

MCS-EXV-DRIVER INSTALLATION GUIDE

IF THIS IS A NEW INSTALLATION, JUMP TO THE SECTION ON WIRING YOUR MCS-EXV-DRIVER.

IF YOU ARE REPLACING AN MCS-EXV DRIVER FOLLOW THE STEPS FOR REMOVING THE OLD DRIVER BELOW.



Please read the following safety precautions and warnings prior to installing your device.

SHUT DOWN CHILLER BEFORE ATTEMPTING THIS INSTALLATION

Check that the supply voltage on the MCS-EXV-DRIVER is correct for your installation.

STEPS TO FOLLOW IF REPLACING MCS-EXV DRIVER

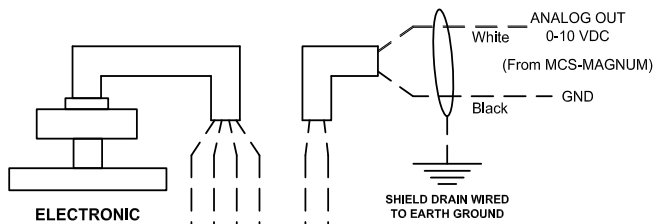
1. Disconnect the electrical power, the command signal and the Electronic Expansion Valve from the driver.
2. Remove the existing EXV Driver and verify the new driver voltage (115 / 24V) matches the installed voltage.
3. Install new EXV Driver and wire the electrical power, the command signal and Electronic Expansion Valve to the new EXV Driver.

WIRING MCS-EXV-DRIVER

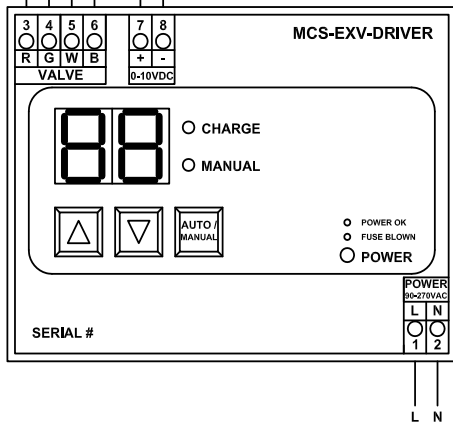
MCS-EXV-DRIVER

Electronic Expansion Valve Interface

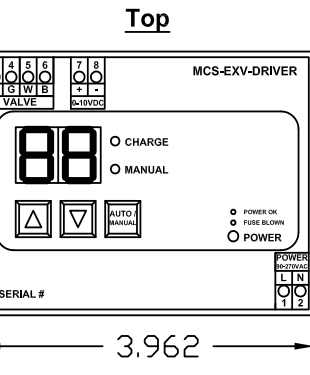
Wiring Diagram



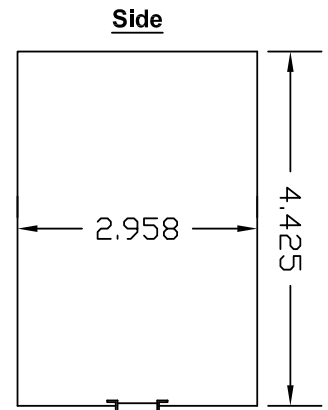
MCS-EXV DRIVER Connection Numbering	ALCO EX4, EX5, EX6, EX7, EX8, Alco-Trans® RTHC	SPORLAN SEI, SDR, SER, SEH, SERI, CDS, MTW, GC, FGB	DANFOSS ETS	CAREL E2V, EV3, EV4, EV5, E6V, E7V	SANHUA VFP12.5, VPF25, VPF50, VPF100, VFP150, VPF250, VPF400
Refer to the Manufacturer's Datasheet of the Valve for Verification of Wiring					
3	Black	Red	Red	Green	Red
4	White	Green	Green	Brown	Green
5	Brown	White	White	White	Black
6	Blue	Black	Black	Yellow	White



110 to 240 VAC
24 VAC - (50-60 Hz)



If utilizing 240 volt L is
Phase1 and N is Phase2.



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MCS-EXV-DRIVER Wiring Diagram (2022-01-21)



POWER UP SEQUENCE:

- Power okay-LED lights up
- Charge light blinks GREEN
- When fully charged the MCS-EXV DRIVER GREEN Light will be solid.
- The driver will go thru the power up sequence.
- Valve is over driven CLOSED.



**VERIFY THE VALVE TYPE PRIOR TO STARTING THE CHILLER
SEE REVERSE SIDE**

CHECKING THE VALVE TYPE - (CHANGE IF NECESSARY)

When in Auto mode press both the UP and DOWN and AUTO/MANUAL keys simultaneously this will display the valve type.

CHANGING THE VALVE TYPE IF NECESSARY

1. Pressing both the UP and DOWN keys simultaneously for 5 seconds shows the 'ES'
2. Release and then Press the UP and DOWN keys simultaneously again to see the 'PS' (password)
3. Use the UP or DOWN key to enter the password '47'
4. Press the UP and DOWN key simultaneously to accept the password entered
5. Next use the UP or DOWN keys to navigate to the EXV VALVE TYPE

VALVE TYPE IDENTIFIER -

Valve Code	Firmware Ver..	# of Steps	EXV TYPE
A1	5.5	750	A1-Alco EX4, EX5, EX6
A2	5.5	1660	A2-Alco EX7
A3	5.5	2600	A3-Alco EX8
CL	6.2	500	CL-CAREL E2V, E3V, E4V, E5V, E6V, E7V
D1	5.5	2625	D1-Danfoss ETS-12B, -24B, -25B, -50B
D2	5.5	3530	D2-Danfoss ETS-100B
D3	5.5	3810	D3-Danfoss ETS-250, -400
D4	5.5	600	D4-Danfoss ETS-12C, -24C, -25C, -50C, -100C
H3	7.3	2600	H3-Sanhua VPF-12.5, -25, -50
H4	7.3	3500	H4-Sanhua VPF-100
H5	7.3	3800	H3-Sanhua VPF-150, -250, -400
P1	7.3	2500	P1-Sporlan GC-10, -20, -30, -40, -50; FGB-60, -70
S1	5.5	1596	S1-Sporlan SEI 0.5-11
S2	5.5	1596	S2-Sporlan SER 1.5-20
S3	5.5	3193	S3-Sporlan SEI 30; SDR -3, SDR-3X
S4	5.5	2500	S4-Sporlan SER-AA, -A, -B, -C, -D; SER(I)-F, -G, -J, -K, -L; CDS -2, -4, -7
S5	5.5	6386	S5-Sporlan SEI-50, SEH (I)-100, -175, -400; SEH-P; CDS -9, -16, -17; SDR -4, -5
T1	6.1	1596	T1-Sporlan SEI 0.5-11 - two valves wired to one MCS-EXV-DRIVER
T2	6.1	1596	T2-Sporlan SER 1.5-20 - two valves wired to one MCS-EXV-DRIVER
T3	6.1	3193	T3-Sporlan SEI 30; SDR -3, SDR-3X - two valves wired to one MCS-EXV-DRIVER
T4	6.1	2500	T4-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	T5-Sporlan SEI-50, SEH (I)-100, -175, -400; SEH-P; CDS -9, -16, -17; SDR -4, -5 - two valves wired to one MCS-EXV-DRIVER

For Replacing your Driver, once your new installation is complete, replace the old MCS-EXV DRIVER in the box that the new driver came in, apply return label and ship back to MCS

**COMPLETE INSTRUCTION ON THE MCS-EXV-DRIVER CAN BE FOUND AT:
www.mcsccontrols.com/manuals.html**



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