

Explosion Protected
Control and Load Switch
(8008/2)



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2 General Information

2.1 Contact Information

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2.2 Information regarding this Installation, Operation and Maintenance Sheet

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The explosion protected control components should be installed, inspected, maintained, and operated by qualified and competent personnel. Read entire instructions before starting installation of this product.

Contact your R. STAHL Customer Service or R. STAHL distributor if you have any questions.

Technical information and illustrations are not binding and subject to change without notice.

The nature of these instructions is only informative and does not cover all of the details, variations or combinations in which this device may be used, its storage, delivery, installations, safe operation and maintenance.

Since conditions of use of the product are outside of the care, custody and control of the manufacturer, the purchaser should determine the suitability of the product for his intended use, and assumes all risk and liability whatsoever in connection therewith.

Save these instructions for future reference.

3 Application

The series 8008 – Control and load switch (industrial control equipment) – is a flameproof switch with increased safety terminals suitable to make or break power supplies in hazardous (classified) locations. The switch is a modular design of up to 4 poles.

Refer to section 6 for application and details of the control devices.

4 Hazardous Location Ratings and Applicable Standards

The Control and Load Switch are in compliance with the following standards:

CAN/CSA-C22.2 No. 0-M91	General Requirements - Canadian Electrical Code Part II
CAN/CSA-C22.2 No.60079-0	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements.
CAN/CSA-C22.2 No.60079-1	Electrical Apparatus for Explosive Gas Atmospheres - Part 1: Construction and Verification Test of Flameproof Enclosures of Electrical Apparatus
CAN/CSA-C22.2 No.60079-7	Electrical Apparatus for Explosive Gas Atmospheres - Part 7: Increased Safety 'e'
CSA C22.2 No.14	Standard for Industrial Control Equipment
ANSI/ISA 60079-0	Standard for Safety for Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements.
ANSI/ISA 60079-1	Standard for Safety for Electrical Apparatus for Explosive Gas Atmospheres - Part 1: Flameproof enclosures 'd'.
ANSI/ISA 60079-7	Electrical Apparatus for Explosive Gas Atmospheres - Part 7: Increased Safety 'e'
ANSI/UL 508	Standard for Industrial Control Equipment

5 Safety Instructions

Use the control and load switch only for its intended purpose.

Incorrect or impermissible use or non-compliance with these instructions invalidates our warranty provision.

Any alterations or modifications to the component impairing its explosion protection are not permitted. The control unit must be used only if it is clean and undamaged.

Observe the following when using the device:

- National and local safety regulations
- National and local accident prevention regulations
- National and local assembly and installation regulations
- Generally recognized technical regulations
- Safety instructions in these operating instructions
- Characteristic values and rated operating conditions on the rating and data plates
- Additional instruction plates on the control unit

6 Technical Data

Explosion Protection USA (FM)/Canada (FM)



FM 16 US 0159 U
Class I, Zone 1, AEx db eb IIC T6...T5 Gb
Class I, Division 2, Groups ABCD (US)
FM 16 CA 0094 U
Ex db eb IIC T6...T5 Gb
Class I, Division 2 per CEC J18-150 (C)



Other Certifications and Certificates: LISTED

Ambient Temperature Range

8008/2-0 and 8008/2-1 Control Switches

T6: $-50^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$

8008/2-6 Load Switch

T6: $-50^{\circ}\text{C} \leq T_{\text{amb}} \leq +50^{\circ}\text{C}$

T5: $-50^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$

Service Temperature Range

$-50^{\circ}\text{C} \leq T_{\text{amb}} \leq +80^{\circ}\text{C}$

Electrical Data

8008/2-0 and 8008/2-1 Control Switches

Contact Rating: A600 (per ANSI/UL 508 and CSA C22.2 No. 14)

Maximum current (resistive): 10 A

8008/2-6 Load Switch

Voltage Rating	Phase	Horsepower rating
120 VAC	3 phase	2 hp
240 VAC	3 phase	5 hp
480 VAC	3 phase	10 hp
600 VAC	3 phase	10 hp

Maximum current (resistive) : 16 A

Note: Per NEC 505.7(E), the short circuit current needs to be limited to less than 10,000 rms symmetrical amperes.

