SE7000
Fan Coil Unit Application Guide

SE7000 Series Room Controllers

Version 4

Schneider Electric

Table of contents

Product & application selector

SER7300 & Relay Pack

Power	Building Function	Humidity Control	Application	Outputs / Inputs	Controller	Relay Pack	Typical Application
Line Voltage	Commercial	Yes	2 or 4 pipe, Up to 3 speed fan	1H/1C with Reheat	SER7350A5045	SC3500E5045	Page: 38, 42
				1H/1C with 4 inputs and reheat	SER7350A5045	SC3504E5045	Page: 40, 44
				1H/1C with 4 inputs reheat and occ. output	SER7350A5045	SC3514E5045	Page: 44
		No	2 Pipe, Up to 3 speed fan	1H/1C with pulsed reheat	SER7300A5045	SC3400E5045	Page: 42
				1H/1C with pulsed reheat and 4 inputs	SER7300A5045	SC3404E5045	Page: 38
	Hospitality	Yes	2 or 4 pipe, Up to 3 speed fan	1H/1C with Reheat	SER7355A5045*	SC3500E5045	Page: 36, 50
				1H/1C with 4 inputs and reheat	SER7355A5045*	SC3504E5045	Page: 40, 48
				1H/1C with 4 inputs reheat and occ. output	SER7355A5045*	SC3514E5045	Page: 44
		No	2 Pipe, Up to 3 speed fan	1H/1C with pulsed reheat	SER7305A5045*	SC3400E5045	Page: 42
				1H/1C with pulsed reheat and 4 inputs	SER7305A5045*	SC3404E5045	Page: 38
			Slave fan control only	3 fan outputs	SER73xxA5045	SC3300E5000	Page: 46

*The Hospitality/Lodging models are identical to the commercial controllers except for the Override key which is replaced with a °C/°F key to switch between Celsius and Fahrenheit units.

At the end of the model number, add B for BACnet communication or W for Zigbee wireless communication.
Ex: SER7300A5045B or SER7300A5045W

SER7300 and SC3000 | Fan coil terminal equipment controllers

This new cost-effective solution for upgrading line-voltage fan coil unit thermostats requires only two components: the SER7300 terminal equipment controller and the SC3000 relay pack. This solution allows existing line voltage wiring between the fan coil unit and temperature controller to be re-used, reducing overall costs and installation time. 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.

Commercial interface (local override)

Part Number	Description	Humidity	PIR Cover	Communication
SER7300A5045	Stand-alone fan coil terminal equipment controller	No	No	Stand-alone (network ready)
SER7300A5045B	BACnet fan coil terminal equipment controller	No	No	BACnet
SER7300A5045W	Wireless fan coil terminal equipment controller	No	No	Wireless
SER7300A5545	Stand-alone fan coil terminal equipment controller	No	Yes	Stand-alone (network ready)
SER7300A5545B	BACnet fan coil terminal equipment controller	No	Yes	BACnet
SER7300A5545W	Wireless fan coil terminal equipment controller	No	Yes	Wireless
SER7350A5045	Stand-alone fan coil terminal equipment controller	Yes	No	Stand-alone (network ready)
SER7350A5045B	BACnet fan coil terminal equipment controller	Yes	No	BACnet
SER7350A5045W	Wireless fan coil terminal equipment controller	Yes	No	Wireless
SER7350A5545	Stand-alone fan coil terminal equipment controller	Yes	Yes	Stand-alone (network ready)
SER7350A5545B	BACnet fan coil terminal equipment controller	Yes	Yes	BACnet
SER7350A5545W	Wireless fan coil terminal equipment controller	Yes	Yes	Wireless

Hotel/lodging interface (°C/°F selection)

Part Number	Description	Humidity	PIR Cover	Communication
SER7305A5045	Stand-alone fan coil terminal equipment controller	No	No	Stand-alone (network ready)
SER7305A5045B	BACnet fan coil terminal equipment controller	No	No	BACnet
SER7305A5045W	Wireless fan coil terminal equipment controller	No	No	Wireless
SER7305A5545	Stand-alone fan coil terminal equipment controller	No	Yes	Stand-alone (network ready)
SER7305A5545B	BACnet fan coil terminal equipment controller	No	Yes	BACnet
SER7305A5545W	Wireless fan coil terminal equipment controller	No	Yes	Wireless
SER7355A5045	Stand-alone fan coil terminal equipment controller	Yes	No	Stand-alone (network ready)
SER7355A5045B	BACnet fan coil terminal equipment controller	Yes	No	BACnet
SER7355A5045W	Wireless fan coil terminal equipment controller	Yes	No	Wireless
SER7355A5545	Stand-alone fan coil terminal equipment controller	Yes	Yes	Stand-alone (network ready)
SER7355A5545B	BACnet fan coil terminal equipment controller	Yes	Yes	BACnet
SER7355A5545W	Wireless fan coil terminal equipment controller	Yes	Yes	Wireless

Transformer relay packs for fan coil units

Part Number	Description
SC3500E5045	1 heat/cool output, 1 cool output, and 3 fan outputs
SC3504E5045	1 heat/cool output, 1 cool output, 3 fan outputs and four inputs
SC3514E5045	1 heat/cool output, 1 cool output, 3 fan outputs, Occupancy output (7Vdc), and four inputs
SC3400E5045	1 heat/cool output, 1 Modulating pulsed Vdc output for SSR electric reheat control, and 3 fan outputs
SC3404E5045	1 heat/cool output, 1 Modulating pulsed Vdc output for SSR electric reheat control, and 3 fan outputs
SC3300E5045	3 slave fan outputs

Wireless accessories*

Part Number	Description
VWA5000D5045W	Wireless door switch
VWA5000W5045W	Wireless window switch

*Wireless accessories are compatible with all the VWA, SER7300, and wireless models.

SE7300 | Fan coil room controllers

Power	Application	Building Function	Humidity Control	Outputs / Inputs	Controller	Typical Application
Low Voltage	- 2 or 4 Pipe - Hot/Chill water valves - Up to 3 speed fan - Automatic Changeover -Auxiliary contact output	Commercial	Yes	On-Off 1H/1C	SE7350C5045	Page: 20, 32
				Floating 1H/1C	SE7350C5045	Page: 12, 34
				Analogue 1H/1C	SE7350F5045	Page: 16, 30
			No	On-Off 1H/1C	SE7300C5045	Page: 28
				Floating 1H/1C	SE7300C5045	Page: 14
				Analogue 1H/1C	SE7300F5045	Page: 22, 24, 26
		Hospitality / Lodging	Yes	On-Off 1H/1C	SE7355C5045*	Page: 18, 20, 32
				Floating 1H/1C	SE7355C5045*	Page: 12, 34
				Analogue 1H/1C	SE7355F5045*	Page: 16, 30
			No	On-Off 1H/1C	SE7305C5045*	Page: 28
				Floating 1H/1C	SE7305C5045*	Page: 14
				Analogue 1H/1C	SE7305F5045*	Page: 22, 24, 26

*The Hospitality/Lodging models are identical to the commercial controllers except for the Override key which is replaced with a °C/°F key to switch between Celsius and Fahrenheit units.

Note: At the end of the model number, add B for BACnet communication, E for Echelon communication or W for Zigbee wireless communication. Ex: SER7300A5045B or SER7300A5045E or SER7300A5045W

SE7300 | Fan coil room controllers

Achieve better energy efficiency and reduce operating costs with SE7300 Series room controllers. Ideal for commercial and hotel applications, these fan coil units function with electronically commutated motors to optimise fan control sequences. With the full proportional operating of the SE7300, as opposed to the traditional three-speed tap operation, customers will experience better control and a more comfortable environment.

