



ELECTRICAL ISOLATION DEVICES

e L-O-X[®] SERIES



PRODUCT CATALOG

e L-O-X® Electrical Isolation Devices

Product Overview

The ROSS e L-O-X® solution provides for local electrical energy isolation & verification.

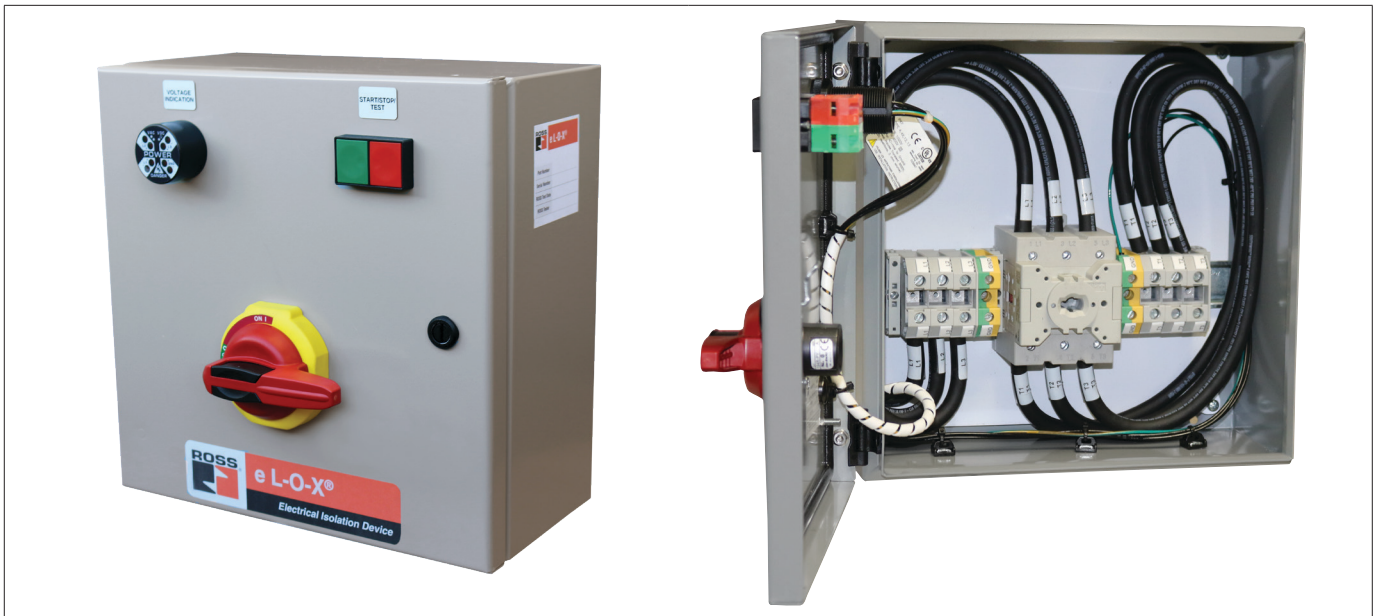


Illustration examples.

The e L-O-X® includes a Stop button that can be used to send a Stop command to the machine. Once the machine has stopped and the disconnect switch (rotary on 30 to 100 A sizes) has been actuated and locked, isolation may be verified, visually, by use of the 3-phase voltage indicator and, also, by using the Start button to test the machine to verify that it does not run.

The e L-O-X® electrical isolation device is especially useful in situations where the distance to the main electrical disconnect is excessive and causes extra downtime traveling back and forth between the main disconnect and the machine when performing Lockout/Tagout.

FEATURES

Start (Test) / Stop buttons – Can be integrated with machine controls, for Start and Stop functions, and testing for energy release verification

Lockable disconnect switch (load-rated) – Local disconnect switch, lockable in the OFF position (Lockout/Tagout).

3-Phase power indicator – Indicates voltage presence on all phases and, also, if phases are out of balance. Also, as a way to verify energy release after Lockout/Tagout.

