S3C Valve Module
Quick Reference Guide

SD-437 / 102021 Controller v. A

The Sporlan **S3C Valve Module** should be installed only by a qualified professional. All other system components should be supplied by Sporlan to ensure compatibility and proper operation. The S3C Valve Module fully integrates with the Sporlan S3C Case Control System. NOTE: This S3C Valve Module Quick Reference Guide assumes the S3C Case Controller has been setup prior to installation of the S3C Valve Module. See 100-50-9.1 for full set-up instructions.

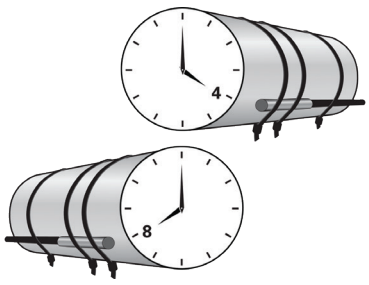
Use caution when working around high voltage components.
Safety covers should be used for personal safety on high voltage panels.

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 8 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 1" 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 1" on the controller.
4. Mount the discharge air temperature sensor in the appropriate location in the case. Connect the non-polarized sensor wires to "Air 1" 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". Optional if the S3C Case Control already has a pressure transducer installed.



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

6. Connect the liquid line solenoid to "Sol/Pulse" on the controller.
7. Connect the Electronic Expansion Valve (EEV) to "Stepper Valve 1" on controller.
8. If an Electronic Evaporator Pressure Regulator (EEPR) is used, ensure side DIP switches 1, 2 and 3 are set ON (all down); see Figure 1.
9. Connect the EEPR to "Stepper Valve 2" on the controller.
10. Connect power to the Valve Module. **NOTE: Power will come from the S3C Case Control power supply.**

2. SETUP

The S3C Valve Module is set up and configured through the S3C Case Control and S3C DM (display). On initial power up, the valve module will drive the EEV and EEPR closed. To ensure the valve module is configured properly to control an EEV on 'Stepper Valve 1' input and an EEPR on 'Stepper Valve 2' input, the following parameters must be set up through the S3C DM. **NOTE: The Case Control, DM and Valve Module must be networked together as shown in the wiring diagram.**

Through the DM:

1. Press 🔧 icon on the front of the display.
2. Press ▲▼ to scroll to the password (default is 1), press SET.
3. Press SET when display shows CASE.
4. Scroll to uLuC (valve configuration) and press SET.
5. Scroll to EPrt (EPR type)and press SET.
6. Change the steps to match the corresponding EEPR on the system, then press SET:
   a. 2500
   b. 6386
7. Press ESC three times to exit to main display.

Figure 1 - Side DIP Switches 1, 2, 3 ON (down) for EEPR control.

VEM MODEL NUMBER SUFFIX

	Pulse Valve / Liquid Line Solenoid Output			
		2	1	0
BAS	With	A	B	C
	Without	D	E	F

Six models of the S3C Valve Module, part number 953623X exist, where the suffix X can be any letter A through F. This letter denotes the model type and determines how many Pulse / Solenoid outputs the Valve Module has and if Building Automation System control via RS-485 is available. This suffix letter on the back label is the only way to differentiate between Valve Modules as all six models externally look identical.

Sporlan S3C Case Control Installation and Operation Manual

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

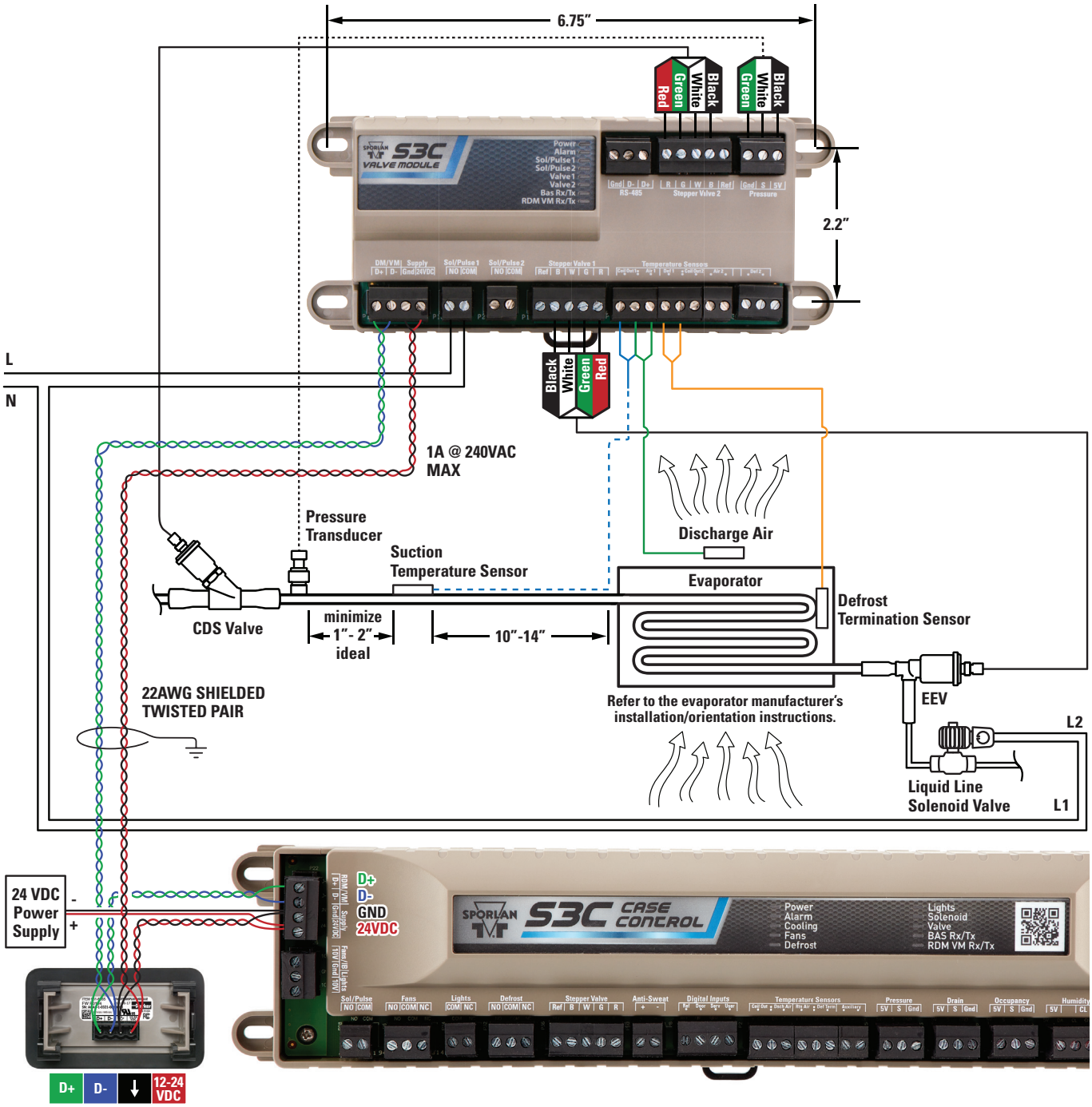


Diagram for reference only. Refer to input/output electrical ratings for all external connections.
For safety information, see the Safety Guide at www.parker.com/safety or call 1-800-CPARKER.

Note: Use caution when working around high voltage components.

Visit www.sporlan.com for details on other Sporlan products such as sensors, transducers, and valves.

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