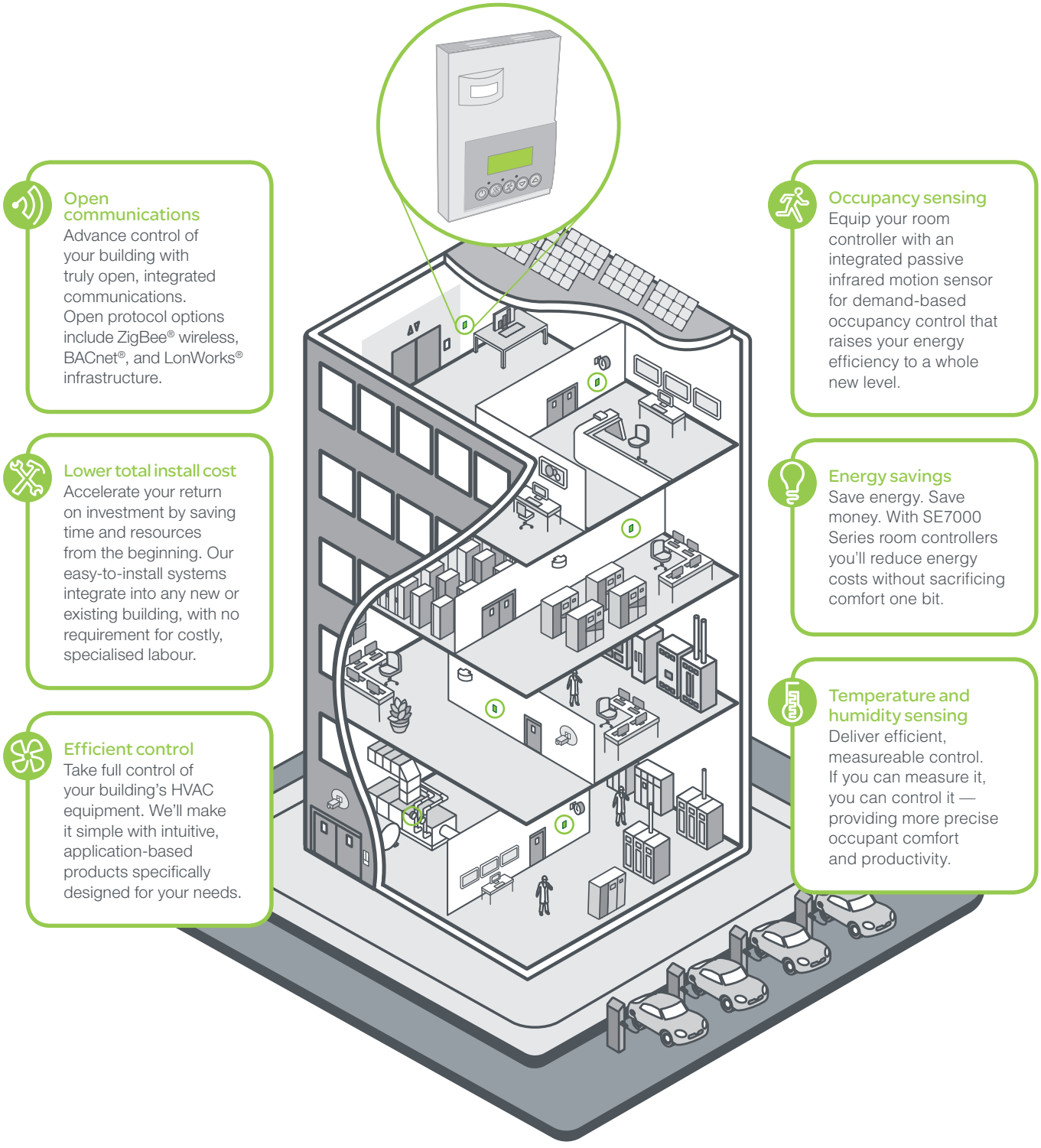
Commercial interface (local override)

Part Number	Description	Humidity	Output	PIR Cover	Communication
SE7300C5045	Stand-alone fan coil controller	No	Floating or on/off	No	Stand-alone (network ready)
SE7300C5045B	BACnet fan coil controller	No	Floating or on/off	No	BACnet
SE7300C5045E	LON fan coil controller	No	Floating or on/off	No	LonWorks
SE7300C5045W	Wireless fan coil controller	No	Floating or on/off	No	Wireless
SE7300C5545	Stand-alone fan coil controller	No	Floating or on/off	Yes	Stand-alone (network ready)
SE7300C5545B	BACnet fan coil controller	No	Floating or on/off	Yes	BACnet
SE7300C5545E	LON fan coil controller	No	Floating or on/off	Yes	LonWorks
SE7300C5545W	Wireless fan coil controller	No	Floating or on/off	Yes	Wireless
SE7300F5045	Stand-alone fan coil controller	No	0 - 10 V	No	Stand-alone (network ready)
SE7300F5045B	BACnet fan coil controller	No	0 - 10 V	No	BACnet
SE7300F5045E	LON fan coil controller	No	0 - 10 V	No	LonWorks
SE7300F5045W	Wireless fan coil controller	No	0 - 10 V	No	Wireless
SE7300F5545	Stand-alone fan coil controller	No	0 - 10 V	Yes	Stand-alone (network ready)
SE7300F5545B	BACnet fan coil controller	No	0 - 10 V	Yes	BACnet
SE7300F5545E	LON fan coil controller	No	0 - 10 V	Yes	LonWorks
SE7300F5545W	Wireless fan coil controller	No	0 - 10 V	Yes	Wireless
SE7350C5045	Stand-alone fan coil controller	Yes	Floating or on/off	No	Stand-alone (network ready)
SE7350C5045B	BACnet fan coil controller	Yes	Floating or on/off	No	BACnet
SE7350C5045E	LON fan coil controller	Yes	Floating or on/off	No	LonWorks
SE7350C5045W	Wireless fan coil controller	Yes	Floating or on/off	No	Wireless
SE7350C5545	Stand-alone fan coil controller	Yes	Floating or on/off	Yes	Stand-alone (network ready)
SE7350C5545B	BACnet fan coil controller	Yes	Floating or on/off	Yes	BACnet
SE7350C5545E	LON fan coil controller	Yes	Floating or on/off	Yes	LonWorks
SE7350C5545W	Wireless fan coil controller	Yes	Floating or on/off	Yes	Wireless
SE7350F5045	Stand-alone fan coil controller	Yes	0 - 10 V	No	Stand-alone (network ready)
SE7350F5045B	BACnet fan coil controller	Yes	0 - 10 V	No	BACnet
SE7350F5045E	LON fan coil controller	Yes	0 - 10 V	No	LonWorks
SE7350F5045W	Wireless fan coil controller	Yes	0 - 10 V	No	Wireless
SE7350F5545	Stand-alone fan coil controller	Yes	0 - 10 V	Yes	Stand-alone (network ready)
SE7350F5545B	BACnet fan coil controller	Yes	0 - 10 V	Yes	BACnet
SE7350F5545E	LON fan coil controller	Yes	0 - 10 V	Yes	LonWorks
SE7350F5545W	Wireless fan coil controller	Yes	0 - 10 V	Yes	Wireless

The Hospitality/Lodging models are identical to the commercial controllers except for the Override key which is replaced with a °C/°F key to switch between Celsius and Fahrenheit units.The only difference in the p/n is that the 6th character is a 5 instead of a zero - Example: SE7305 rather than SE7300.

Cost-saving, energy-saving applications

From hotels and hospitals to schools, retail, and commercial buildings, Schneider Electric offers wide-ranging room control solutions for your building management needs. Whether retrofitting current systems with a more technologically advanced room controller or going green with a more environmentally friendly option, SE7000 Series is the ideal, cost-competitive solution. The SE7000 Series room controllers can be equipped with an integrated passive infrared motion sensor for demand-based occupancy control that opens up new opportunities in smart energy management.



Open communications

Advance control of your building with truly open, integrated communications. Open protocol options include ZigBee® wireless, BACnet®, and LonWorks® infrastructure.

Lower total install cost

Accelerate your return on investment by saving time and resources from the beginning. Our easy-to-install systems integrate into any new or existing building, with no requirement for costly, specialised labour.