100% factory tested

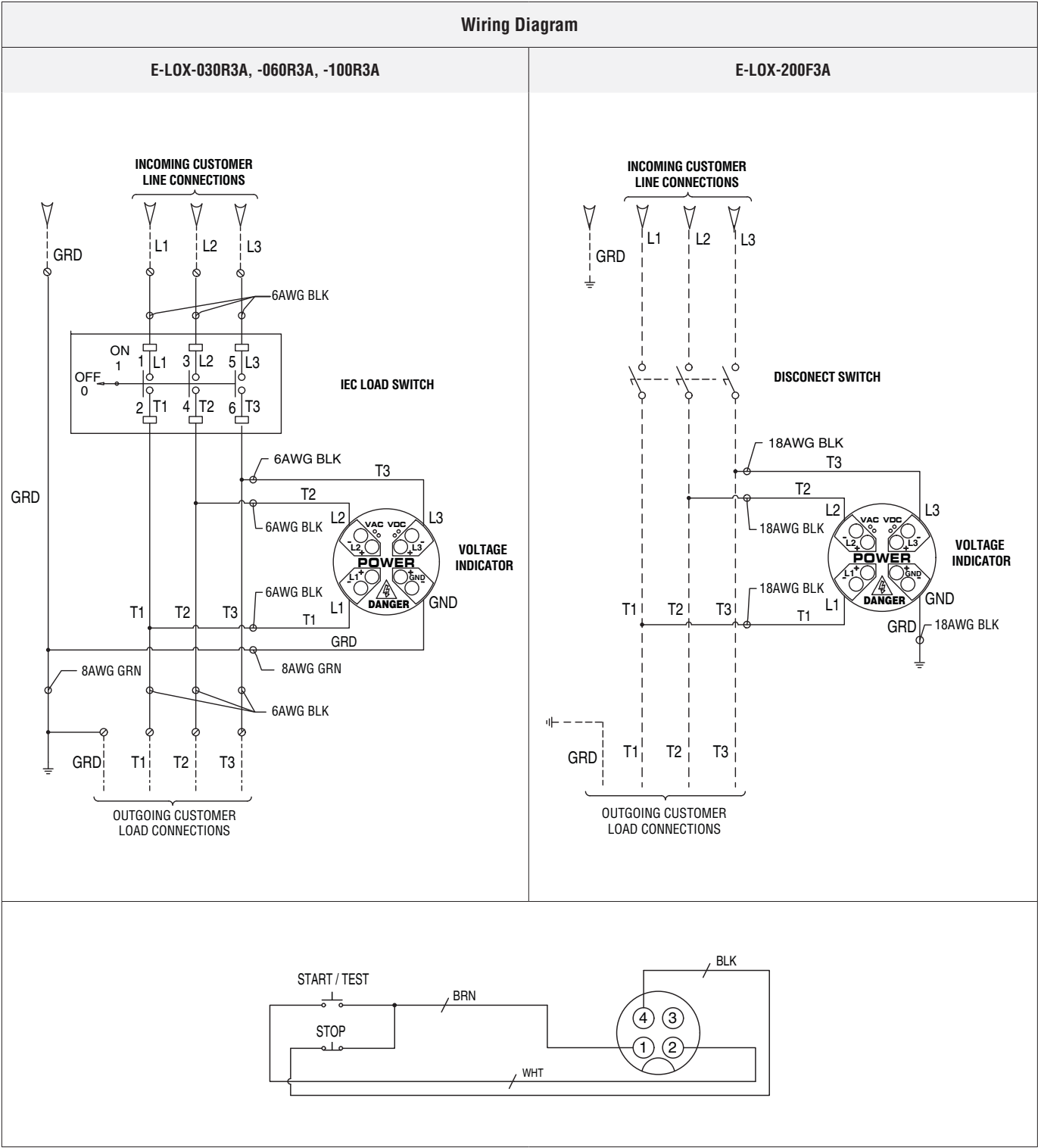
Per specifications and regulations, the e L-O-X® products are defined as energy isolation devices, NOT AS EMERGENCY STOP DEVICES.

Specifications

SPECIFICATIONS				
GENERAL	Actuation		Disconnect Switch 30-A, 60-A, & 100-A	Rotary handle
			Disconnect Switch 200-A	Flange-type handle (pull-down)
			Start (Test) Switch	Green Momentary Pushbutton / Normally Open (NO)
			Stop Switch	Red Momentary Pushbutton / Normally Closed (NC)
	Mounting	Type	Wall-mount	
	Minimum Operation Frequency		Once per month, to ensure proper function	
ELECTRICAL DATA	Electrical Connection		Terminal Block	
	Voltage		Main Disconnect & Power Indicator Up to 600 volts AC, 3-Phase	
			Start (Test) / Stop	24 volts DC at 1.5 amps 110 volts DC at 0.5 amps
	Rated Current		E-LOX-030R3A	30 Amps
			E-LOX-060R3A	60 Amps
			E-LOX-100R3A	100 Amps
			E-LOX-200F3A	200 Amps
	Enclosure Rating		NEMA Type 12, Dust-tight, IP55	
IMPORTANT NOTE: Please read carefully and thoroughly all of the CAUTIONS, WARNINGS on the inside back cover.				

