The Sporlan S3C Case Control should be installed only by a qualified professional. All other system components should be supplied by Sporlan to ensure compatibility and proper operation.

Use caution when working around high voltage components. Safety covers should be used for personal safety on high voltage panels.

1. INSTALLATION
   (Reference diagram on back side).

1. Mount the controller in a rain-tight protected location using #8 sheet metal screws; tighten to 14-16 in-lbs. DIN rail may also be used as alternate mounting. The suggested mounting area is 6 inches high and 14 inches wide, depth is 3 inches.

2. Mount the suction temperature sensor to the suction line after the evaporator. Connect the non-polarized sensor wires to “Coil Out” on the controller. Maximum torque on screw terminals is 3.5 in-lbs.

3. Mount the defrost termination sensor to the coil. Connect the non-polarized sensor wires to “Def Term” on the controller.

4. Mount the discharge air temperature sensor in the appropriate location in the case. Connect the non-polarized sensor wires to “Dsch Air” on the controller.

5. Mount the pressure transducer on the suction line near the suction temperature sensor, positioned at 12 o’clock. Install the pressure transducer cable and connect the wires to “Pressure” on the controller. Black = “5V”, White = “S”, Green = “Gnd”.

6. Connect the liquid line solenoid to “Sol/Pulse” on the controller.

7. Connect the Electronic Expansion Valve to “Stepper Valve” on controller. For alternate valve configurations, see Bulletin 100-50-9.1.

8. Install the S3C DM (display) and wire to the controller.

9. Connect power supply to the controller and DM. Transformer requirements are 24VDC 60VA, Class II.

2. SETUP
   On initial power up, the display will show \( \sum_\alpha \in \tau \) and the controller will drive the stepper valve closed until set up is complete. Scan QR code below for full installation and operating manual.

Configure the controller using an S3C DM (display). Press “UP” or “DOWN” arrow on the display to view parameter options. Press “SET” to save. Press “ESC” button to back up one level in the menu. The set up must be complete prior to exiting otherwise changes will not be saved.

1. Is the case self contained (\( \sum_\alpha \in \tau \)): Select \( \varphi_\in \tau \), then press SET

2. Set \( \varphi_\in \tau \), Case Identifier

3. Set \( \sum_{\in \tau} \), Application Type:
   \( \tau \in \lambda \) (Walk In Cooler/Freezer)
   \( \in \lambda L \) (Single Temperature)
   \( \sum_{\in \lambda} \) (Dual Temperature)

4. Set \( \sum_{\in \tau} \), Stepper Configuration:
   \( \varepsilon_{\in \tau} \) (Electronic Pressure Regulator)
   \( \varepsilon_{\tau} \) (Electronic Expansion Valve)
   \( \tau_{\in \tau} \) (Use for TEV)

5. Set \( \varepsilon_{\in \tau} \), Expansion Valve Type:
   \( \varepsilon_{\in \tau} \in \lambda_{<6}, 6386 \)
   \( \in \lambda \) (Hot Gas)
   \( \varepsilon_{\tau} \) (Electric)
   \( \tau_{\in \tau} \), Air

6. Set \( \varepsilon_{\in \tau} \), Number of Evaporators

7. Will case be integrated to a \( \varphi_{\in \tau} \), Building Automation System; \( \varphi_\in \tau \) or \( \varphi_\in \tau \)

8. Set \( \varphi_{\in \tau} \), Building Automation Protocol (skipped if no BAS):
   \( \in \lambda \) (MODBUS over RS-485)
   \( \in \lambda \) (BACnet over RS-485)
   \( \in \lambda \) (BACnet over IP)
   \( \in \lambda \) (MODBUS over IP)

9. Set \( \tau_\in \varphi_\in \), Month

10. Set \( \varphi_{\in \tau} \), Day

11. Set \( \varepsilon_\in \varphi_\in \), Year

12. Set \( \sum_{\in \tau} \), Time (24hr format)

13. Set \( \varepsilon_{\in \tau} \), Refrigerant Type

14. Set \( \varepsilon_{\in \tau} \), System EPR Type

15. Set \( \varepsilon_{\in \tau} \), Discharge Air Setpoint

16. Set \( \varepsilon_{\in \tau} \), Defrost Type
   \( \in \lambda \), Hot Gas
   \( \varepsilon_{\in \tau} \), Electric
   \( \tau_{\in \tau} \), Air

17. Set \( \varepsilon_{\in \tau} \), Defrost Termination Temperature

18. Set \( \varepsilon_{\in \tau} \), Defrost Termination Failsafe Time

19. Set \( \varepsilon_{\in \tau} \), Defrost Per Day

Temperature sensor should be mounted at either 4 or 8 o’clock, on a free-draining line.

For detailed instructions and part numbers, scan this QR code or go to www.sporlanonline.com/electronic-controls and download Bulletin 100-50-9.1
Diagram for reference only. Refer to input/output electrical ratings for all external connections.

For safety information, see the Safety Guide at www.parker.com/safety or call 1-800-CPARKER.

Note: Use caution when working around high voltage components.

© 2017 Parker Hannifin Corporation

Parker Hannifin Corporation
Sporlan Division
206 Lange Drive • Washington, MO 63090 USA
phone 636 239 1111 • fax 636 239 9130
www.sporlan.com