Efficient control

Take full control of your building's HVAC equipment. We'll make it simple with intuitive, application-based products specifically designed for your needs.

Occupancy sensing

Equip your room controller with an integrated passive infrared motion sensor for demand-based occupancy control that raises your energy efficiency to a whole new level.

Energy savings

Save energy. Save money. With SE7000 Series room controllers you'll reduce energy costs without sacrificing comfort one bit.

Temperature and humidity sensing

Deliver efficient, measureable control. If you can measure it, you can control it — providing more precise occupant comfort and productivity.

Energy savings for a healthy bottom line.

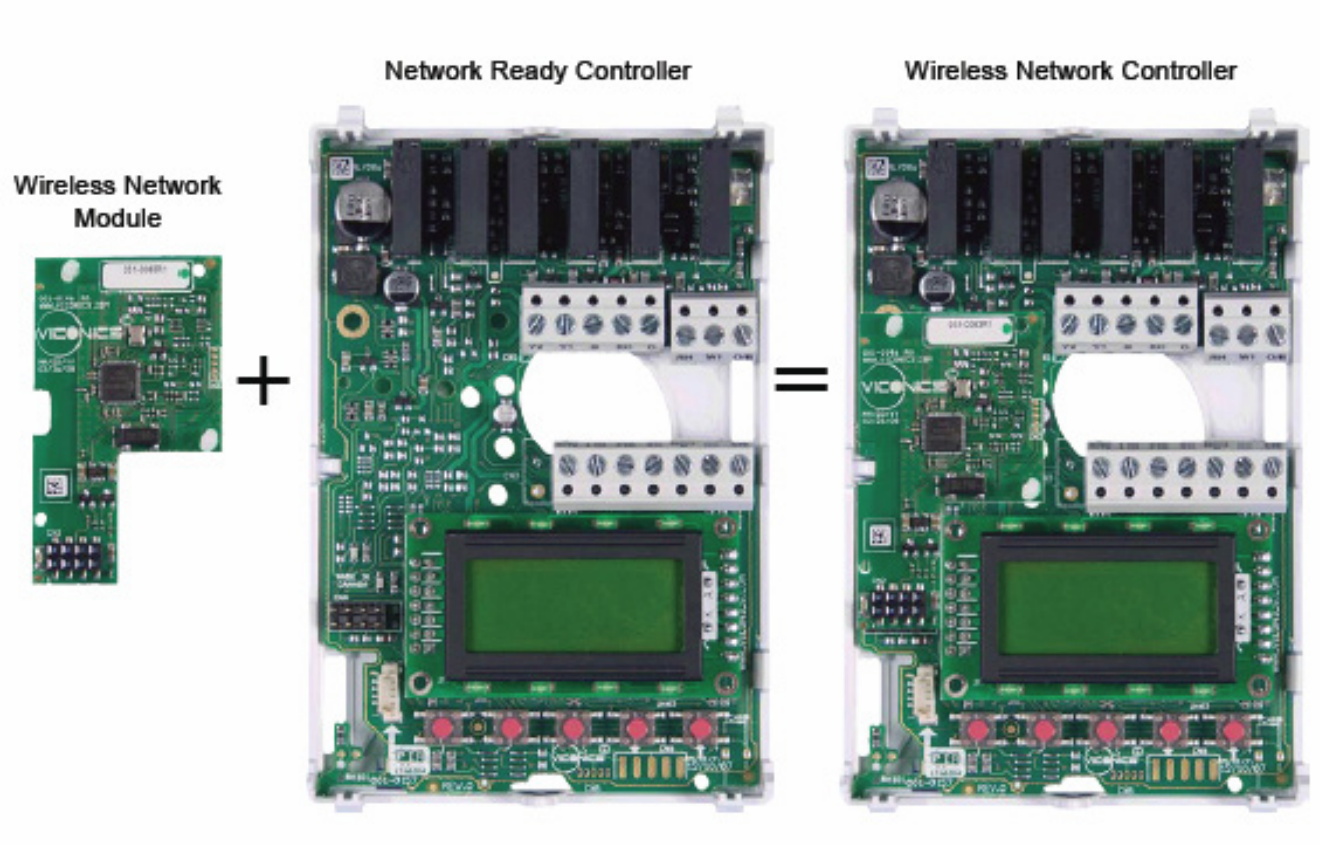
Increase the comfort of patients, visitors, and employees while reducing energy consumption with SE7000 Series room controllers.

SE7000 network ready communication adapters

All current “Network Ready” Schneider-Electric SE7000 controllers are capable of being retrofit in the field with accessory communication adapters that enables the controllers to be integrated into virtually all leading building automation systems

This approach allows the flexibility to add network communication strategies as budgets allow or as the buildings needs change.

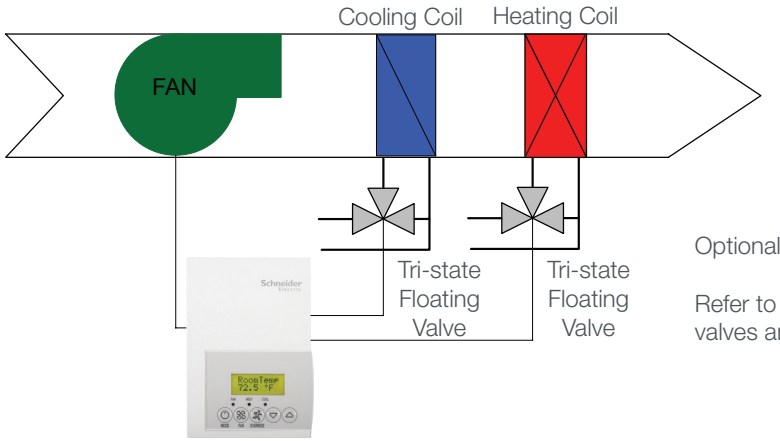
If required, Network Ready (stand-alone) Terminal Equipment Controllers can be field retrofitted with the following communication adapters.



Comfortable workers are more productive.

Accelerate your return on investment with SE7000 Series room controllers.

SE7350C5045: Heating/cooling: 4-pipe fan coil unit with 3-speed fan, tri-state floating valves and dehumidification sequence



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	ON
Lockout	As per user. Default value = 0 No lock
Pipe No	4.0
CntrlTyp	Floating
SeqOpera	4 = Cooling / Heating 4 pipes
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
FL time	As per user. Default value = 1.5 minutes. Range 0.5 to 9.0 in 0.5 minutes increments
cph	N/A
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second)
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

The changeover sensor will send the supply air temperature to the controller.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Cooling valve will modulate to maintain room temperature. Heating valve is closed. Dehumidification is enabled.

On a call for heat:

Heating valve will modulate to maintain room temperature. Cooling valve is closed. Dehumidification is disabled.

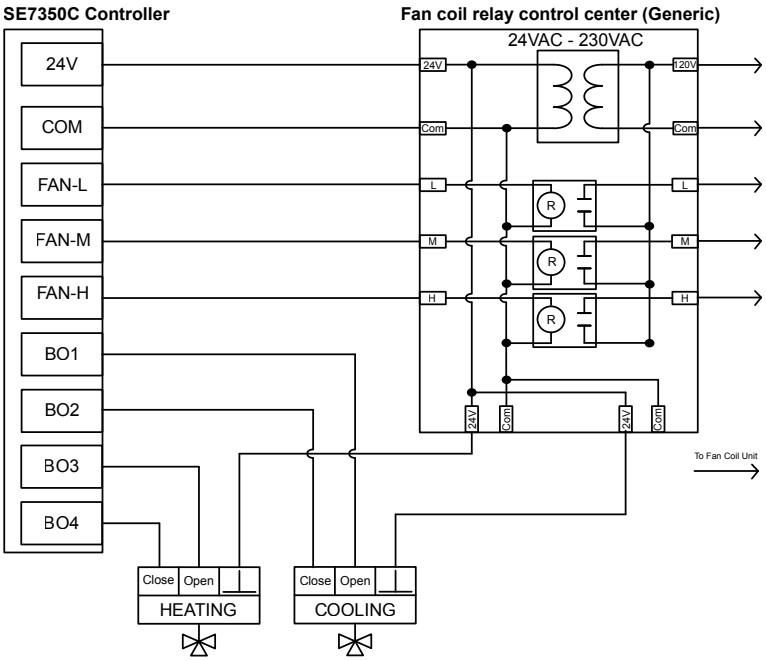
On a demand for dehumidification:

Dehumidification is achieved via the cooling coil using the heating coil for reheat if necessary.