Ordering Information

MODEL NUMBER	Load Rating (Amps)
E-LOX-030R3A	30
E-LOX-060R3A	60
E-LOX-100R3A	100
E-LOX-200F3A	200



The e L-O-X® is comprised of:

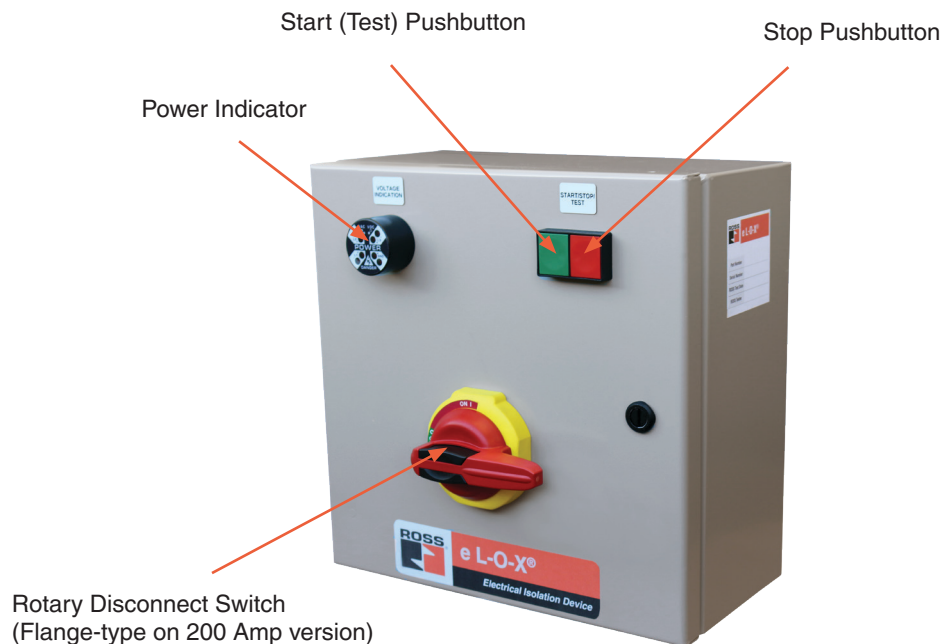
- an enclosure with a load-rated disconnect switch (either rotary or flange-type),
- a red STOP pushbutton,
- a green START/TEST pushbutton, and
- a 3-phase LED power indicator.

The disconnect switch on the e L-O-X® electrical energy isolation device connects (ON position) and disconnects (OFF position) electrical power to a machine (or machine zone) via a manually operated disconnect switch that is lockable only in the OFF position. Placing the disconnect switch in the OFF position disconnects the electrical power to the machine to isolate the machine from the electrical energy source.

The red pushbutton, if utilized, can be used to send a STOP signal to the machine (or zone) controls to stop the machine prior to disconnecting power with the disconnect switch. The STOP switch is a momentary pushbutton-operated NC switch.

