

8581/41-b. Receptacle.

S / I / 2 / ABCD / T5 Ta = -30 °C to +40 °C; DIP / II,III / 1 / EFG / T5 Ta = -30 °C to +40 °C;

I / 1 / AEx d e IIC / T5 Ta = -30 °C to +40 °C

b = Configuration 404, 405, 406, 407, 409, 412, 504, 505, 506, 507, 509, and 512.

Equipment Ratings:

The Series 8570/... is suitable for Class I, Division 2, Groups ABCD, T6 Ta = 55 °C; dust ignitionproof for Class II/III, Division 1, Groups EFG, T6 Ta = -50 °C to +55 °C, suitable for Class I, Zone 1, AEx d e IIC T6 Ta = -50 °C to +55 °C; indoor and outdoor (Type 3, 4, 4X, IP66) hazardous (classified) locations.

The Series 8571/... is suitable for Class I, Division 2, Groups ABCD, T6 Ta = -50 °C to +40 °C, T5 Ta = -50 °C to +55 °C; dust ignitionproof for Class II/III, Division 1, Groups EFG, T6 Ta = -50 °C to +40 °C, T5 Ta = -50 °C to +55 °C, suitable for Class I, Zone 1, AEx d e IIC T6 Ta = -50 °C to +40 °C, T5 Ta = -50 °C to +55 °C; indoor and outdoor (Type 3, 4, 4X, IP66) hazardous (classified) locations.

The Series 8575/... is suitable for Class I, Division 2, Groups ABCD, T6; dust ignitionproof for Class II/III, Division 1, Groups EFG, T6, suitable for Class I, Zone 1, AEx d e IIC T6; indoor and outdoor hazardous (classified) locations.

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

The Series 8578/... is suitable for Class I, Division 2, Groups ABCD, T6; dust ignitionproof for Class II/III, Division 1, Groups EFG, T6, suitable for Class I, Zone 1, AEx d e IIC T6; indoor and outdoor hazardous (classified) locations.

The Series 8579/... is suitable for Class I, Division 2, Groups ABCD, T6 Ta = -30 °C to +40 °C; dust ignitionproof for Class II/III, Division 1, Groups EFG, T6 Ta = -30 °C to +40 °C, suitable for Class I, Zone 1, AEx d e IIC T6 Ta = -30 °C to +40 °C; indoor and outdoor hazardous (classified) locations.

The Series 8581/... is suitable for Class I, Division 2, Groups ABCD, T5 Ta = -30 °C to +40 °C; dust ignitionproof for Class II/III, Division 1, Groups EFG, T5 Ta = -30 °C to +40 °C, suitable for Class I, Zone 1, AEx d e IIC T5 Ta = -30 °C to +40 °C; indoor and outdoor hazardous (classified) locations.

FM Approved for:

R STAHL Schaltgeräte GmbH
74638 Waldenburg GERMANY

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

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	2011
Class 3611	2004
ANSI/NEMA 250	1991
ANSI/IEC 60529	2004
ANSI/ISA 60079-0	2009
ANSI/ISA 60079-1	2009
ANSI/ISA 60079-7	2008

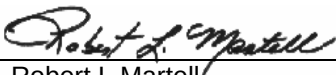
Original Project ID: 0R6A2.AX

Approval Granted: July 24, 1991

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
0D9A3.AE	October 31, 1997	3D5A5.AE	April 26, 1999
3021899	January 26, 2005	3031009	October 8, 2007
04042008	May 28, 2008	3039954	July 20, 2011
3044380	August 31, 2012	3050350	September 6, 2013

FM Approvals LLC


Robert L. Martell
Assistant Vice President

September 6, 2013
Date

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

Certificate of Compliance

Certificate: 1729614 (LR 99480)

Master Contract: 171050

Project: 2477938

Date Issued: November 24, 2011

Issued to: R. Stahl Schaltgeraete GmbH

Am Bahnhof 30
Waldenburg, 74638
Germany
Attention: Thomas Minde

The products listed below are eligible to bear the CSA Mark shown



Nicholas Cameron

Issued by: Nicholas Cameron

PRODUCTS

CLASS 6238 03 - RECEPTACLES - Attachment Plug Type and Plugs - With Switch - For Hazardous

Class I, Zone 1 and Zone 2 Ex de IIC, T6; Class I, Division 2, Groups A, B, C and D; Class II, Division 1 & 2, Groups E, F and G; Class III;

Series 8570 /22 plug and Series 8570 /21 wall receptacle (install per installation drawing 85 706 05 30. Install auxiliary contacts per control drawing 85 706 07 30 0): Ex de IIC, T6 Ta = -30°C to +55°C Enclosure Type 3, 4, 4X, IP66

Series 8571 /22 plug and Series 8571 /21 wall receptacle (install per installation drawing 85 716 04 30 0. Install auxiliary contacts per control drawing 85 706 07 30 0): Ex de IIC, T6 Ta = -30°C to +55°C Enclosure Type 3, 4, 4X, IP66

Series 8570 /.5 flange receptacle install per control drawing 85 706 06 30 0: Ex de IIC, T6 Ta = -30°C to +55°C

Series 8571 /.5 flange receptacle install per control drawing 85 716 05 30 0: Ex de IIC, T6 Ta = -30°C to +55°C

