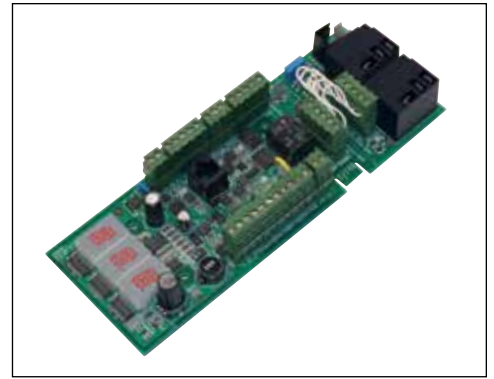




Cold Room Control Quick Reference Guide

SD-302/32013

Controller v. A



The Sporlan Cold Room 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.

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

Tools required:

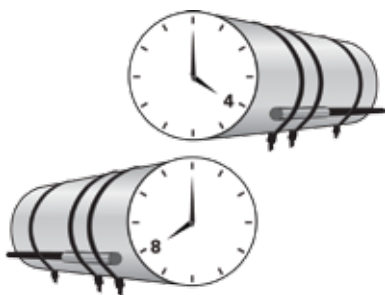
- Small flat screwdriver for terminals
- Cordless screwdriver
- Phillips and flat screwdrivers
- Needle-nose pliers
- Wire cutters
- Scotch-Brite™ pad
- Two #10 self-tapping screws to mount SnapTrack panel
- Four female ¼" crimp-on Quick Disconnect terminals for relays

1. INSTALLATION

Reference diagram on the back of this guide.

Maximum torque on screw terminals is 3.5 in-lbs.

1. Mount the SnapTrack panel on a flat surface in a protected location, using self-tapping #10 screws. To leave enough working space, the suggested mounting area is 10 inches high and 6 inches wide; depth is 2.5 inches. Install the controller in the SnapTrack.
2. Mount the evaporator outlet temperature sensor to the suction line, positioned at either 4 or 8 o'clock. Connect the non-polarized wires to "Evap.Out."
3. Mount the pressure transducer on the suction line near the suction temperature sensor, positioned at 12 o'clock. Connect the wires to "Pressure."



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

4. Mount the room or box temperature sensor in the area to be controlled. Connect the non-polarized wires to "Room.Tmp."
5. Mount the defrost termination sensor on the coldest point of the evaporator coil. Connect the non-polarized wires to "Def-Tmp."
6. Connect an external relay to the "Aux-Tmp." A short (closed contact) will enable pumpdown.
7. Connect the evaporator fan: connect the hot lead from the power supply to the COM terminal on the relay; connect the neutral lead from the power supply to one terminal on the fan; connect the other terminal on the fan to the NC terminal on the relay.
8. Connect the defrost heater: connect the hot lead from the power supply to the COM terminal on the relay; connect the neutral lead from the power supply to one terminal on the heater; connect the other terminal on the heater to the NO terminal on the relay.
9. Connect the four terminals of the expansion valve to the CRC controller. Refer to diagram on back for polarity.
10. Connect remaining optional equipment as shown on the back of this guide: liquid line solenoid, RS-485 network, alarm, and/or electric defrost override relay.
11. Connect power supply to the CRC controller. Transformer requirements are 24 volts AC at 40VA, Class II.

2. SETUP

On initial power-up, the EEV will close and the controller will display the first parameter in the Setup Menu. Press the SELECT knob once to view the setting. Rotate the knob to change the setting. Press the knob again to save the value and proceed to the

next parameter. The following parameters must set/verified before the controller will begin normal operation:

See the Cold Room Control Installation and Operating Instructions for configuring additional system parameters or when installing multiple CRC controllers in a master/slave configuration.

1. **M/S** – For a single evaporator system, the CRC may be set up as either a Master **MST** or a slave **SLV** controller.
2. **F/C** – Select Fahrenheit (**Fah**) or Celsius (**Cel**) units. Default is **Fah**.
3. **L/M** – Select Low (**LT**) or Medium (**MT**) Temperature. Default is **MT**.
4. **RTS** – Select Room Temperature Setpoint. Default is **-10°F** for LT or **35°F** for MT.
5. **VTy** – Select valve type. Default is **2** (2500 step EEV).
6. **Rfg** – Select the actual refrigerant used in the system. Default is **04A** (404A).
7. **Clc** – Set the current time in hours (**xxH**) and minutes (**xxM**). Time is based on a 24-hour clock.

