

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.

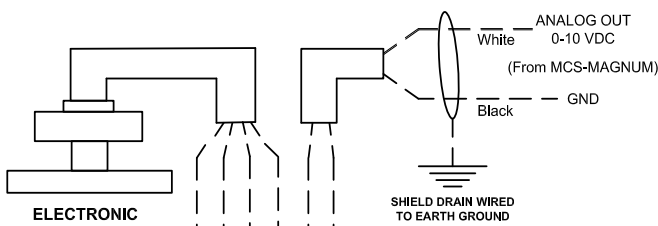
STEPS TO FOLLOW IF REPLACING MCS-EXV DRIVER

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

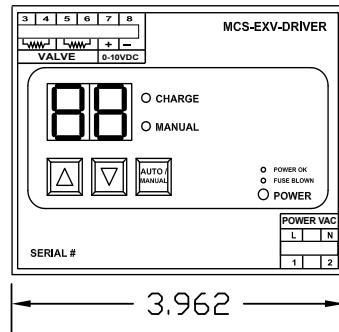


MCS-EXV DRIVER Connection Numbering	ALCO EX4, EX5, EX6, EX7, EX8, Alco-Trane® RTHC	SPORLAN SEI, SDR, SER, SEH, SERI, CDS, MTW, GC, FGB	DANFOSS ETS	CAREL E2V, EV3, EV4, E5V, E6V, E7V	SANHUA VPF12.5, VPF25, VPF50, VPF100, VPF150, VPF250, VPF400
3	Black	Red	Red	Green	Red
4	White	Green	Green	Brown	Green
5	Brown	White	White	White	Black
6	Blue	Black	Black	Yellow	White

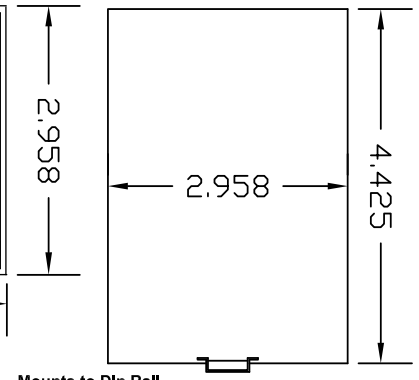


Refer to the Manufacturer's Datasheet of the Valve for Verification of Wiring

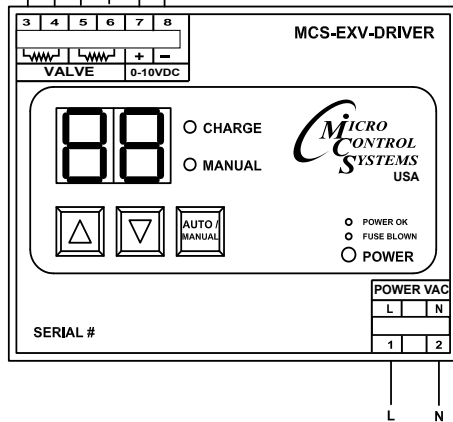
Top



Side



Mounts to Din Rail



115 to 230 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 (2022-09-23)



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

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'

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

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

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.mcscontrols.com/manuals.html



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