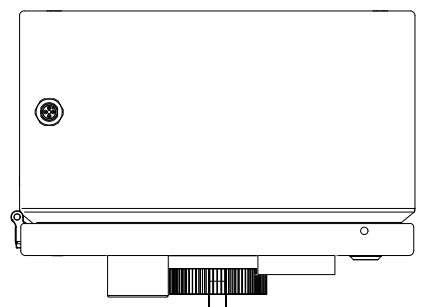
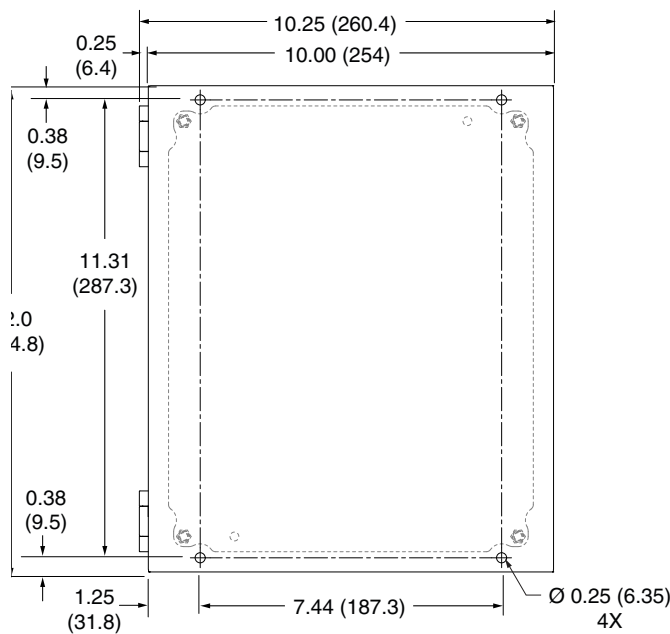
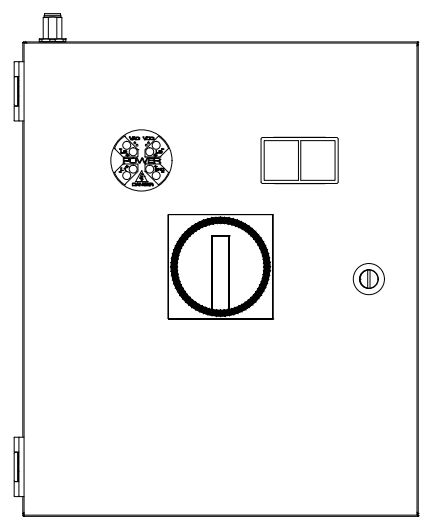
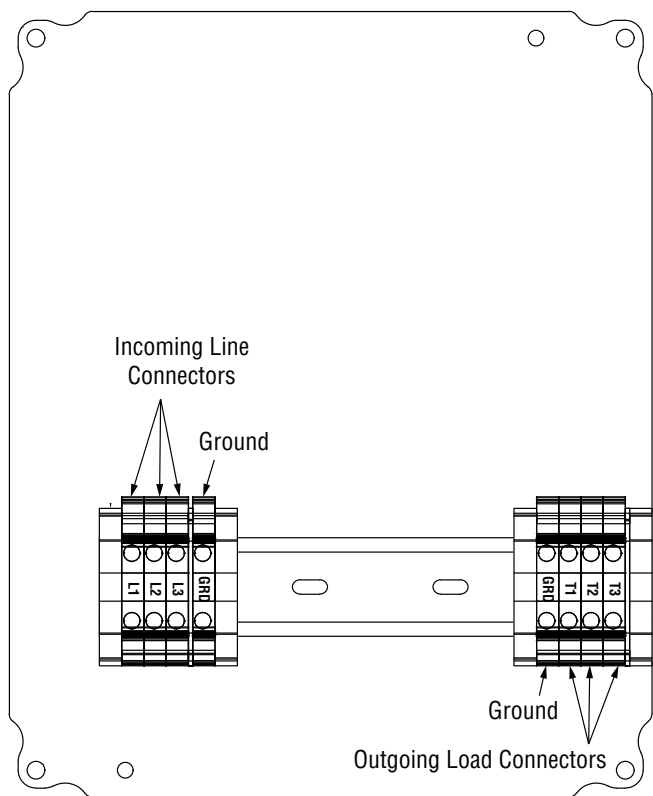
The green START/TEST pushbutton, if utilized, provides a method to send a start signal to the machine (or zone). The START/TEST switch is a momentary pushbutton-operated NO switch. Pressing the green pushbutton after the electrical disconnect switch is placed in the off position and locked-out could also be used to TEST the system to verify electrical power is disconnected and dissipated.

The 3-phase LED power indicator is used to indicate the presence of electrical power on the load side of the disconnect switch (terminals T1, T2, & T3). The power indicator also provides a visual verification of energy release after isolation.