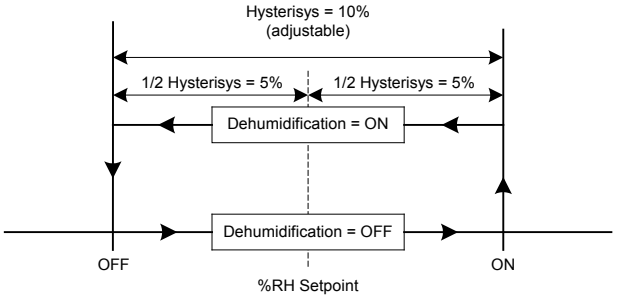
Dehumidification is only allowed in COOL mode (or if cooling is enabled in AUTO mode).

Dehumidification is disabled if the room temperature falls below the low ambient lockout temperature. Which is the cooling setpoint minus the configuration defined deadband value.

Reheat is disabled if cooling demand reaches 100%.



Dehumidification ON/OFF Sequence:



Options

BACnet, Echelon and Wireless communication models available (see Appendix B for network wiring).

Remote wall mount or duct sensor ready.

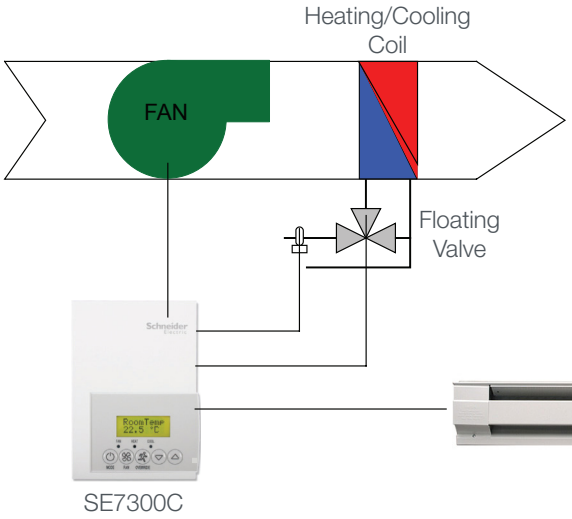
Analogue outputs available (SE73xxF5045).

Can be configured for 2 pipe systems.

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

Universal input can be configured for a changeover sensor.

SE7300C5045: Heating/cooling with changeover and reheat: 2-pipe fan coil unit with 3-speed fan, tri-state floating valve and electric reheat.



Sensor: 10K Ohm Type 2.

Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	COS
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
Lockout	As per user. Default value = 0 No lock
Pipe No	2.0
CntrlTyp	Floating
SeqOpera	2 = Cooling with Reheat
Fan Menu	2
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
FL time	As per user. Default value = 1.5 minutes. Range 0.5 to 9.0 in 0.5 minutes increments
cph	N/A
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second)
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

The changeover sensor will send the supply air temperature to the controller.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

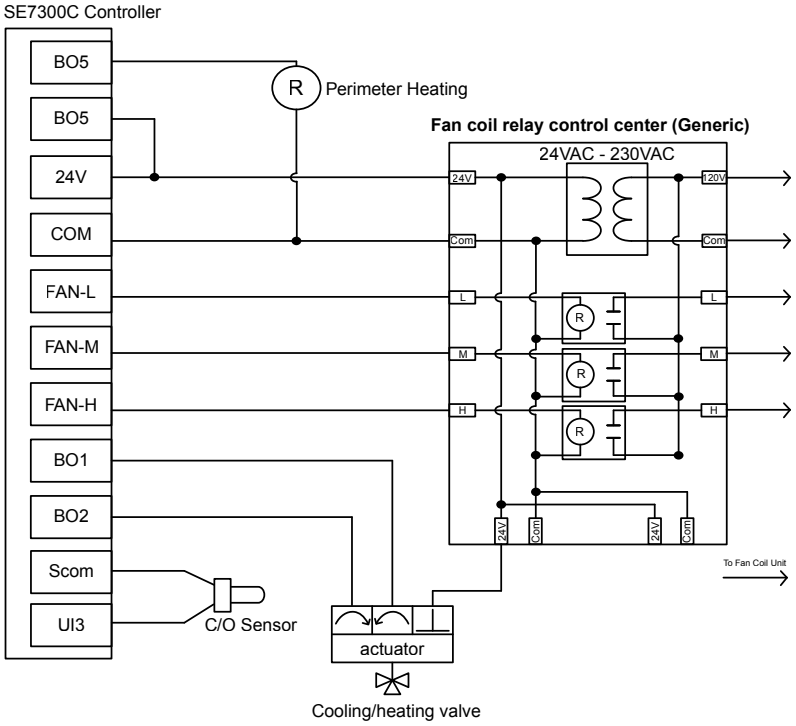
The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

If water temperature is less than 24°C (75°F), valve will open to allow water flow. If supply air temperature is greater than 25°C (77°F), valve will close. Baseboard is always desactivated.

On a call for heat:

If water temperature is less than 24°C (75°F), valve will close and the duct heater will be activated. If water temperature is greater than 25°C (77°F), valve will open to allow water flow. If the water flow is unable to satisfy the demand, the baseboard is activated.



Options

BACnet, Echelon and Wireless models available (see Appendix B for network wiring).

Analogue 0-10 VDC outputs available (SE73xxF5045).

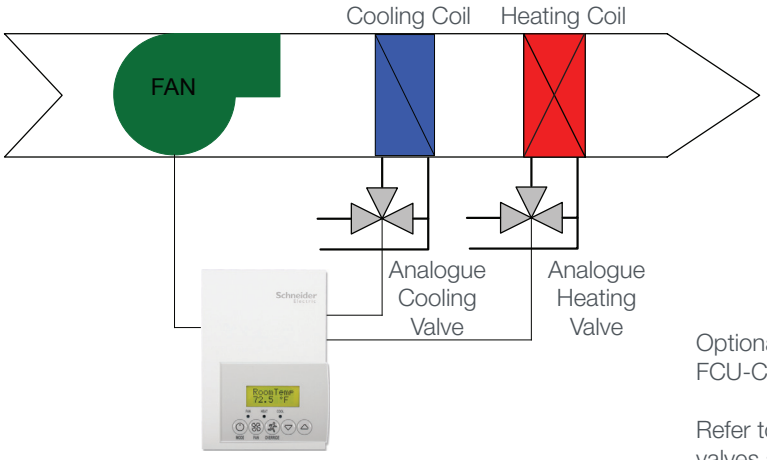
Remote wall mount or duct sensor ready.

Can be configured for 4 pipe systems.

Can be configured to single or two speed fan.

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

SE7350F5045: Heating/cooling: 4-pipe fan coil unit with 3-speed fan, 0-10 VDC Analogue valves and dehumidification sequence



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	ON
Lockout	As per user. Default value = 0 No lock
Pipe No	4.0
SeqOpera	4 = Cooling / Heating 4 pipes
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
RA/DA	Reverse Acting (RA) or Direct Acting (DA), depends on actuator
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second)
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

The changeover sensor will send the supply air temperature to the controller.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Cooling valve will modulate to maintain room temperature. Heating valve is closed.

Dehumidification is enabled.

On a call for heat:

Heating valve will modulate to maintain room temperature. Cooling valve is closed.

Dehumidification is disabled.

