



# MCS-EXV-DRIVER-XX

## Description & Specifications



Part # **MCS-EXV-DRIVER-XX**

### Specifications

Dimensions..... 3.96”L by 2.96”W by 4.43”H  
 Operating Temperature..... -4 F to 158 F (-20 C to 70 C)  
 Input Power ..... 110 to 240 VAC ±10% (50/60 Hz)  
 44 VA  
 Analog Control Voltage..... 0 to 10 VDC

### OPTION

-24 ..... 24 VAC ± 10% (50/60 Hz)

The following table defines XX (Display) for the part number. Please specify it when ordering.

Valve Code	# of Steps	EXV TYPE
A1	750	Alco EX4-EX5-EX6
A2	1660	Alco EX7
A3	2600	Alco EX8
CL	500	CAREL E2V, E3V, E4V, E5V, E6V, E7V
D1	2625	Danfoss ETS-12/25/50
D2	3530	Danfoss ETS-100
D3	3810	Danfoss ETS-250/400
S1	1596	Sporlan SEI 0.5 to 11
S2	1596	Sporlan SER 1.5-20
S3	3193	Sporlan SEI 30; SDR -3, SDR-3x
S4	2500	Sporlan SER-AA-A, B,C,D Sporlan SERI-F,G,J,K,L CDS -2, -4, -7
S5	6388	Sporlan SEI-50, SEH (I)-100, -175, -400; CDS -9, -16, -17; SDR -4
T1	1596	Sporlan SEI 0.5 to 11 - two valves wired to one MCS-EXV-DRIVER
T2	1596	Sporlan SER 1.5-20 - two valves wired to one MCS-EXVDRIVER
T3	3193	Sporlan SEI 30; SDR -3, SDR-3x - two valves wired to one MCS-EXV-DRIVER
T4	2500	Sporlan SER-AA-A, B,C,D Sporlan SERI-F,G,J,K,L CDS -2, -4, -7 - two valves wired to one MCS-EXV-DRIVER
T5	6388	Sporlan SEI-50, SEH (I)-100, -175, -400; CDS -9, -16, -17; SDR -4- two valves wired to one MCS-EXV-DRIVER

### Description

The **MCS-EXV-DRIVER-XX** is used for the positioning and control of bipolar expansion valves using an analog input of 0-10 VDC (0 VDC = 0% valve opening, 10 VDC = 100% valve opening). The MCS-EXV-DRIVER-XX supports multiple electronic valve manufacturers including Sporlan, Alco, Danfoss and Carel. The MCS-EXV-DRIVER also supports overdriving on full opened and full closed voltage signals. The display decimal notifies when overdriving by blinking. Another advantage of using the MCS-EXV-DRIVER-XX is that it eliminates the need for having a liquid line solenoid. The MCS-EXV-DRIVER has capacitors that store enough power to close the valve when input power fails. The LED light indicates status of the internal backup supply and the on-time of the LED increases as the internal backup supply gets charged.

### Unit Modes

**1. Auto Mode** – The unit defaults to this mode after every power up. In this mode, the MCS-EXV-DRIVER-XX positions the valve according to the analog input control voltage.

**2. Manual Mode** – When in auto mode, if holding the ‘Auto/Manual’ key for 5 seconds and then entering the authorization number switches the unit into manual mode.

In this mode, the valve position is controlled with the keypad’s directional arrows.

The MCS-EXV-DRIVER switches back to auto mode after remaining idle for 120 seconds or by holding the Auto/Manual button for 5 seconds.

**3. Power Down Mode** – If the main power is disconnected, the MCS-EXV-DRIVER switches to the power down mode. In this mode, the MCS-EXV-DRIVER uses internal power to close the expansion valve.

Revision - 2016-10-13