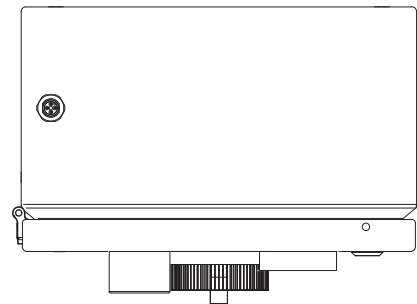
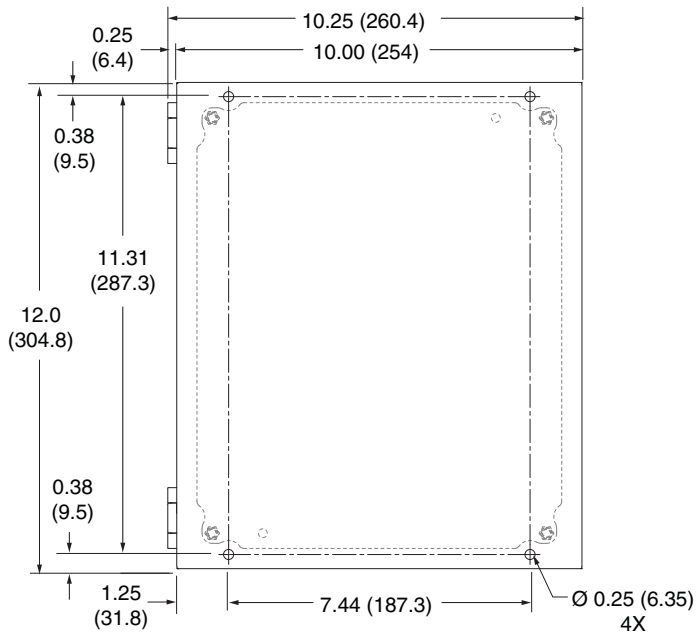
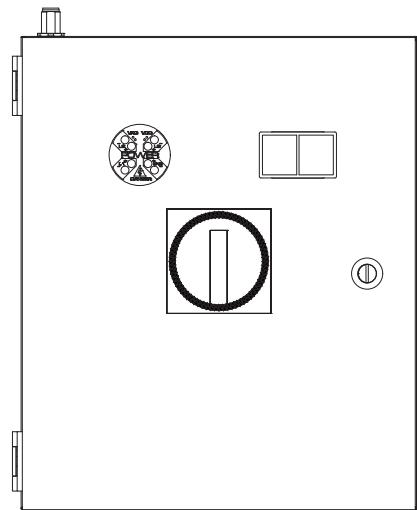
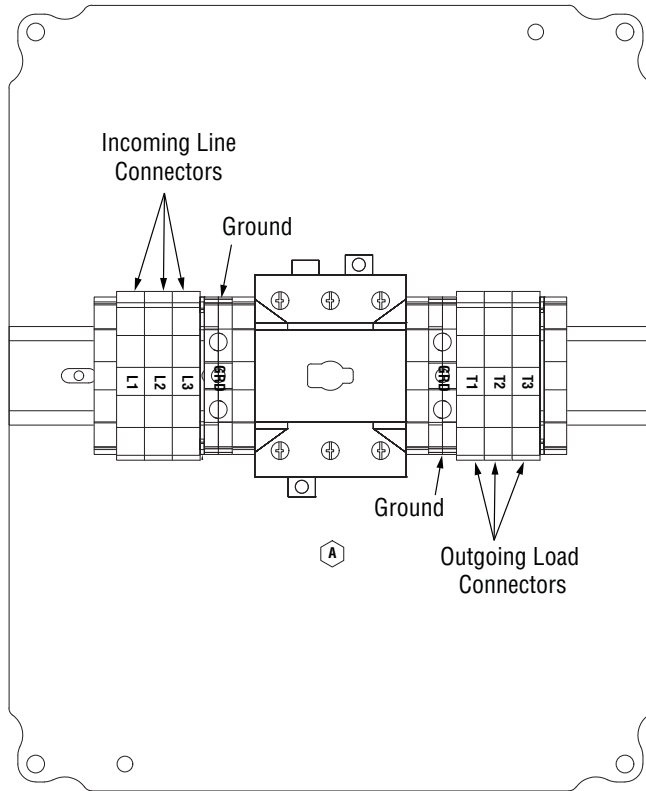
Mounting Information and Overall Dimensions (Inches/mm)

