

LAURENCE INSTRUCTIONS

Flameproof Soli-Con® Actuators

IEC Ex



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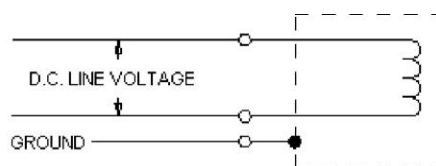
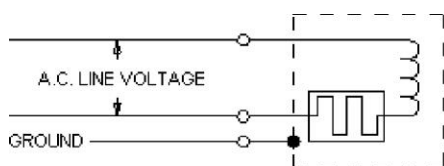
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FROM FACTORY MUTUAL

Laurence Explosion Proof Actuators are International Electrotechnical Commission (IEC) and CE / ATEX compliant for use in hazardous locations, indoors and outdoors, per IEC 60079-1 Ex db, Zone 1, Group IIB+H₂, T4, IP66. Per ATEX Equipment Group II, Category 2 GD for Gas and Dust.

Coil Insulation Class H (Electronic components maximum temperature rating is 125° C)

Table 1 – SCG/SCH Soli-Con® Model Information (Approx.)					
Model No.	Voltage	Holding Current	Inrush Current	Max. Cycles	Fuse Amperage
SC1D-024-E10	24 Volts, Direct Current	0.80 Amps	14.0 Amps	2 per minute	2
SC1B-VAR-E10	48 Volts, 50/60 Hertz	0.70 Amps	10.0 Amps	2 per minute	2
SC1B-VAR-E10	120 Volts, 50/60 Hertz	0.50 Amps	7.0 Amps	2 per minute	2
SC1B-VAR-E10	220 Volts, 50/60 Hertz	0.35 Amps	6.0 Amps	2 per minute	2
SC1B-VAR-E10	48 Volts, Direct Current	0.50 Amps	10.0 Amps	2 per minute	2
SC1B-VAR-E10	125 Volts, Direct Current	0.30 Amps	6.0 Amps	2 per minute	2
SC1B-VAR-E10	250 Volts, Direct Current	0.25 Amps	5.0 Amps	2 per minute	2

CAUTION To prevent ignition of hazardous atmospheres, this actuator should not be installed in an area where vapors or gases have an ignition temperature less than the temperature rating stated on the actuator label. *Maximum ambient temperature is 85° C for all models.*



NOTE:
DO NOT USE
FULL WAVE
RECTIFIED A.C.
ON 24 VOLT
D.C. MODEL

CIRCUIT DIAGRAMS

Installation to be conducted per applicable electrical codes, such as, National Electrical Code, NFPA 70; Canadian Electrical Code C22.1; EN60079-14 and IEC 60079-14 Electrical Installation Design, Selection and Erection.

Electrical supply line to actuator should be fused with a FUSETRON® FRS-R type fuse (see Table 1 for amp rating). Rated amperage is based on the fuse in a 25° C ambient temperature. Select wire size appropriate to fuse rating and length of run of wire, but in no case use less than 14 AWG or 2mm² for Model No. SC1D-024-E10 and 18 AWG or 1mm² for Model No. SC1B-VAR-E10. *Full inrush current at rated voltage* must be delivered to the actuator to ensure proper operation. *Green/yellow colored wire* is for protective grounding.

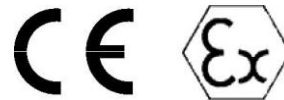
Solenoid features an external green terminal screw for ground connection of a 12 AWG or 4 mm² conductor.

Solenoid enclosure principle materials are carbon steel and stainless steel.

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Specific Conditions of Use:

1. The equipment has flying lead conductors that exit the enclosure. A suitably certified Ex db or Ex eb terminal box is required to be connected to apparatus enclosure for completing to external supply circuit. Apparatus is provided with 1/2 inch NPT entry connection.
2. Overcurrent protection fuse required during installation to external supply circuit.
3. Customer to supply wire rated for a minimum ambient of 10°C above maximum ambient temperature of installation location.
4. Flameproof joints cannot be repaired. Consult the manufacturer if dimensional information on the flameproof joints is necessary.
5. The equipment must be installed in the vertical position with the actuator guide tube facing downward.

Identification Label on unit is as follows:

		SOLI-CON EXPLOSION-PROOF ACTUATOR	
MODEL #			
SER./DATE			
VOLTS/HZ/DUTY			
 2809	Ex db IIB+H2 T4 Gb Ex tb IIIC T135 °C Db IECEX FMG 22.0012X FM22ATEX0024X		ENCL. TYPE 4/IP66 -40°C < Tamb < 85°C II 2 G II 2 D
 APPROVED	CL I, DIV I, GR B,C,D CL II, DIV I, GR E,F,G CL III TEMP CODE T4	FACTORY SEALED CIRCOR FLOW TECHNOLOGIES INDIA PRIVATE LIMITED SF NO. 337/2, NO.15 NARANAPURAM VILLAGE, PONNANDAMPALAYAM, THENNAMPALAYAM TO ANNUR ROAD, COIMBATORE, TAMIL NADU 641659	

No maintenance is required for this actuator. Any questions should be referred to our Coimbatore, India, factory.

CIRCOR FLOW TECHNOLOGIES INDIA PRIVATE LIMITED
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