



Secondary Fluid Control

Quick Reference Guide

SD-377

Controller v. A



The Sporlan Secondary Fluid Control should be installed only by a qualified professional. All other system components (valves and sensors) should be supplied by Sporlan to ensure compatibility and proper operation. There are no user-serviceable components inside the controller. Opening the case will void the warranty.



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

Tools required:

- Small flat screwdriver for terminal connections
- Cordless screwdriver
- Phillips and flat screwdrivers
- Needle-nose pliers
- Wire cutters
- Scotch-Brite pad
- Two #8 X 1/2" self-tapping screws to mount DIN rail
- Six cable ties

1. INSTALLATION

Refer to diagram on back of this guide.

1. Mount the controller in a rain-tight, protected location using the supplied DIN rail. To leave enough working space, the suggested mounting area is 10 inches high, 5 inches wide and minimum depth of 3 inches.
2. Mount the coil inlet, coil outlet and discharge air temperature sensors per SD-245 supplied in sensor kit. For further details on location of sensor installation, snap QR code below to view the Installation and Operation manual; Bulletin 100-50-5.4, or visit www.sporlanonline.com.

NOTE: Sensors are color coded for ease of installation.

Coil Inlet (supply) = Blue
Coil Outlet (return) = Black
Discharge Air = Green

3. Connect the Inlet liquid temperature sensor wires to terminals 29 and 30 (blue jacket). The sensor is not polarized. **Maximum torque on screw terminals is 3.5 in-lbs.**
4. Connect the Outlet liquid temperature sensor wires to terminals 27 and 28 (black jacket). The sensor is not polarized.
5. Connect the Discharge air temperature sensor wires to terminals 31 and 32 (green jacket). The sensor is not polarized.

6. Connect terminals 25 and 26 to a Normally Open dry contact. A short or closed contact from an external relay will position the valve for defrost.
7. Connect the Sporlan SFV wires to terminals 5, 6, 7, and 8. Valve wires are color coded.
8. Connect power to terminals 1 and 2. Transformer requirements are 24 volts AC at 40 VA, Class II.
9. Remove the protective clear film from the front of the Secondary Fluid Control.



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

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2. SETUP

Ensure all connections have been made and the defrost signal is inactive before applying power. The SFV is initialized upon start up, and the system will not operate until completing setup. Once powered up, the controller will display the firmware versions and then the first variable to set. To change setup parameters, press the select knob to enter setpoint range, scroll to desired selection and then press the select knob.

1. Set **dASP**, Discharge Air Setpoint. Default is 28°F.
2. Set **dtYP**, Defrost Type. Default is **off** for off time defrost. If warm fluid defrost is required, select **FLUd**.
3. Once setup is complete, the controller will display **dAIR** (Discharge Air)

temperature. After the system is in operation, verify that the Discharge Air Setpoint, **dASP**, is met.

4. If additional controllers are being installed, refer to Bulletin 100-50-5.4.

3. SETPOINT MENU OPERATION

For further system tuning, adjust parameter setpoints as described below and in Bulletin 100-50-5.4.

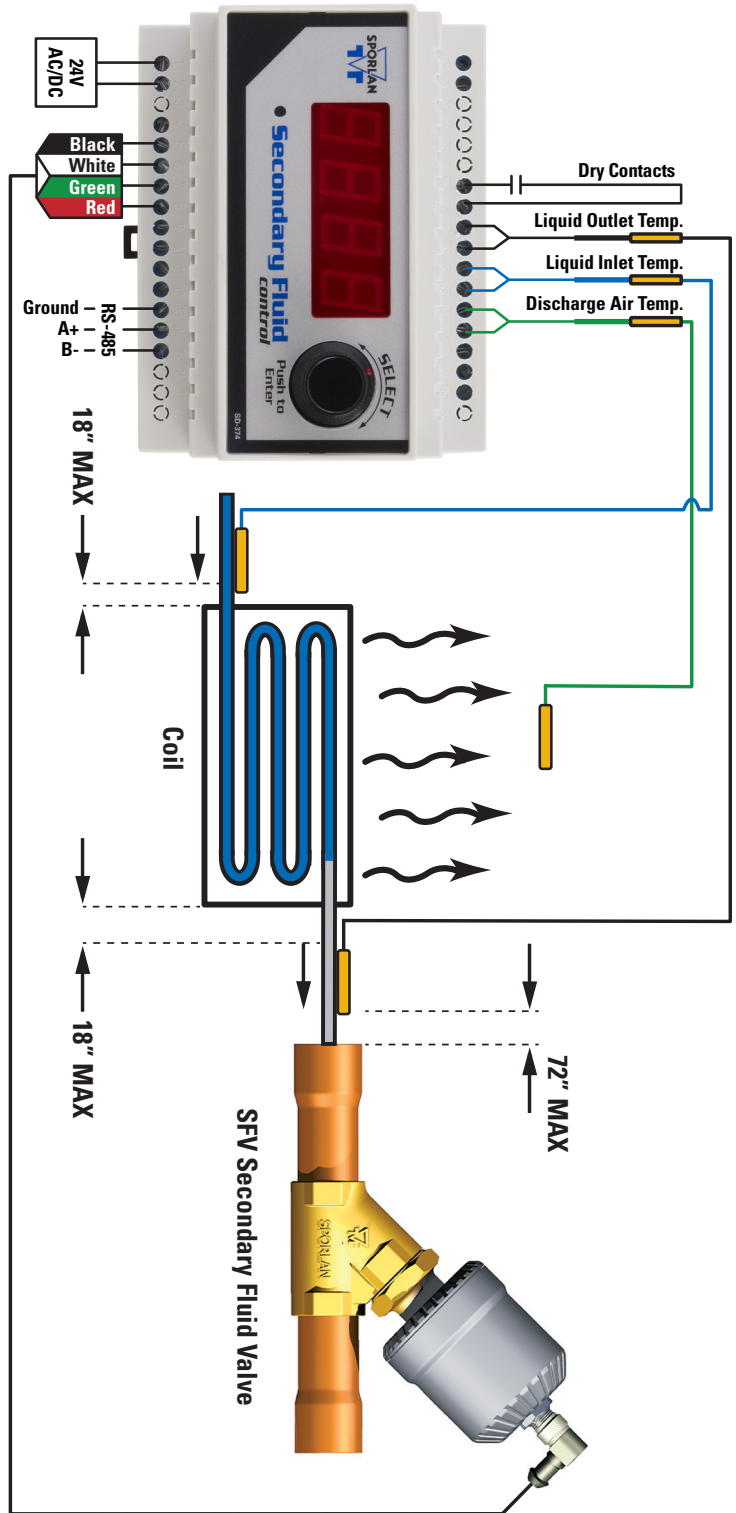
NOTE: The Parameter Menu times out after 60 seconds of inactivity and all changes will be lost.

1. Enter the Parameter Menu: Press and hold the SELECT knob for 5 seconds. Rotate the knob to enter the password "111" and press the SELECT knob again.
2. To change a parameter, rotate the SELECT knob to the desired parameter and press the SELECT knob. The default value will display.
3. Turn the SELECT knob to change the value and then press the SELECT knob to enter the value and return to the Parameter Menu.
4. After all parameters are set, turn the SELECT knob to "ESC" and press the SELECT knob to save all changes. Observe the system for proper operation.

Sporlan Secondary Fluid Control Installation and Operation Manual



For detailed instructions, scan this QR code or go to www.sporlanonline.com/electronic-controls and download Bulletin 100-50-5.4



NOTE: PIPING AND SENSOR INSULATION NOT SHOWN.



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

