Room Controllers
SC3000 Relay Pack

The SC3000 is a relay pack for line-voltage fan coil units. The device is used with SER7300 and SER8300 room controllers as a two component retrofit option.
SC3000 Relay Pack

Features

A compact and easy to install relay pack for line-voltage fan coil units to be used in combination with room controllers.

Introduction

The SC3000 relay pack is part of a two component retrofit option for line-voltage fan coil units. The relay pack must be combined with either SER7300 or SER8300 room controllers.

The SC3000 relay pack features an onboard universal voltage power supply and line-voltage relays which directly drive fractional horsepower fan motors and valves. This eliminates the need to install and wire costly pilot relays and transformers.

No previous building automation training is required for the installation and commissioning process.

Existing line voltage wiring between the fan coil unit and temperature controller can be reused further minimizing overall labor and installation costs.

SC3000 Product Highlights

- Extremely compact design
- Line powered from 90 to 277 VAC 50-60 Hz
- Wire-leads for line-voltage connections
- Direct line switching of fan speed and valves
- Directly switches single phase electric resistive heater up to 10 Amps
- Dedicated supply air sensor for monitoring (model dependent)
- Dedicated return air sensor for control (model dependent)
- Two extra monitoring binary inputs (model dependent)
- Extra SSR output for low cost electric heat modulation (model dependent) utility
**Specifications**

### SC3000

**Dimensions**
- Height: 12cm/4.72in
- Width: 8.6cm/3.38in
- Depth: 2.5cm/1in

**Power Requirements**
- 7.0 VDC +/- 10% 2.4 watts minimum

**Operating Conditions**
- 0 °C - 50 °C (32 °F - 122 °F)
- 0% to 95% R.H. non-condensing

**Storage Conditions**
- -30 °C - 50 °C (-22 °F - 122 °F)
- 0% to 95% R.H. non-condensing

**Temperature Sensor**
Local 10 K NTC type 2 thermistor

**Temperature Sensor Resolution**
± 0.1 °C (± 0.2 °F)

**Temperature Control Accuracy**
± 0.5 °C (± 0.9 °F) at 21 °C (70 °F) typical calibrated

**Humidity Sensor and Calibration**
Single point calibrated bulk polymer type sensor

**Humidity Sensor Precision**
Reading range from 10-90 % R.H.
- non-condensing 10 to 20% precision: 10%
- 20% to 80% precision: 5%
- 80% to 90% precision: 10%

**Humidity Sensor Stability**
Less than 1.0 % yearly (typical drift)

**Dehumidification Setpoint Range**
- 30% to 95% R.H.

**Occ, Stand-By and Unocc Cooling Setpoint Range**
- 12.0 to 37.5 °C (54 - 100 °F)

**Occ, Stand-By and Unocc Heating Setpoint Range**
- 4.5 °C - 32 °C (40 °F - 90 °F)

**Room and Outdoor Air Temperature Display Range**
- -40 °C to 50 °C (-40 °F - 122 °F)

**Proportional Band for Room Temperature control**
Cycling & Heating: Default: 1.8°C (3.2°F)

**Binary Inputs**
- Dry contact across terminal Bl1, Bl2 & U13 to Scom

**Wire Gauge**
- 14 gauge maximum, 22 gauge recommended

**Approximate Shipping Weight**
- 0.34 kg (0.75 lb)

**Safety Standards All Models**
- LVD Directive 2006/95/EC
- CAN.SSA C22.2.NO.24
- UL 873
- EN 60730-2-9

**EMC Standards All Models**
- EMC Directive 2004/108/EC
- IEC 61326-1:2005
- FCC 15 Subpart B
- ICES-003

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

Please check with your local government for instruction on disposal of these products.
## SC3000 Relay Pack

### Dimensions

![Dimensions Diagram]

### Ordering information

<table>
<thead>
<tr>
<th>Part numbers</th>
<th>SC3500E5045</th>
<th>SC3504E5045</th>
<th>SC3514E5045 (with occupancy output)</th>
<th>SC3400E5045</th>
<th>SC3404E5045</th>
<th>SC3300E5045 (slave fan unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 2 pipes</td>
<td></td>
<td></td>
<td>• 2 pipes</td>
<td></td>
<td></td>
<td>• 2 pipes</td>
</tr>
<tr>
<td>• 2 pipes with reheat</td>
<td></td>
<td></td>
<td>• 2 pipes</td>
<td></td>
<td></td>
<td>• 2 pipes with modulating pulsed reheat</td>
</tr>
<tr>
<td>• 4 pipes</td>
<td></td>
<td></td>
<td>• 2 pipes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 2 pipes with reheat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 4 pipes</td>
<td></td>
<td></td>
<td>• 2 pipes with modulating pulsed reheat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan control</td>
<td>Up to 3 speed</td>
<td>Up to 3 speed</td>
<td>Up to 3 speed</td>
<td>Up to 3 speed</td>
<td>Up to 3 speed</td>
<td>Up to 3 speed</td>
</tr>
<tr>
<td>Monitoring inputs</td>
<td>None</td>
<td>4 FCU remote inputs</td>
<td>4 FCU remote inputs</td>
<td>None</td>
<td>4 FCU remote inputs</td>
<td>None</td>
</tr>
<tr>
<td>Control types</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• On-Off line switched valve output control</td>
<td></td>
<td></td>
<td>• On-Off line switched valve output control</td>
<td></td>
<td></td>
<td>• On-Off line switched valve output control</td>
</tr>
<tr>
<td>• 1 heat / cool output</td>
<td></td>
<td></td>
<td>• 1 heat / cool output</td>
<td></td>
<td></td>
<td>• 1 heat / cool output</td>
</tr>
<tr>
<td>• 1 cool output</td>
<td></td>
<td></td>
<td>• 1 cool output</td>
<td></td>
<td></td>
<td>• 1 Modulating pulsed Vdc output for SSR electric reheat control</td>
</tr>
<tr>
<td>• 3 fan outputs</td>
<td></td>
<td></td>
<td>• 3 fan outputs</td>
<td></td>
<td></td>
<td>• 3 fan outputs</td>
</tr>
</tbody>
</table>

All brand names, trademarks and registered trademarks are the property of their respective owners. Information contained within this document is subject to change without notice.