E-LOX-030R3A



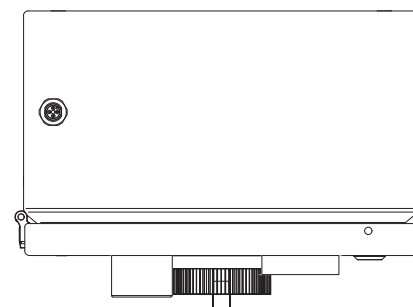
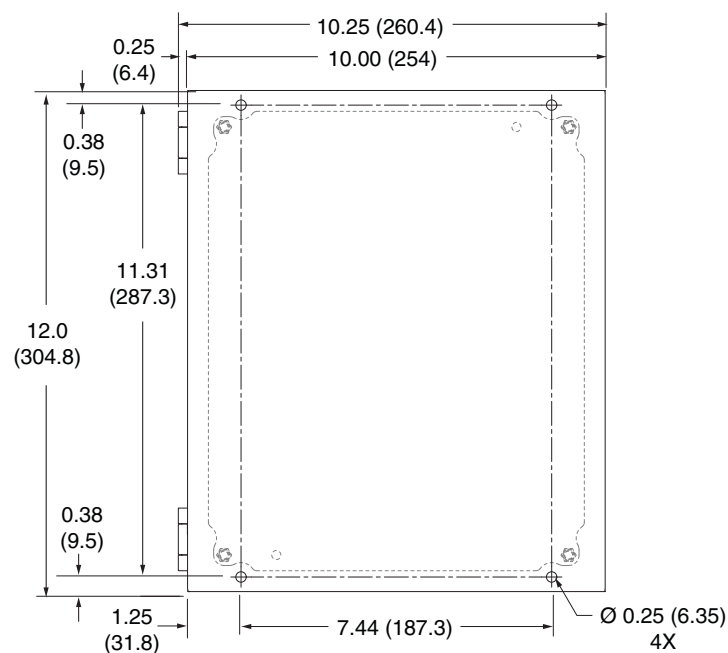
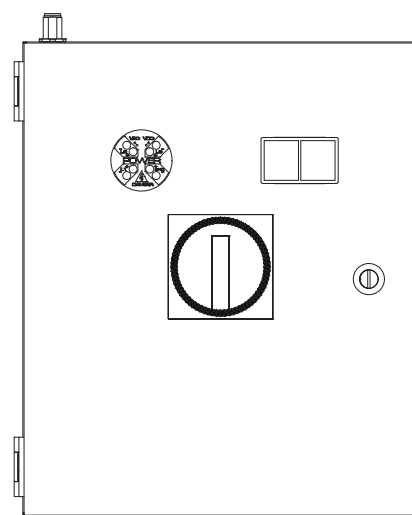
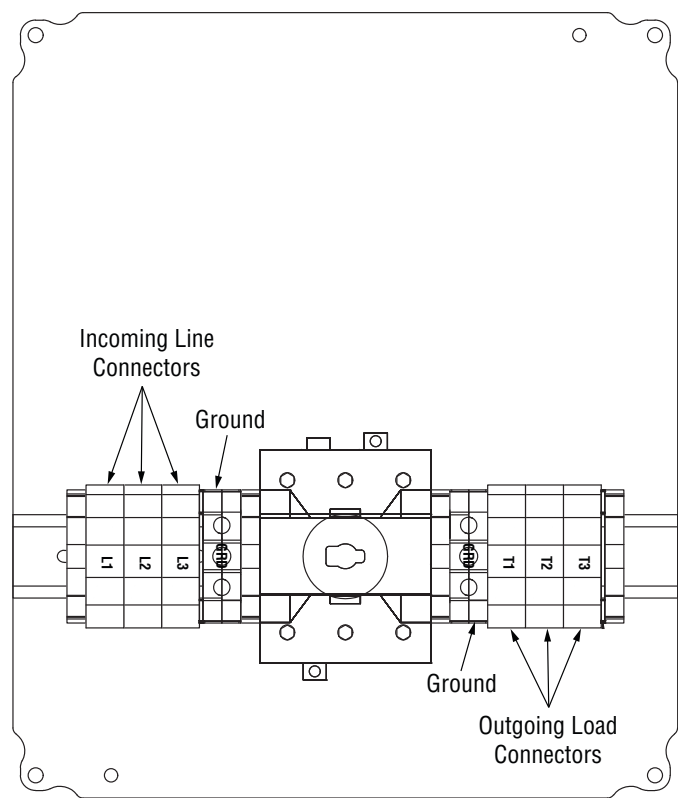
Mounting Information and Overall Dimensions (Inches/mm)

E-LOX-060R3A



Mounting Information and Overall Dimensions (Inches/mm)

