



# S3C Case Control Quick Reference Guide

SD-429 / 82017

Controller v. A



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.

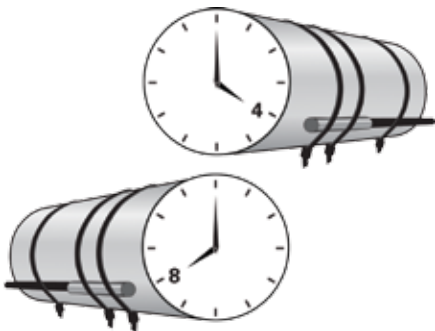


**Use caution when working around high voltage components. Safety covers should be used for personal safety on high voltage panels.**

## 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".



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 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 **SELF** 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.

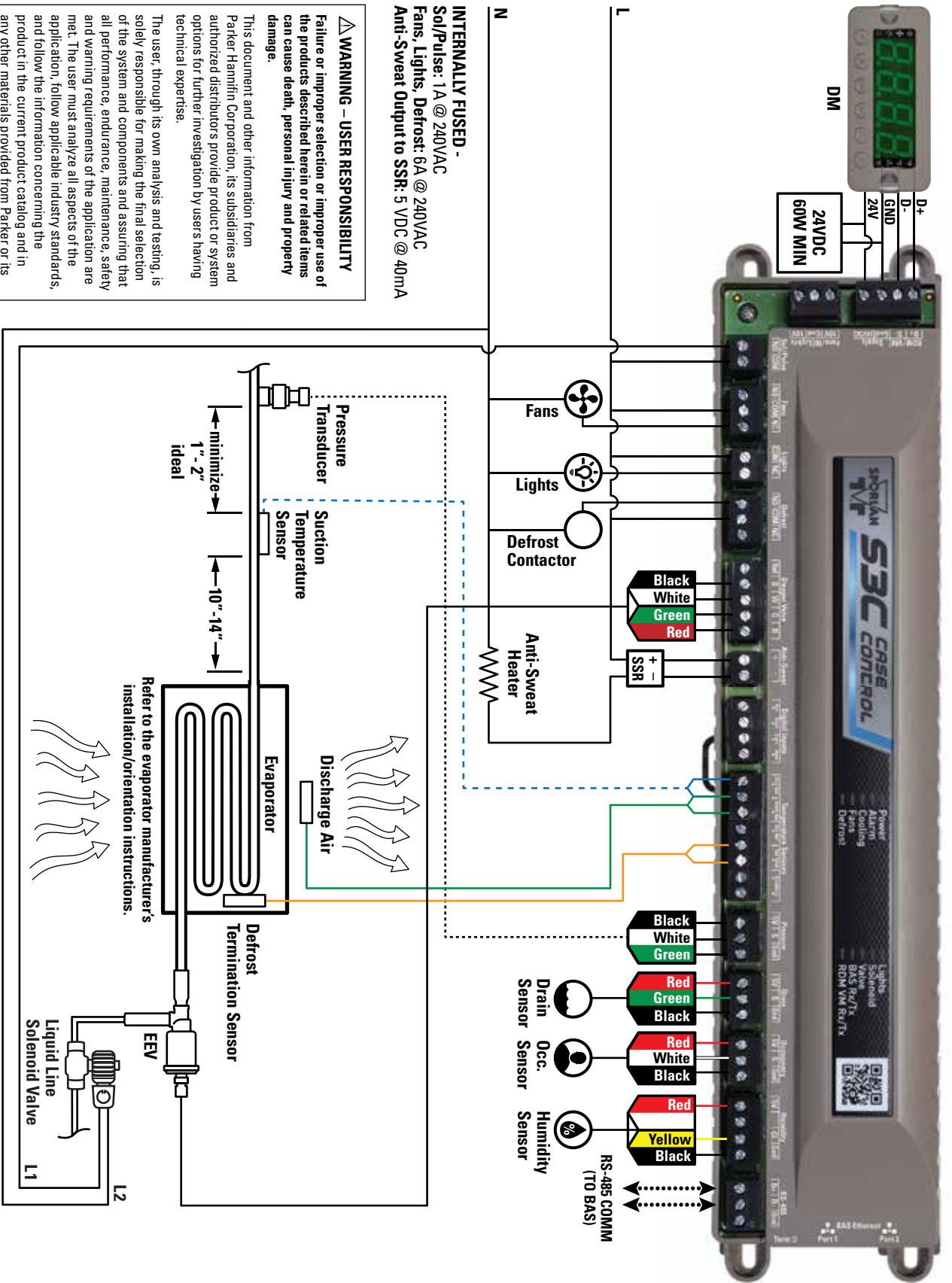
1. Is the case self contained (**SELF**): Select **YES**, then press SET
2. Set **Case Id**, Case Identifier
3. Set **APPL**, Application Type:  
**WALK** (Walk In Cooler/Freezer)  
**Single** (Single Temperature)  
**DUAL** (Dual Temperature)
4. Set **StePC**, Stepper Configuration:  
**EEP** (Electronic Pressure Regulator)  
**EEV** (Electronic Expansion Valve)  
**none** (Use for TEV)
5. Set **EvLV**, Expansion Valve Type:  
**EEV** 1596 6386  
**PULS** 2500  
**500** 3193

6. Set **nevP**, Number of Evaporators
7. Will case be integrated to a **bAS**, Building Automation System; **YES** or **no**
8. Set **bASP**, Building Automation Protocol (skipped if no BAS):  
**485** (MODBUS over RS-485)  
**485** (BACnet over RS-485)  
**IP** (BACnet over IP)  
**IP** (MODBUS over IP)
9. Set **month**, Month
10. Set **day**, Day
11. Set **year**, Year
12. Set **time**, Time (24hr format)
13. Set **refT**, Refrigerant Type
14. Set **EPRt**, System EPR Type
15. Set **dASP**, Discharge Air Setpoint
16. Set **dEff**, Defrost Type  
**H9AS**, Hot Gas  
**ELec**, Electric  
**Air**, Air
17. Set **dTEP**, Defrost Termination Temperature
18. Set **dTEE**, Defrost Termination Failsafe Time
19. Set **dFPd**, Defrost Per Day

### 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](http://www.sporlanonline.com/electronic-controls) and download Bulletin 100-50-9.1



**INTERNALLY FUSED -**  
 Sol/Pulse: 1A @ 240VAC  
 Fans, Lights, Defrost: 6A @ 240VAC  
 Anti-Sweat Output to SSR: 5 VDC @ 40mA

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 Failure or improper selection or improper use of the products described herein or related items can cause death, personal injury and property damage.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

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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](http://www.parker.com/safety) or call 1-800-CPARKER.



**Note: Use caution when working around high voltage components.**

Visit [www.sporlanonline.com](http://www.sporlanonline.com) for details on other Sporlan products such as sensors, transducers, and valves.