The Flange receptacles contain only the switching and plug connection element of the Series 8570/21 and 8571/21 receptacle and is designed for installation into the wall of an enclosure in compliance with the mounting, spacing, casualty and segregation requirements of the ultimate application and is subject to approval by the local jurisdiction



Certificate: 1729614 (LR 99480)

Master Contract: 171050

Project: 2477938

Date Issued: November 24, 2011

APPLICABLE REQUIREMENTS

CSA Standard C22.2 No 0-10 - General Requirements - Canadian Electrical Code, Part II

CSA Standard C22.2 No. 0.4-2004 - Bonding of Electrical Equipment

CSA Standard C22.2 No. 25-M1966 - Enclosures for Use in Class II Groups E, F and G Hazardous Locations

CSA Standard C22.2 No. 30-M1986 – Explosion-Proof Enclosures for Use in Class I Hazardous Locations

CSA Standard C22.2 No. 94-1991 - Special Purpose Enclosures

CSA Standard C22.2 No 159M1987 - Attachment Plugs, Receptacles and Similar Wiring Devices for Use in Hazardous Locations Class I, Groups A, B, C and D, Class II, Group G and Coal Dust and in Gaseous Mines

CSA Standard C22.2 No. 182.1-02 - Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type

CSA Standard C22.2 No. 213-M1987 - Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations

CAN/CSA E60079-0:07 - Electrical apparatus for explosive gas atmospheres – Part 0: General requirements

CAN/CSA E60079-1:07 - Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosures "d"

CAN/CSA E60079-7:03 - Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety "e"

CAN/CSA-C22.2 No. 60529:05 - Degrees of protection provided by enclosures (IP Code)

CAN/CSA-E61241-1-1:02 - Electrical apparatus for use in the presence of combustible dust – Part 1-1: Electrical apparatus protected by enclosures and surface temperature limitation – Specification for apparatus



Certification

Manufacturer: Larson Electronics LLC
Address: 9419 US-HWY 175
Kemp, Texas 75143

Declare the following equipment conforms to the standard(s) as listed:

Model: HLP-EX, HLO-EX Series
Description: Hazardous Location Plugs and Receptacles

Evaluated Listings:

CE: DIRECTIVE 2014/35/EU - LOW VOLTAGE DIRECTIVE
CE: DIRECTIVE 2014/30/EU - EMC DIRECTIVE
CE: Regulation (EC) No 1907/2006 - REACH REGULATION
CE: DIRECTIVE 2015/863/EU - ROHS DIRECTIVE

The HLP-EX, HLO-EX Series complies with the essential protection requirements of the European Parliament of the Council Directive for Low Voltage Directive, EMC Directive, REACH Regulation, and RoHS Directive. This certification applies to all specimens manufactured in accordance to the manufacture's drawings.

Signed for and on behalf of: Larson Electronics, LLC
Place of issue: Kemp, TX

Signature: *James Thomas*

Name: James Thomas
Position: Operations Manager



Certification

Manufacturer: Larson Electronics LLC
Address: 9419 US-HWY 175
Kemp, Texas 75143

Declare the following equipment conforms to the standard(s) as listed:

Model: HLP-EX, HLO-EX Series
Description: Hazardous Location Plugs and Receptacles

Evaluated Listings:

CE: DIRECTIVE 2015/863/EU - ROHS DIRECTIVE

This is to certify that products offered by Larson Electronics LLC comply with the Reduction of Hazardous Substances (RoHS) directives. Directive 2002/95/EC became effective on 1 July 2006. It restricts the use of six substances in the manufacture of electrical and electronic equipment. This directive was revised in June 2011 and is now referred to as directive 2011/65/EU. Directive 2015/863/EU amending Annex II to Directive 2011/65/EU announced plans to add four substances from 22 July 2019.

We hereby certify that the equipment specified above conforms to the Directive(s) by containing less of the restricted substances than the stated limits.

Signed for and on behalf of: Larson Electronics, LLC
Place of issue: Kemp, TX

Signature: *James Thomas*

Name: James Thomas
Position: Operations Manager



Certification

Manufacturer: Larson Electronics LLC
Address: 9419 US-HWY 175
Kemp, Texas 75143

Declare the following equipment conforms to the standard(s) as listed:

Model: HLP-EX, HLO-EX Series
Description: Hazardous Location Plugs and Receptacles

Evaluated Listings:

CE: Regulation (EC) No 1907/2006 - REACH REGULATION

This letter establishes the opinion of Larson Electronics LLC regarding the status, under the current European Union ("EU") Regulations on Registration, Evaluation, Authorization, and Restriction of Chemical Substances ("REACH").

REACH does not apply to manufactured products which are referred to as "completed articles". Substances (chemicals) are subject to REACH registration, NOT products.

In addition, Articles are exempt from the REACH requirements if (a) the Article does not contain a substance of very high concern or candidate substance in an amount exceeding 0.1% weight by weight, and (b) if substances present in the Article in excess of 1 ton per year per importer are not expected nor intended to be released.

Based on communication with our raw material suppliers, we conclude that to the best of our knowledge our products requiring REACH compliance do not contain any of the currently listed SVHC in concentrations of 0.1% or above.

Accordingly, we foresee no registration or pre-registration requirement for the products we supply.

Signed for and on behalf of: Larson Electronics, LLC
Place of issue: Kemp, TX

Signature:

Name: James Thomas
Position: Operations Manager



Frequently Asked Questions (FAQ)

There are no Faqs