Micro CONTROL SYSTEMS

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 EX4, EX5, EX6
A2	5.5	1660	Alco EX7
A3	5.5	2600	Alco EX8
CL	6.2	500	CAREL E2V, E3V, E4V, E5V, E6V, E7V
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; Y1218/ Y1231; SEH-P; CDS –9, -16, -17; SDR –4, -5
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 - two valves wired to one MCS-EXV-DRIVER

For Non-Programmed Driver, add XX to part number (e.g. MCS-EXV-DRIVER-XX)

Packaging

Ship Weight 1.36 lb (approx)

Box Dimensions............... 6 x 5.25 x 3.25" (approx)

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