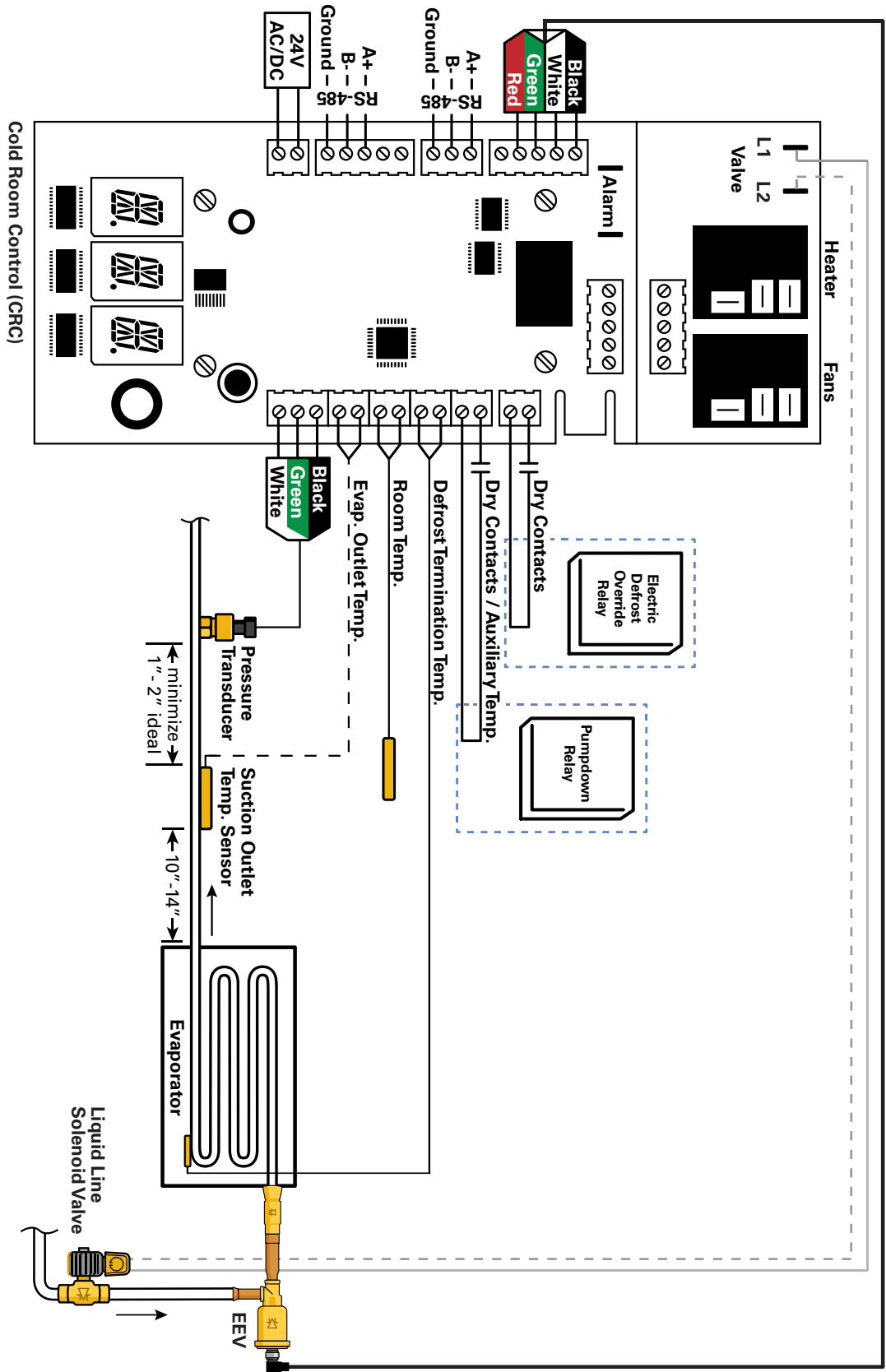
Once setup is complete, the CRC will begin controlling based on default values. The display will alternate between the room temperature and the current operating mode. Any alarms (***A***) will also be displayed.

Sporlan Cold Room Control Installation and Operation Manual



For detailed instructions, scan this QR code or go to www.sporlanonline.com/electronic-controls and download Bulletin 100-50-4.1

System Schematic



This schematic is for component location only, not a typical piping recommendation.
 Schematic not to scale.
 Insulation not shown.



WARNING: Route and secure cables away from hot surfaces, high voltage lines, and moving components.