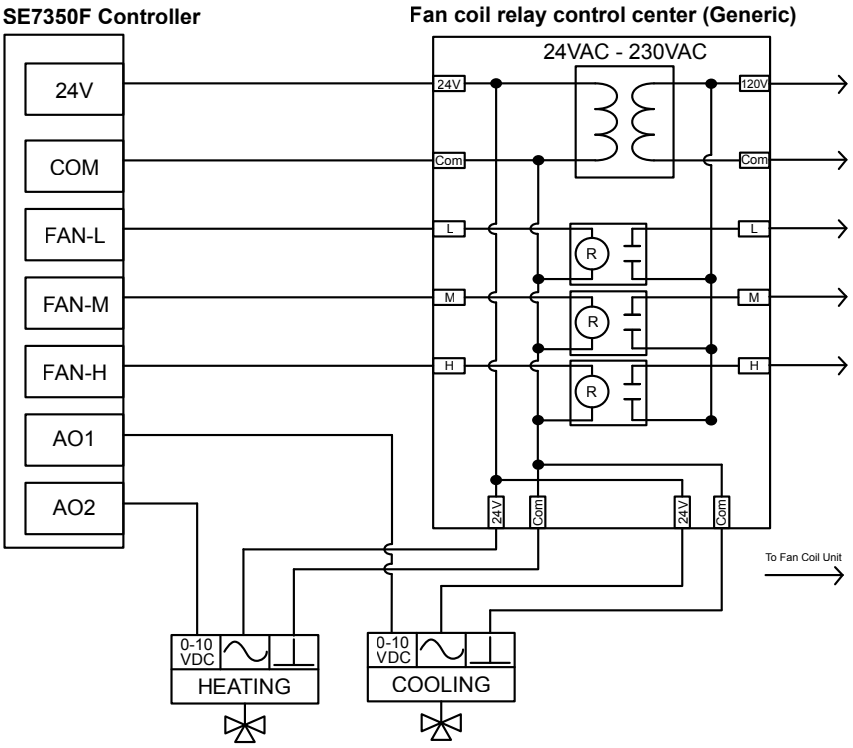
On a demand for dehumidification:

Dehumidification is achieved via the cooling coil using the heating coil for reheat if necessary.

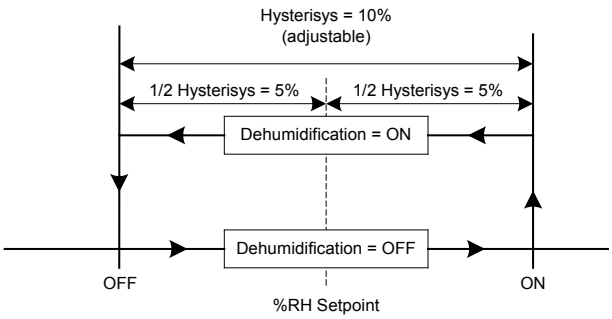
Dehumidification is only allowed in COOL mode (or if cooling is enabled in AUTO mode).

Dehumidification is disabled if the room temperature falls below the low ambient lockout temperature. Which is the cooling setpoint minus the configuration defined deadband value.

Reheat is disabled if PI cooling demand reaches 100%.



ON/OFF Sequence:



Options

BACnet, Echelon and Wireless communication models available (see Appendix B for network wiring).

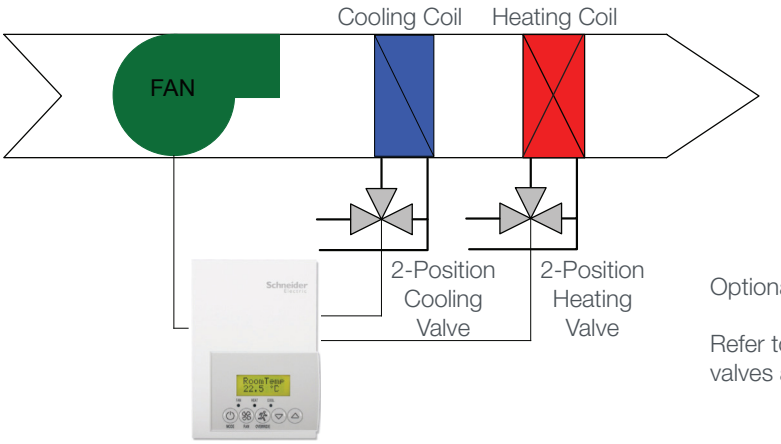
Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems.

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

Universal input can be configured for a changeover sensor.

SE7355C5045: Heating/cooling: 4-pipe fan coil unit with 3-speed fan, 2-position valves, and dehumidification sequence



Optional PIR cover: COV-PIR-FCU-L-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	ON
Lockout	As per user. Default value = 0 No lock
Pipe No	4.0
CntrlTyp	On/Off
SeqOpera	4 = Cooling / Heating 4 pipes
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
FL time	As per user. Default value = 1.5 minutes. Range 0.5 to 9.0 in 0.5 minutes increments
cph	As per user. 4 to 8 CPH
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second)
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Cooling valve will open to maintain room temperature. Heating valve is closed. Dehumidification is enabled.

On a call for heat:

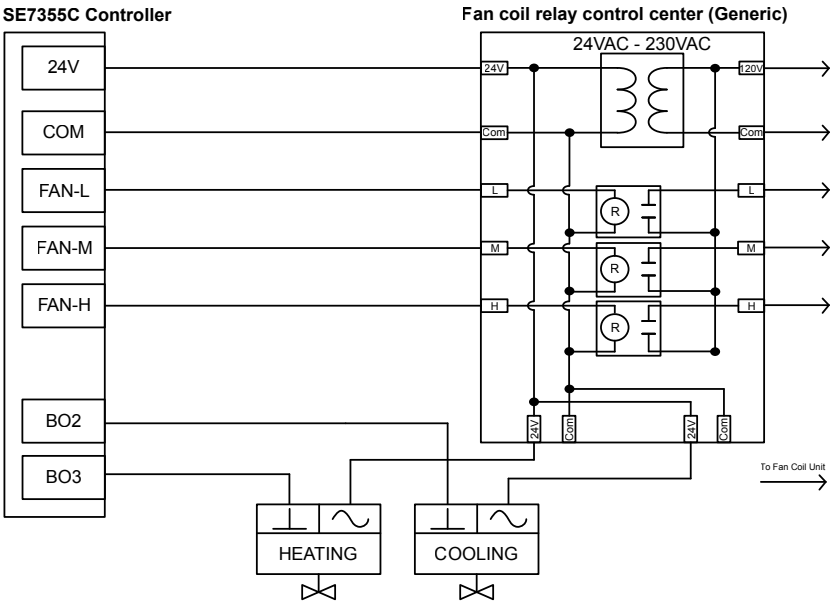
Heating valve will open to maintain room temperature. Cooling valve is closed. Dehumidification is disabled.

On a demand for dehumidification:

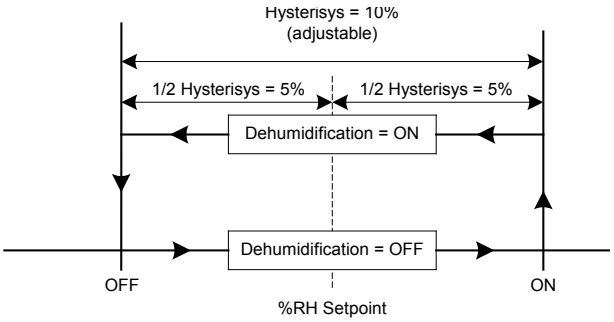
Dehumidification is achieved via the cooling coil using the heating coil for reheat if necessary.

Dehumidification is only allowed in COOL mode (or if cooling is enabled in AUTO mode).

Dehumidification is disabled if the room temperature falls below the low ambient lockout temperature, which is the cooling setpoint minus the configuration defined deadband value.



Dehumidification ON/OFF Sequence:



Options

BACnet, Echelon and Wireless communication models available (see Appendix B for network wiring).

