

# **MCS-EXV-DRIVER**

## **Description & Specifications**



Part # MCS-EXV-DRIVER
MCS-EXV-DRIVER-24

(add -xx to part number for Non-Programmed Driver)

### **Description**

The MCS-EXV-DRIVER 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 supports multiple electronic valve manufacturers including Sporlan, Sanhua, 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 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 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.

# **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 (standard)..... 110 to 240 VAC ±10% (50/60 Hz) Optional ...... 24VAC ± 10% (50/60 Hz)

Analog Control Voltage..... 0 to 10 VDC

#### **VALVE TYPE IDENTIFIER -**

Valve Code	Firmware Ver.	# of Steps	EXV TYPE
A1	5.5	750	Alco/Emerson EX4, EX5, EX6
A2	5.5	1660	Alco/Emerson EX7
A3	5.5	2600	Alco/Emerson EX8
CL	6.2	500	CAREL E2V, E3V, E4V, E5V, E6V, E7V
DA	9.2	4999	Danfoss ETS500L
DB	9.2	3810	Danfoss ETS175L
D1	5.5	2625	Danfoss ETS-12B, -24B, -25B, -50B, KVS-15
D2	5.5	3530	Danfoss ETS-100B
D3	5.5	3810	Danfoss ETS-250, -400, KVS-42
D4	5.5	600	Danfoss ETS-12C, -24C, -25C, -50C, -100C
D5	7.9	1100	Danfoss CCTM-2, CCMT-4, CCMT-8
D6	7.9	800	Danfoss CCMT-16
D7	7.9	1400	Danfoss CCMT-24
D8	7.9	2300	Danfoss CCMT-30
D9	7.9	2200	Danfoss CCMT-42
H3	7.5	2600	Sanhua VPF-12.5, -25
H4	7.5	2600	Sanhua VPF-50
H5	7.5	3500	Sanhua VPF-100
H6	7.5	3800	Sanhua VPF-150, -250, -400
P1	7.5	2500	Sporlan GC-10, -20, -30, -40, -50; FGB-60, -70
S1	5.5	1596	Sporlan SEI 0.5-11
S2	5.5	1596	Sporlan SER 1.5-20
S3	5.5	3193	Sporlan SEI 30; SDR -3, SDR-3X
S4	5.5	2500	Sporlan SER-AA, -A, -B, -C, -D; SER(I)-F, -G, -J, -K, -L; CDS -2, -4, -7
S5	5.5	6386	Sporlan SEI-50, SEH (I)-100, -175, -400, T; Y121 Y1231; SEH-P; CDS –9, -16, -17; SDR –4, -5, MTW-9S, -17S, -21S
T1	6.1	1596	Sporlan SEI 0.5-11 - two valves wired to one MCS-EXV-DRIVER
T2	6.1	1596	Sporlan SER 1.5-20 - two valves wired to one MCS-EXV-DRIVER
T3	6.1	3193	Sporlan SEI 30; SDR –3, SDR-3X - two valves wired to one MCS-EXV-DRIVER
T4	6.1	2500	Sporlan SER-AA, -A, -B, -C, -D; SER(I)-F, -G, -J, -K, -L; CDS -2, -4, -7 - two valves wired to one MCS-EXV-DRIVER
T5	6.1	6386	Sporlan SEI-50, SEH (I)-100, -175, -400, T; SEH-P; CDS –9, -16, -17; SDR –4, -5, MTW-9S, -17S, -21S - two valves wired to one MCS-EXV-DRIVER

### **Packaging**

Ship Weight .......... 1.36 lb (approx)
Box Dimensions.... 6 x 5.25 x 3.25" (approx)

