

# THERMOSTATS & CONTROLLERS

## PROGRAMMABLE FAN COIL CONTROLLER SE8300 SERIES



### DESCRIPTION

The **Schneider Electric SE8300 Series** are fan coil room controllers so smart energy management has never been easier. Designed for new construction and retrofit projects, the room controllers dramatically decrease project delivery costs by reducing installation, configuration and commissioning time. No complex software or tools are required to customize functionality in order to meet your applications requirements. The room controllers provide all the advanced features and monitoring functions required by modern building automation systems in a simple compact enclosure.

The **SE8300 Series** are specifically designed to provide exceptional temperature control of multi-speed fan coil units. All models can provide advanced occupancy routines and automatic energy savings during occupied periods without sacrificing occupant comfort. When compared to traditional building automation controllers, the **SE8300 Series** fan coil room controllers provide unmatched return on investment.



SE8300 Series



### FEATURES

- **Five (5) customizable colors for digital touch screens**
- **Supports the upload of a custom standby screen**
- **Supports the display of custom messages when integrated via BACnet MS/TP**
- **English, French, Spanish, Chinese, Russian and other selectable languages**
- **Interchange between °C/°F**
- **BACnet MS/TP (default model)**
- **ZigBee Pro wireless mesh network (optional)**
- **Suitable for both commercial and hospitality markets and systems**
- **Humidity sensor with on-board dehumidification strategy (model dependent)**
- **Configurable fan sequence of operation**

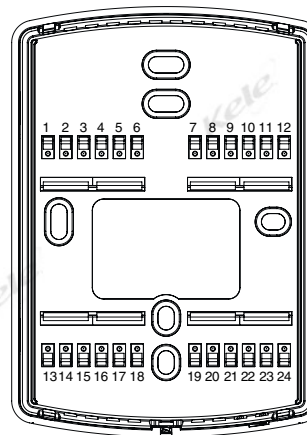
SPECIFICATIONS			
<b>Supply Voltage</b>	19-30 VAC, 50/60 Hz	<b>Keypad Lockout</b>	Selectable system/fan/unoccupied
<b>Supply VA</b>	6 VA	<b>System Setting</b>	O=off, H=heating, C=cooling, A=automatic changeover
<b>Accuracy</b>	Temperature, $\pm 0.9^{\circ}\text{F}$ ( $\pm 0.5^{\circ}\text{C}$ ), Dehumidification 30% to 95% RH	<b>Fan Setting</b>	L=low, M=medium, H=high, A=auto
<b>Digital Inputs</b>	Dry contact	<b>Wiring</b>	16-24 AWG, 22 AWG recommended
<b>Universal Input</b>	Dry contact or 10K Type 2 Model 24 thermistor	<b>Color</b>	White or Silver
<b>Display</b>	Two line backlit LCD, $\pm 0.2^{\circ}\text{F}$ ( $\pm 0.1^{\circ}\text{C}$ )	<b>Mounting</b>	Standard vertical, 2" x 4" box
<b>Thermostat Type</b>	Zone (VT7200) or FCU (VT7300)	<b>Operating Temperature</b>	32° to 122°F (0° to 50°C)
<b>Cover Controls</b>		<b>Operating Humidity</b>	0 to 95% RH (non-condensing)
<b>Zone Models</b>	Up/down/override buttons Heat/Cool "on" LEDs	<b>Enclosure Rating</b>	UL FR1, flame retardant plastic
<b>FCU Models</b>	Up/down/°C-or-°F/fan/mode buttons Fan/Heat/Cool "on" LEDs	<b>Dimensions</b>	4.72"H x 3.38"W x 1.00"D (12.0 x 8.6 x 2.5 cm)
<b>Remote Sensor</b>	Thermistor, 10K Type 2 Model 24	<b>Weight</b>	0.75 lb (0.34 Kg)
<b>Control Type</b>	Proportional plus integral (PI)	<b>Approvals</b>	UL Listed File #E234137, cULus, CE
<b>Cycles Per Hour</b>	Adjustable	<b>Warranty</b>	1 year
<b>Setpoint</b>	Adjusted depending on heating or cooling mode, heating and cooling setpoints are changed simultaneously with respect to the deadband		
<b>Cooling limits</b>	54° to 100°F (12°C to 37.7°C)		
<b>Heating limits</b>	40° to 90°F (4.5° to 32°C)		