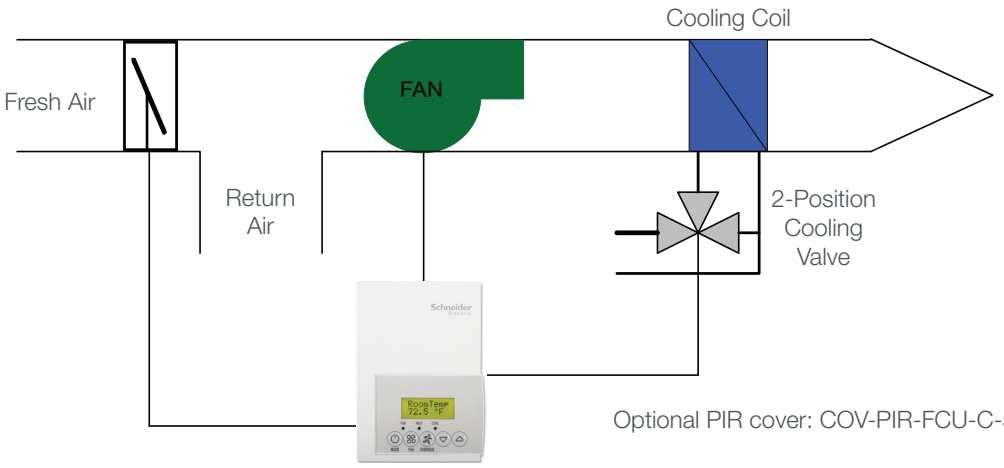
Models available with factory installed PIR cover.

Remote wall mount or duct sensor ready / Can be configured for 2 pipe systems.

Analogue outputs available (SE73xxF5045).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

SE7300C5045: Cooling only: 2-pipe fan coil unit with single speed fan, 2-Position cooling valve and fresh air damper



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
Lockout	As per user. Default value = 0 No lock
Pipe No	2.0
CntrlTyp	On/Off
SeqOpera	0 = Cooling only
Fan Menu	4
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	1 (occupied=contact closed, unoccupied=contact open)
Auto Fan	AS or AS AD
FL time	As per user. Default value = 1.5 minutes. Range 0.5 to 9.0 in 0.5 minutes increments
cph	N/A
Reheat	Not used
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

The auxiliary contact will close setting the fresh air damper to its minimum position.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

The auxiliary contact will open causing the fresh air damper to close completely.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

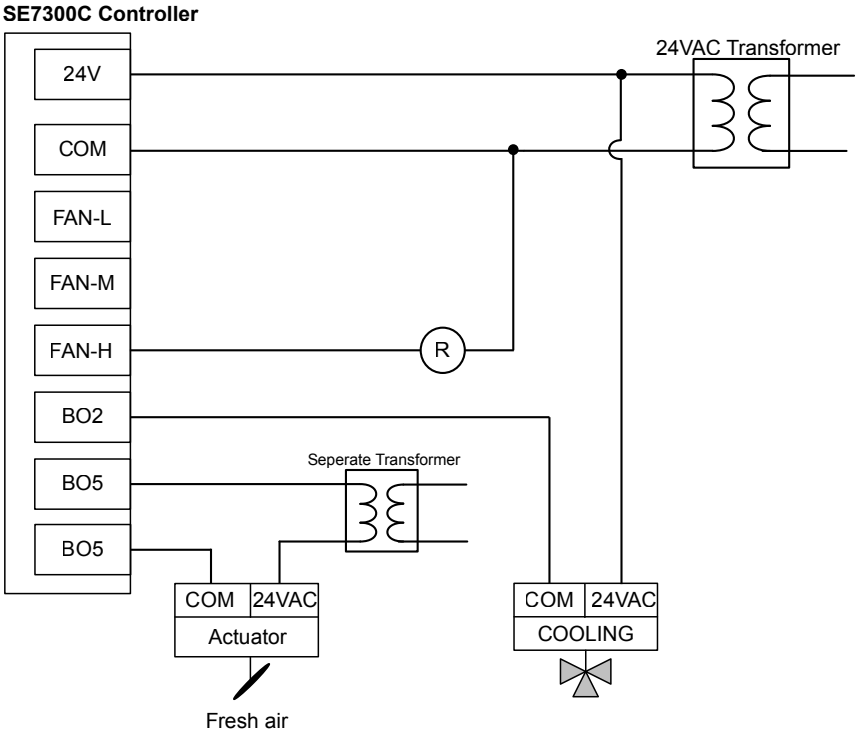
The auxiliary contact will close setting the fresh air damper to its minimum position.

On a call for cool:

Cooling valve will open.

On a call for heat:

Cooling valve will close.



Options

BACnet, Echelon and Wireless models available (see Appendix B for network wiring).

Analogue 0-10 VDC outputs available (SE73xxF5045).

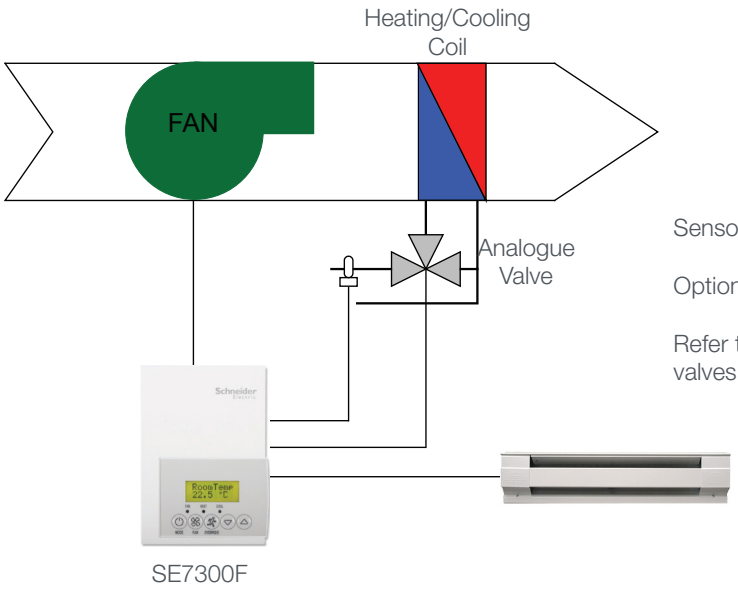
Remote wall mount or duct sensor ready.

Can be configured for 4 pipe systems.

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

Can be configured for two speed or three speed fan control.

SE7300F5045: heating/cooling with changeover sensor and reheat: 2-pipe fan coil unit with 3-speed fan, analogue valve, and electric reheat



Sensor: 10K Ohm Type 2.

Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	COS
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
Lockout	As per user. Default value = 0 No lock
Pipe No	2.0
SeqOpera	2 = Cooling with Reheat
Fan Menu	2
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
RA/DA	As per Valve
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second) only if using SSR
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

The changeover sensor will send the supply air temperature to the controller.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

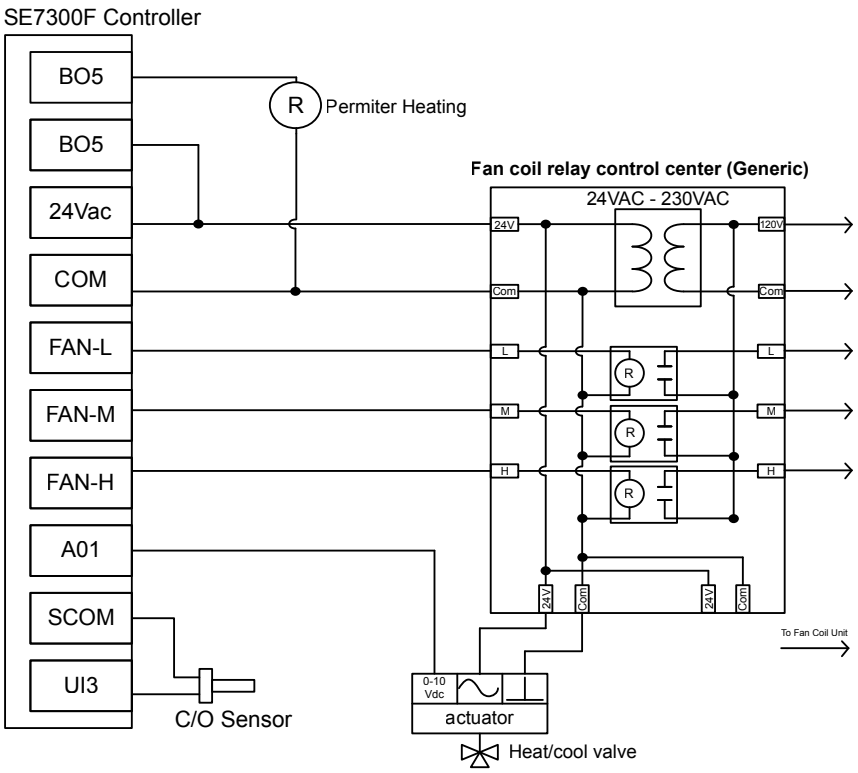
The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

If water’s temperature is less than 24°C (75°F), valve will open to allow water flow. If supply air temperature is greater than 25°C (77°F), valve will close. Baseboard is always desactivated.

