Removable Electrical Actuator (Suppression Diode)

The removable electrical actuator locates to the top of the container valve. 24 v dc is required for solenoid operation. Provision is made for the connection of a manual actuator to the top of the actuator assembly. The suppression diode electrical actuator must be wired up correctly with the positive supply from the control panel connected to terminal 1, and the negative supply connected to terminal 2.The removable electrical actuator has a life span of 10 years from manufacture, which is indicated on the label.

Figure 12 - Electrical Actuator - Suppression Diode (Part No. 304.205.010)

Technical Information

Body:	Mild Steel & Dull Nickel
Swivel nut:	Brass CZ121
Actuation Pin:	Stainless Steel
Actuation Type:	Latching
Reset Requirement:	Manually via Reset Tool supplied
Connection:	1" BSPP Brass
Nominal Voltage:	24 v dc
Nominal Current:	0.25 A
Max. Monitoring Current:	25 mA
Manual Actuation Force:	50 N (11.24 lbf)
Nominal Pin Travel:	4.4 mm (0.17")
Electrical connection:	3-pin plug connector
Back EMF Protection:	Suppression Diode
Certification:	UL Recognised
Overall Size:	104mm (L) x 44mm (Dia) (4.09" (L) x 1.73" (Dia))
Weight:	0.95 kg (2.09 lbs)

Removable Electrical Actuator (Bridge Rectifier)

The removable electrical actuator locates to the top of the container valve. 24 v dc is required for solenoid operation. Provision is made for the connection of a manual actuator to the top of the actuator assembly. Due to the design of the bridge rectifier it will operate regardless of how it is wired up; the positive supply from control panel can be connected to either terminal 1 or 2 with the reverse for the negative supply. The removable electrical actuator has a life span of 10 years from manufacture, which is indicated on the label.

Figure 13 - Electrical Actuator - Bridge Rectifier (Part No. 304.209.001)

Technical Information

Body:	Mild Steel & Dull Nickel
Swivel nut:	Brass CZ121
Actuation Pin:	Stainless Steel
Actuation Type:	Latching
Reset Requirement:	Manually via Reset Tool supplied
Connection:	1" BSPP Brass
Nominal Voltage:	24 v dc
Nominal Current:	0.25 A
Max. Monitoring Current:	25 mA
Manual Actuation Force:	50 N (11.24 lbf)
Nominal Pin Travel:	4.4 mm (0.17")
Electrical connection:	3-pin plug connector
Back EMF Protection:	Bridge Rectifier
Certification:	UL Recognised
Overall Size:	104mm (L) x 44mm (Dia) (4.09" (L) x 1.73" (Dia))
Weight:	0.95 kg (2.09 lbs)

Actuation Installation

The method of actuation depends on the system configuration and any specific contract requirements and can be broken down as follows:

- Single Container Actuation
- Multiple Container Actuation

Single Container Actuation

Removable Electrical Actuator

The removable electrical actuator is fitted to the top of the valve assembly as follows:

- Check the actuator mechanism to ensure that it is in the non-fired position by fully screwing in the reset tool, i.e. pin retracted (see Figure 54).
- Remove the actuator cap from the top of the valve assembly (see Figure 46).
- Carefully screw the actuator to the valve assembly (see Figure 55).

Note: The actuator must be hand tight only.

If no other actuators are to be installed ensure that the protective cap on the actuator is retained in position.

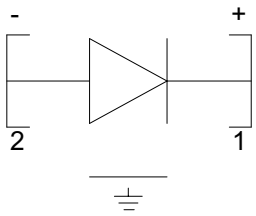
Figure 54 - Actuator Non-Fire Position

Figure 55 - Electrical Actuator Location

Electrical Actuator - Suppression Diode

The electrical signal from the detection and/or control equipment is connected in accordance with the wiring diagram detailed in Figure 56 when all other installations have been completed.

Figure 56 - Electrical Actuator Wiring Diagram - Suppression Diode



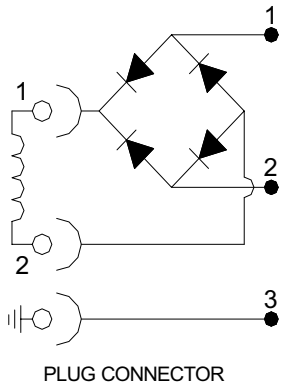
This Electrical Actuator is fitted with a suppression diode in parallel to the coil as indicated. Connect +ve from control panel to terminal 1 and -ve from control panel to terminal 2, on plug connector. End of line monitoring device (if required) to be fitted on site.

Before this system is put into operation, the removable solenoid can be checked by firing the system. To do this, REMOVE THE ELECTRICAL ACTUATOR from the valve. With power to the actuator, the pin should be firmly in the down position. Ensure that the electrical actuator is reset prior to fitting on to the conatainer valve. FAILURE TO RESET THE ACTUATOR WILL RESULT IN THE POTENTIALLY HAZARDOUS DISCHARGE OF THE CONTAINER.

Electrical Actuator - Bridge Rectifier

The electrical signal from the detection and/or control equipment is connected in accordance with the wiring diagram detailed in Figure 57 when all other installations have been completed.

Figure 57 - Electrical Actuator Wiring Diagram - Bridge Rectifier



This Electrical Actuator is fitted with a bridge rectifier as indicated. Connect +ve from control panel to either terminal 1 or 2 with the reverse for the -ve supply from control panel, on plug connector. End of line monitoring device (if required) to be fitted on site.

Before this system is put into operation, the removable solenoid can be checked by firing the system. To do this, REMOVE THE ELECTRICAL ACTUATOR from the valve. With power to the actuator, the pin should be firmly in the down position. Ensure that the electrical actuator is reset prior to fitting on to the conatainer valve. FAILURE TO RESET THE ACTUATOR WILL RESULT IN THE POTENTIALLY HAZARDOUS DISCHARGE OF THE CONTAINER.