Termination Capacity

Contact terminal:

8008/2-0 and 8008/2-1: 14 AWG...10 AWG (2.5 mm²...6 mm²), solid or stranded

8008/2-6: 12 AWG...10 AWG (4 mm²...6mm²); solid or stranded

Terminal is designed to hold two wires at the same time.

Tightening torque: 1.8 Nm (contact terminals)

WARNING

Please observe the technical data on the rating plate

Please consult the manufacturer if operating conditions are non-standard

7 Installation

WARNING

To avoid fire or shock hazard, the electrical power must be turned OFF before and during installation.

- Refer to the technical data and installation information on the front and side mounted nameplates of the control unit.
- For Class I, Zone 1 installations, Series 8008/2 control and load switch must be installed in a Certified Increased Safety 'eb' enclosure. When installing the control components into 'eb' enclosures the spacing distances through air and over surface, in accordance with CAN/CSA C22.2 No. 60079-7 + C22.2 No. 14 for Canada or ANSI/ISA 60079-7 + UL508A for USA, must be maintained.
- For Class I, Division 2 installations Series 8008/2 control and load switch must be installed in a suitable enclosure providing mechanical protection, provisions for conduit/cable entry, and sufficient clearance for electrical connections as per C22.2 No. 14 for Canada and UL508A for USA.
- Series 8008/2 control and load switch have been Certified as a component and the suitability of the final assembly is to be determined by the authorities having jurisdiction.
- The terminals on the control component have been identified on the control unit. Refer to the device label and technical information for proper connection.
- Field wiring conductors shall be copper wires only, stranded – and sized based on the conductor rated for 75°C.(for North American Installations)
- Per NEC 505.7(E), the short circuit current needs to be limited to less than 10,000 rms symmetrical amperes.

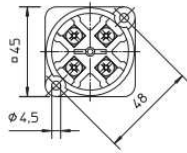
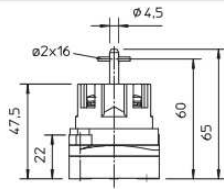
8 Maintenance

WARNING

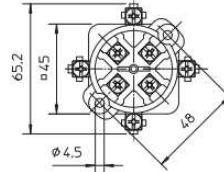
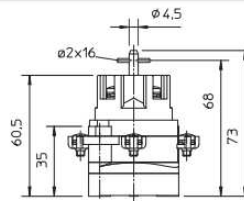
To avoid electrical shock, fire and/or explosions, always disconnect primary power source before inspection, service or Maintenance.

- We recommend an Electrical Prevention Maintenance program as described in the National Electrical Code® (NEC) and the National Fire Protection Association Bulletin NFPA No. 70B or the Canadian Electrical Code (CEC) respectively, and any local regulations. It is recommended that it should be at least once a year.
- Maintenance should only be performed by qualified and experienced personnel.
- Perform visual, electrical, and mechanical checks on all components on a regular basis.
 - Visually check for undue heating evidence by distortion of wires or other components, damaged or worn parts.
 - Electrically check to make sure that all connections are clean and tight.
 - Mechanically check that all parts are properly assembled, and operating mechanisms move freely.
- The Flameproof joint CANNOT be repaired
- Replacement parts are available through R. STAHL distributors. Replace only with parts of identical rating.

9 Dimensions in Millimeters



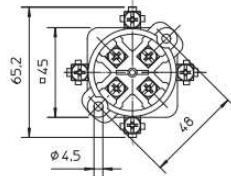
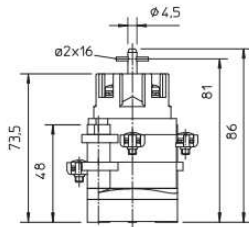
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