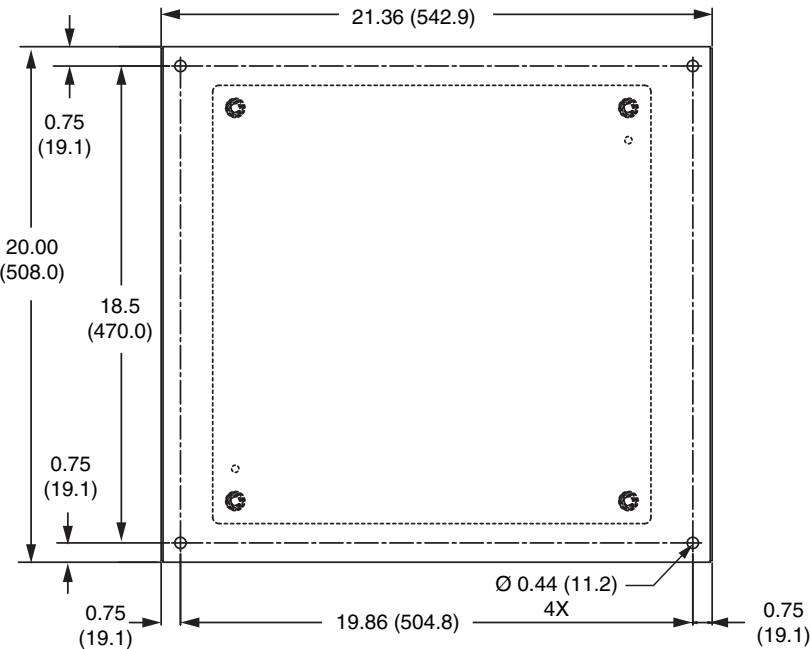
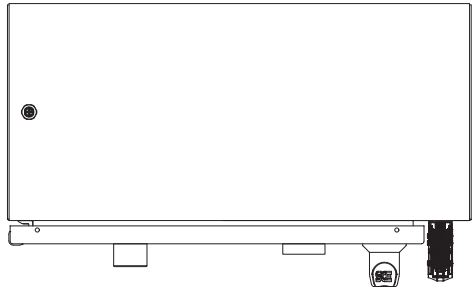
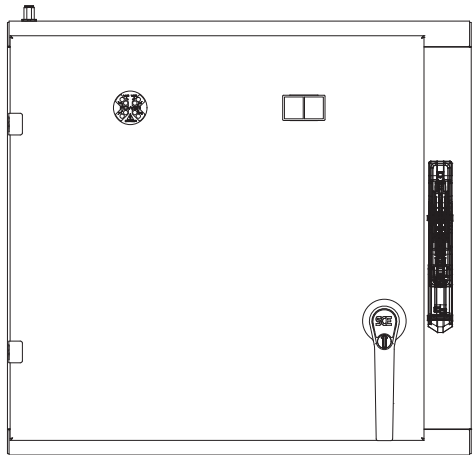
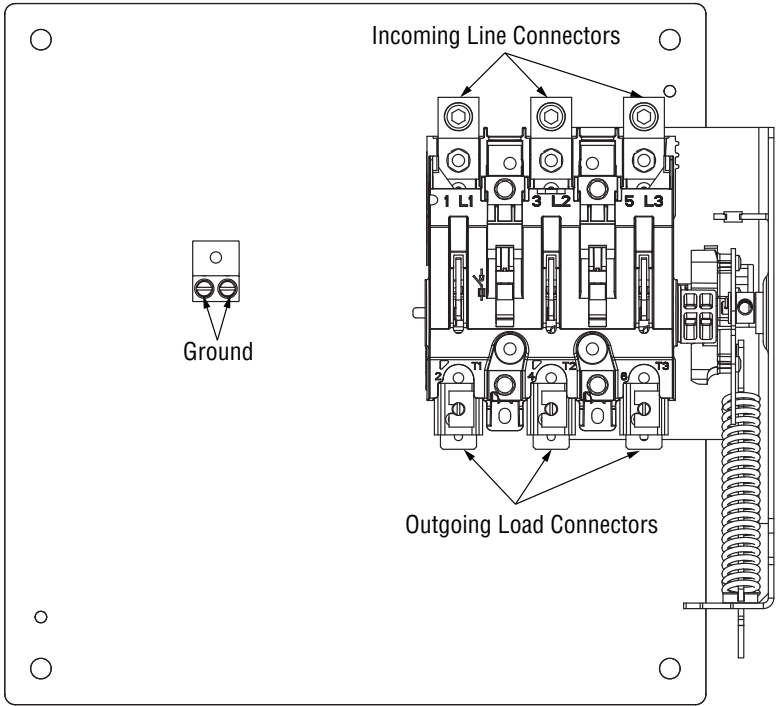
E-LOX-100R3A



Technical Data

Mounting Information and Overall Dimensions (Inches/mm)

E-LOX-200F3A



CAUTIONS, WARNINGS And STANDARD WARRANTY



ROSS OPERATING VALVE, ROSS CONTROLS®, ROSS DECCO®, and AUTOMATIC VALVE INDUSTRIAL, collectively the “ROSS Group”.

PRE-INSTALLATION or SERVICE

1. Before servicing a valve or other pneumatic component, be sure all sources of energy are turned off, the entire pneumatic system is shut down and exhausted, and all power sources are locked out (ref: OSHA 1910.147, EN 1037).
2. All ROSS Group Products, including service kits and parts, should be installed and/or serviced only by persons having training and experience with pneumatic equipment. Because any product can be tampered with and/or need servicing after installation, persons responsible for the safety of others or the care of equipment must check ROSS Group Products on a regular basis and perform all necessary maintenance to ensure safe operating conditions.
3. All applicable instructions should be read and complied with before using any fluid power system to prevent harm to persons or equipment. In addition, overhauled or serviced valves must be functionally tested prior to installation and use. If you have any questions, call your nearest ROSS Group location.
4. Each ROSS Group Product should be used within its specification limits. In addition, use only ROSS Group components to repair ROSS Group Products.

WARNINGS:

Failure to follow these instructions can result in personal injury and/or property damage.

FILTRATION and LUBRICATION

1. Dirt, scale, moisture, etc., are present in virtually every air system. Although some valves are more tolerant of these contaminants than others, best performance will be realized if a filter is installed to clean the air supply, thus preventing contaminants from interfering with the proper performance of the equipment. The ROSS Group recommends a filter with a 5-micron rating for normal applications.
2. All standard ROSS Group filters and lubricators with polycarbonate plastic bowls are designed for compressed air applications only. Use the metal bowl guard, where provided, to minimize danger from high pressure fragmentation in the event of bowl failure. Do not expose these products to certain fluids, such as alcohol or liquefied petroleum gas, as they can cause bowls to rupture, creating a combustible condition and hazardous leakage. Immediately replace crazed, cracked, or deteriorated bowls.
3. Only use lubricants which are compatible with materials used in the valves and other components in the system. Normally, compatible lubricants are petroleum base oils with oxidation inhibitors, an aniline point between 180°F (82°C) and 220°F (104°C), and an ISO 32, or lighter, viscosity. Avoid oils with

phosphate type additives which can harm polyurethane components, potentially leading to valve failure which risks personal injury, and/or damage to property.