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### WIRING

TERMINAL DESIGNATION FOR 2-PIPE AND 4-PIPE APPLICATIONS (Not all terminals are used for all applications)		
TERMINAL NUMBER	TERMINAL LABEL	DESCRIPTION
1	BO1 - Aux	Not used
2	BO2- Y2	Fan speed Low
3	BO3- Y1	Fan speed Med
4	BO4- G	Fan speed High
5	RC/24 V~HOT	24 VAC power supply for thermostat
6	C/ 24 V~COM	24 VAC common for thermostat
7	RH	Auxiliary heat
8	BO8-W1	Auxiliary heat
9	UO9-W2	Normally Closed Cooling Valve (On/Off control); Close Cooling Valve (Floating Control); Not used for Analog Control
10	UO10	Normally Closed Heating Valve (On/Off control); Close Heating Valve (Floating Control); Not used for Analog Control
11	UO11	Normally Open Cooling Valve (On/Off control); Open Cooling Valve (Floating Control); Analog Control Heating Valve
12	UO12	Normally Open Heating Valve (On/Off control); Open Heating Valve (Floating Control); Analog Control Cooling Valve
13	RS485+	BACnet MS-TP+
14	RS485-	BACnet MS-TP-
15	RS485 REF	BACnet MS-TP Ref
16	UI16	Universal input function specified
17	UI17	Universal input function specified
18	Scom	Sensor common
19	UI19-CO2	Universal input function specified
20	UI20 - RS	Remote Room Sensor
21	Scom	Sensor common
22	UI22 - SS	Remote Supply Sensor
23	UI23 - OS	Not used
24	UI24	Not used



### ORDERING INFORMATION

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MODEL	DESCRIPTION
SE8300U0B00	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet, silver casing and cover
SE8300U0B11	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet, white casing and cover
SE8300U5B00	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet and motion (PIR) sensor, silver casing and cover
SE8300U5B11	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet and motion (PIR) sensor, white casing and cover
SE8350U0B00	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet and humidity control, silver casing and cover
SE8350U0B11	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet and humidity control, white casing and cover
SE8350U5B00	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet, motion (PIR) sensor, and humidity control, silver casing and cover
SE8350U5B11	Room Controller for zone and fan coil units, 24 VAC low voltage with BACnet, motion (PIR) sensor, and humidity control, white casing and cover

WIRELESS ACCESSORIES	
MODEL	DESCRIPTION
SED-DOR-P-5045	Wireless remote sensor door switch
SED-WIN-P-5045	Wireless remote sensor window switch
SED-WDS-P-5045	Wireless remote sensor door or window switch
SED-WMS-P-5045	Wireless remote wall mount occupancy sensor
SED-CMS-P-5045	Wireless remote ceiling mount occupancy sensor
VCM8000V5045P*	ZigBee Pro extended profile communication module for all SE8000 series controllers

\* Required for ZigBee Pro wireless communication for SED sensors.

REPLACEMENT COVERS (FASCIAS)	
MODEL	DESCRIPTION
FAS-00	Fascia replacement-Silver
FAS-01	Fascia replacement-White
FAS-02	Fascia replacement-Glossy Translucent Silver
FAS-03	Fascia replacement-Glossy Translucent White
FAS-04	Fascia replacement-Glossy Translucent Black
FAS-08	Fascia replacement-Brushed Aluminum Finish
FAS-09	Fascia replacement-Light Grey Sleight Finish

**COV-HPUMP**  
**COV-MULTI**  
**COV-SEN-O**  
**TG511A1000**

### ACCESSORIES

Cover, heat pump, no logo  
Cover, conventional, no logo  
Cover, no logo, sensor with override  
Thermostat guard- clear-medium size

**KTR24**  
**KTR24-LED-MB**  
**ST-FZ24-8**  
**ST-D24**  
**ST-O24**

### RELATED PRODUCTS

Remote room thermistor sensor  
Remote room sensor with override button and LED  
Averaging duct thermistor sensor, Type 2, Model 24  
10K Type 2 duct temperature thermistor  
OSA thermistor sensor, Type 2, model 24,  $\pm 0.36^{\circ}\text{F}$  ( $0.20^{\circ}\text{C}$ )