The S3C Series Can Manage Cases

- Single Coil
- Multiple Coil
- Self-Contained
- Remote Rack

Control Modes

Superheat Control
- Use suction pressures and temperatures to control an EEV

Case Control (Single or Dual Temperature)
- Use discharge or return air temperature to control EEVs and/or EEPRs

Suction Control
- Use suction pressure or temperature to control an EEPR

Control More with the S3C Series

- Defrost
- Lighting
- Fans
- Liquid Line Solenoid
- Anti-Sweat Heaters

S3C Series Case Controls

The Sporlan S3C Series of case control products provides safety, security, and service for remote and self contained refrigerated display appliances (single or multiple coil).

The S3C family of controls includes a case controller, display module, and valve module that all support open protocol communication via BACnet and Modbus. The system is designed to facilitate both installation and integration by the refrigerated appliance OEMs as well as retrofit into existing supermarket refrigeration control installations. When enabled, the controller provides automated configuration and network integration.

The S3C Case Control peer to peer system is capable of standalone or BAS coordinated control of up to 8 refrigerated cases per lineup. This family of controls simplifies and shortens the time required to set up new equipment or retrofit an existing system for more precise control.

The S3C Series MAKES THE CASE, helping your business do MORE business.
**S3C - Case Control**

**ITEM NUMBER 953621**
- Internal control algorithms for precise control
- Multitude of sensory inputs and controlled outputs

**S3C - Display Module**

**ITEM NUMBER 953622**
- Local user interface for the S3C Case Control system
- Navigation via a simplified and intuitive series of menus
- Password protected access to service functions
- Manual defrost initiation with password

**S3C - Valve Module**

**ITEM NUMBER 953623**
- Expands the control capabilities of the S3C Case Control
- Provides additional inputs and outputs

**OUTPUTS**
- EEV for Case Temp. and/or Superheat Control
- 2 Stepper Motor Driven Valves
  - Select either 2 EEVs or 1 EEV and 1 EEPR
- Solid State Relay Output
  - (Liquid Line Solenoid or Pulse EEV)
- 6 Temperature Sensors
  - (Color-coded, 10K types)
  - 2 Coil Outlet Temps
  - 2 Air Temps
  - 2 Defrost Termination Temps

**INPUTS**
- Pressure Transducer (5V)
- 6 Temperature Sensors
- 2 Air Temps
- 2 Defrost Termination Temps
- Display Case Door Status
- Pressure
- Humidity
- Occupancy
- Relay for Anti-Sweat Heaters
- Relay for Defrost Heaters
- Relay for Lights
- Relay for Solenoid or PWM EEV
- Relay for Fans
- Temperature

**OUTPUTS**
- 6 Temperature Sensors
- 2 Coil Outlet Temps
- 2 Air Temps
- 2 Defrost Termination Temps
- Display Case Door Status
- Pressure
- Humidity
- Occupancy
- Relay for Anti-Sweat Heaters
- Relay for Defrost Heaters
- Relay for Lights
- Relay for Solenoid or PWM EEV
- Relay for Fans
- Temperature

**INPUTS**
- Pressure Transducer (5V)
- 6 Temperature Sensors
- 2 Air Temps
- 2 Defrost Termination Temps
- Display Case Door Status
- Pressure
- Humidity
- Occupancy
- Relay for Anti-Sweat Heaters
- Relay for Defrost Heaters
- Relay for Lights
- Relay for Solenoid or PWM EEV
- Relay for Fans
- Temperature
Product Features

• Two S3C Valve Modules may be powered by the S3C Case Control
• Color-coded temperature sensor wires for ease of installation
• Control step motor or pulse width modulation valves
• Bright, colored LEDs show status of case at a glance
• Modbus or BACnet communications
• Defrost or dual temperature mode via dry contact input
• Manual valve positioning available through menu
• Energy efficient system operation through accurate valve control
• No control tuning needed
• Diagnostics report issues with sensors, valves, fans, heaters, etc.
• Fail-safe operation of case under loss of communication with BAS
• Also available in fully assembled panels for retrofit applications

Product Selection

<table>
<thead>
<tr>
<th>S3C Product Line</th>
<th>Case Control Item Number 953621</th>
<th>Display Module Item Number 953622</th>
<th>Valve Module Item Number 953623</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Features</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display</td>
<td>–</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Temperature Sensor (contact)</td>
<td>✓</td>
<td>–</td>
<td>✓</td>
</tr>
<tr>
<td>Temperature Sensor (#)</td>
<td>5</td>
<td>–</td>
<td>6</td>
</tr>
<tr>
<td>Pressure Transducer</td>
<td>1</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Superheat Valves Controlled (type)</td>
<td>EEV (Stepper or PWM)</td>
<td>–</td>
<td>✓</td>
</tr>
<tr>
<td>Superheat Valves Controlled (#)</td>
<td>1 EEV / 1 PWM</td>
<td>0</td>
<td>2 EEVs / 1 PWM</td>
</tr>
<tr>
<td>Communication (Modbus and BACnet)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td>24V DC</td>
<td></td>
</tr>
<tr>
<td>Dimensions - Inches (W x H x D)</td>
<td>13.6 x 3.3 x 1.8</td>
<td>3.0 x 1.5 x 3.5</td>
<td>6.8 x 3.3 x 1.8</td>
</tr>
</tbody>
</table>

Typical Applications

Refrigerated Display Cases
Cold Rooms / Environmental Chambers

Accessories

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Item Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Probes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10K Sensors</td>
<td>230076</td>
<td>20 ft. blue wire - Coil out</td>
</tr>
<tr>
<td></td>
<td>230073</td>
<td>20 ft. green wire - Discharge air (or return air)</td>
</tr>
<tr>
<td></td>
<td>230072</td>
<td>20 ft. orange wire - Defrost termination</td>
</tr>
<tr>
<td></td>
<td>230075</td>
<td>20 ft. yellow wire - Return air</td>
</tr>
<tr>
<td>Pressure Transducers*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSPT0150SVSP-S</td>
<td>952572</td>
<td>0-150 psis transducer (all other refrigerants)</td>
</tr>
<tr>
<td>PSPT0300SVSP-S</td>
<td>952574</td>
<td>0-300 psis transducer (R410A)</td>
</tr>
<tr>
<td>PSPT0500SVSP-S</td>
<td>952576</td>
<td>0-500 psis transducer (R744)</td>
</tr>
<tr>
<td>PSPT0652SVSP-S</td>
<td>952579</td>
<td>0-652 psis transducer</td>
</tr>
<tr>
<td>Sensors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCC-360</td>
<td>953504</td>
<td>Occupancy Sensor</td>
</tr>
<tr>
<td>RTH-2301</td>
<td>953503</td>
<td>Temperature and Humidity Sensor</td>
</tr>
<tr>
<td>CT-26</td>
<td>953507</td>
<td>Current Sensor 25A to 5V DC</td>
</tr>
<tr>
<td>Transducer Cables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSPT000000CP20</td>
<td>953192</td>
<td>2 meter cable</td>
</tr>
<tr>
<td>PSPT000000CP50</td>
<td>953100</td>
<td>5 meter cable</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Supply</td>
<td>953444</td>
<td>Input: 100-240 VAC; Output: 24 VDC, 60W</td>
</tr>
<tr>
<td>SMA-12</td>
<td>953276</td>
<td>Handheld digital instrument for testing step motor performance.</td>
</tr>
</tbody>
</table>

*Select one per control module based on refrigerant.