WARNINGS:

Failure to follow these instructions can result in personal injury and/or property damage.

AVOID INTAKE/EXHAUST RESTRICTION

1. Do not restrict air flow in the supply line. To do so could reduce the pressure of the supply air below minimum requirements for the valve and thereby causing erratic action.
2. Do not restrict a valve's exhaust port as this can adversely affect its operation. Exhaust silencers must be resistant to clogging and must have flow capacities at least as great as the exhaust capacities of the valves. Contamination of the silencer can result in reduced flow and increased back pressure.

WARNINGS: Failure to follow these instructions can result in personal injury and/or property damage.

SAFETY APPLICATIONS

1. Mechanical Power Presses and other potentially hazardous machinery using a pneumatically controlled clutch and brake mechanism must use a press control double valve with a monitoring device. A double valve without a self-contained monitoring device should be used only in conjunction with a control system which assures monitoring of the valve. All double valve installations involving hazardous applications should incorporate a monitoring system which inhibits further operation of the valve and machine in the event of a failure within the valve mechanism.
2. Safe Exhaust (dump) valves without a self-contained monitoring device should be used only in conjunction with a control system which assures monitoring of the valve. All Safe Exhaust valve installations should incorporate a monitoring system which inhibits further operation of the valve and machine in the event of a failure within the valve mechanism.
3. Per specifications and regulations, the ROSS L-O-X® and L-O-X® with EEZ-ON®, N06 and N16 Series operation products are defined as energy isolation devices, NOT AS EMERGENCY STOP DEVICES.

WARNINGS:

Failure to follow these instructions can result in personal injury and/or property damage.

STANDARD WARRANTY

All products sold by the ROSS Group are warranted for a one-year period [with the exception of Filters, Regulators and Lubricators (“FRLs”) which are warranted for a period of seven (7) years] from the date of purchase. All products are, during their respective warranty periods, warranted to be free of defects in material and workmanship. The ROSS Group's obligation under this warranty is limited to repair, replacement or refund of the purchase price paid for products which the ROSS Group has determined, in its sole discretion, are defective. All warranties become void if a product has been subject to misuse, misapplication, improper maintenance, modification or tampering. Products for which warranty protection is sought must be returned to the ROSS Group freight prepaid.

THE WARRANTY EXPRESSED ABOVE IS IN LIEU OF AND EXCLUSIVE OF ALL OTHER WARRANTIES AND THE ROSS GROUP EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED WITH RESPECT TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ROSS GROUP MAKES NO WARRANTY WITH RESPECT TO ITS PRODUCTS MEETING THE PROVISIONS OF ANY GOVERNMENTAL OCCUPATIONAL SAFETY AND/OR HEALTH LAWS OR REGULATIONS. IN NO EVENT IS THE ROSS GROUP LIABLE TO PURCHASER, USER, THEIR EMPLOYEES OR OTHERS FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM A BREACH OF THE WARRANTY DESCRIBED ABOVE OR THE USE OR MISUSE OF THE PRODUCTS. NO STATEMENT OF ANY REPRESENTATIVE OR EMPLOYEE OF THE ROSS GROUP MAY EXTEND THE LIABILITY OF THE ROSS GROUP AS SET FORTH HEREIN.



GLOBAL LOCATIONS

	AMERICAS	USA	ROSS CONTROLS	Tel: +1-248-764-1800	www.rosscontrols.com
		Canada	ROSS CANADA	Tel: +1-416-251-7677	www.rosscanada.com
		Brazil	ROSS BRASIL	Tel: +55-11-4335-2200	www.rosscontrols.com.br
	EUROPE	Germany	ROSS EUROPA	Tel: +49 (0)6103-7597-100	www.rosseuropa.com
		France	ROSS FRANCE	Tel: +33(0)1-49-45-65-65	www.rossfrance.com
		United Kingdom	ROSS UK	Tel: +44 (0)1254 872277	www.rossuk.co.uk
	ASIA & PACIFIC	India	ROSS CONTROLS INDIA	Tel: +91-44-2624-9040	www.rosscontrolsindia.com
		China	ROSS CONTROLS CHINA	Tel: +86-21-6915-7961	www.rosscontrolschina.com
		Japan	ROSS ASIA	Tel: +81-42-778-7251	www.rossasia.co.jp



www.automaticvalve.com



www.rossdecco.com



www.manufactis.net



www.masterpneumatic.com



www.pneumatrol.com



www.ubsafe.ca