On a call for heat:

If water temperature is less than 24°C (75°F), valve will close and the baseboard will be activated. If water temperature is greater than 25°C (77°F), valve will open to allow water flow. If the water flow is unable to satisfy the demand, the baseboard is activated.



Options

BACnet, Echelon and Wireless models available (see Appendix B for network wiring).

Tri-State Floating outputs available (SE73xxC5045).

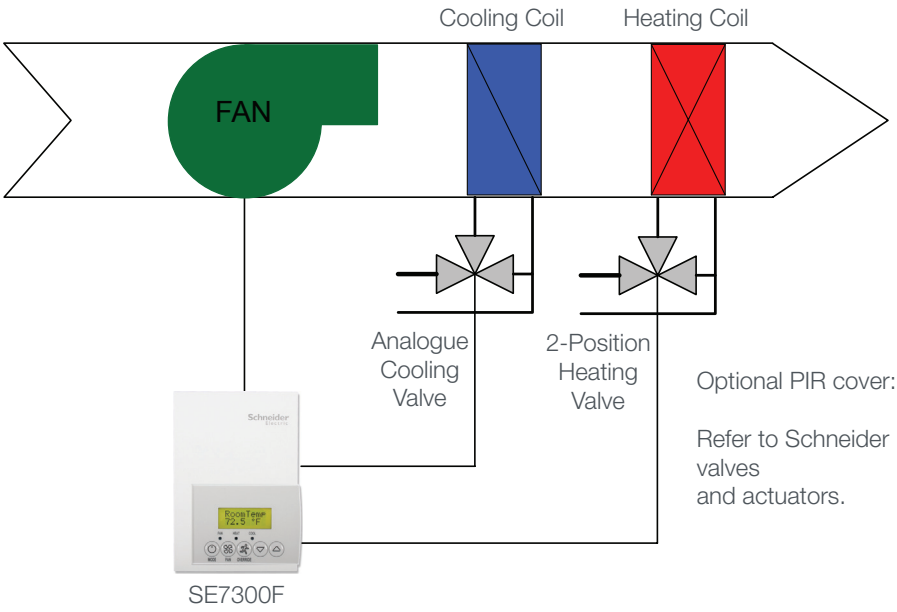
Remote wall mount or duct sensor ready.

Can be configured for 4 pipe systems.

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

Can be configured to single or two speed fan.

SE7300F5045: Cooling with reheat: 4-pipe fan coil unit with 3-speed fan, analogue cooling valve and on/off heating valve



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
Lockout	As per user. Default value = 0 No lock
Pipe No	4.0
SeqOpera	2 = Cooling with Reheat
Fan Menu	2
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
RA/DA	As per Valve
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second) only if using SSR
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

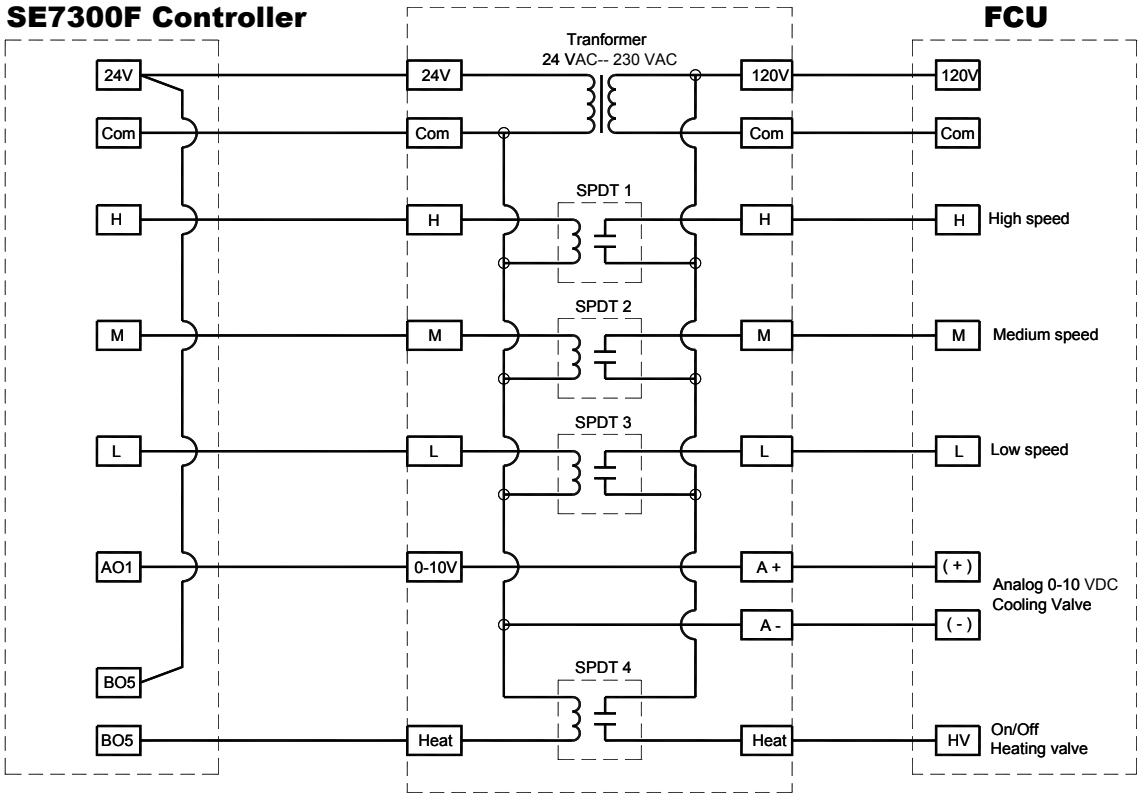
The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

The Analogue valve will start modulating based on the cooling demand.

On a call for heat:

The heating valve will open.



Options

BACnet, Echelon and Wireless models available (see Appendix B for network wiring).

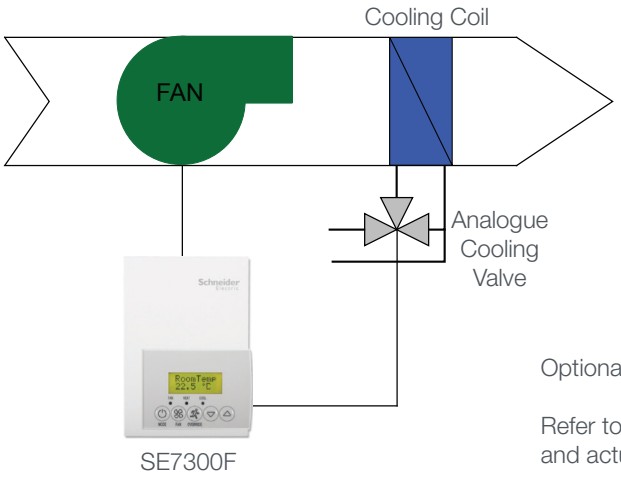
Tri-State Floating outputs available (SE73xxF5045).

Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems / Can be configured to single or two speed fan.

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

SE7300F5045: Cooling only: 2-pipe fan coil unit with 3-speed fan and 0-10 VDC analogue cooling valve



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	COS
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
Lockout	As per user. Default value = 0 No lock
Pipe No	2.0
SeqOpera	0 = Cooling Only
Fan Menu	4
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
cph	N/A
RA/DA	As per Valve
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second) only if using SSR
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

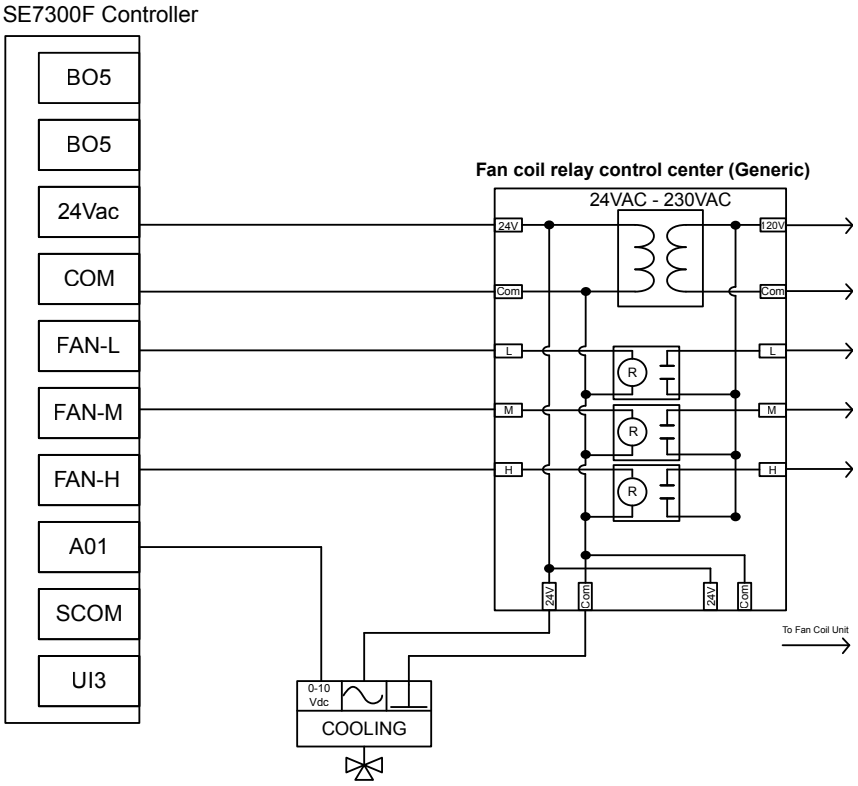
The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Analogue valve will modulate allowing cool air to flow to reach the setpoint.

On a call for heat:

Valve will close



Options

BACnet, Echelon and Wireless models available (see Appendix B for network wiring).

Remote wall mount or duct sensor ready.

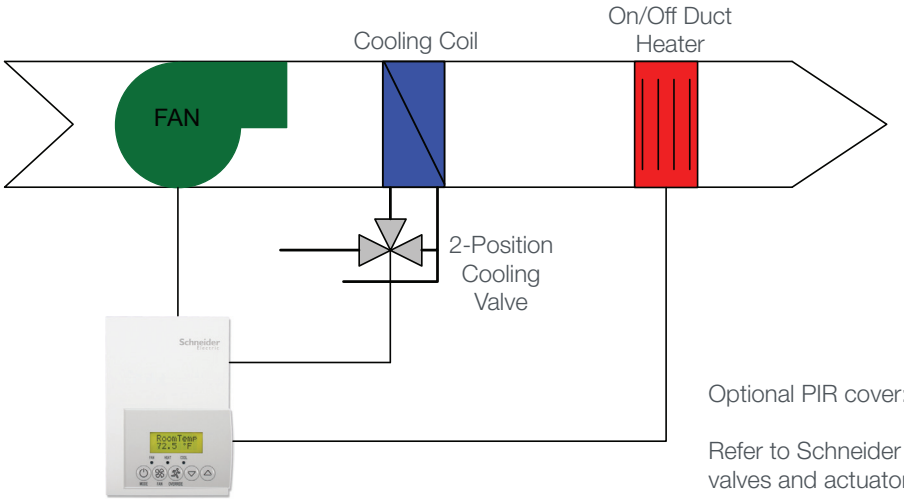
Tri-State Floating outputs available (SE73xxC5045)

Can be configured for 4 pipe systems.

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

Can be configured to two or three speed fan.

SE7300C5045: Cooling with reheat: 2-pipe fan coil unit with 3-speed fan, 2-position valve and electric reheat



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
Lockout	As per user. Default value = 0 No lock
Pipe No	2.0
CntrlTyp	On/Off
SeqOpera	2 = Cooling with Reheat
Fan Menu	2
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
FL time	As per user. Default value = 1.5 minutes. Range 0.5 to 9.0 in 0.5 minutes increments
cph	N/A
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second)
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

The changeover sensor will send the supply air temperature to the controller.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

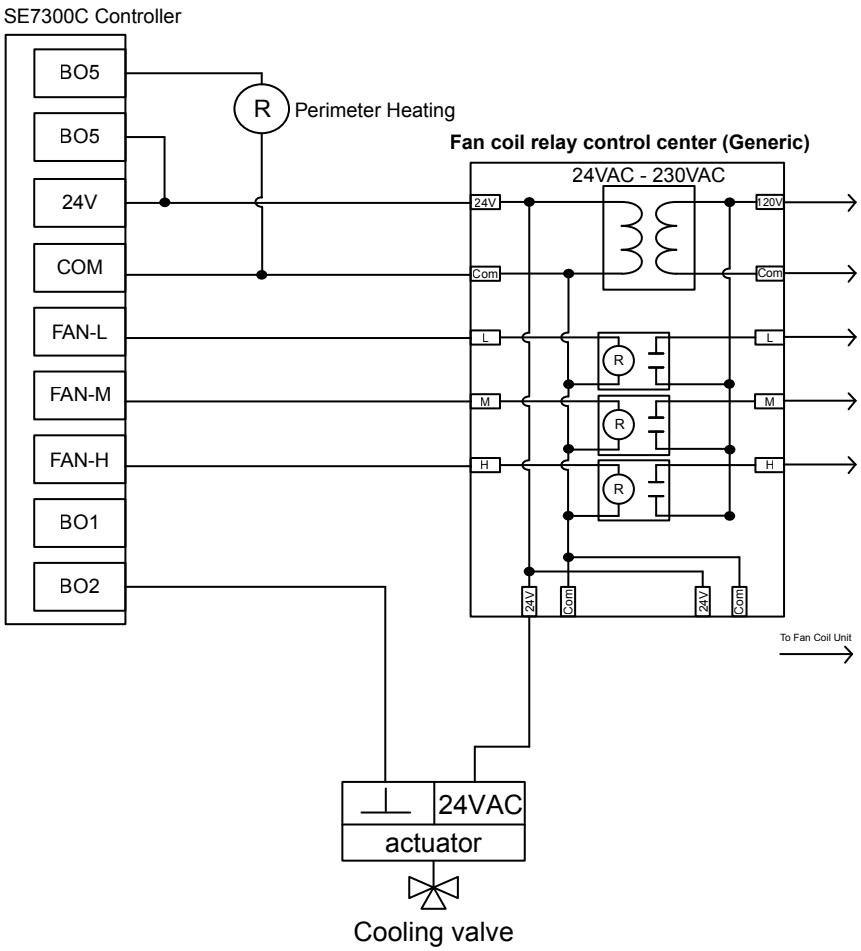
The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Cooling valve will open. Electric heat will stay Off.

On a call for heat:

Valve will close. Electric heat will be activated.



Options

BACnet, Echelon and Wireless models available (see Appendix B for network wiring).

Analogue 0-10 VDC outputs available (SE73xxF5045).

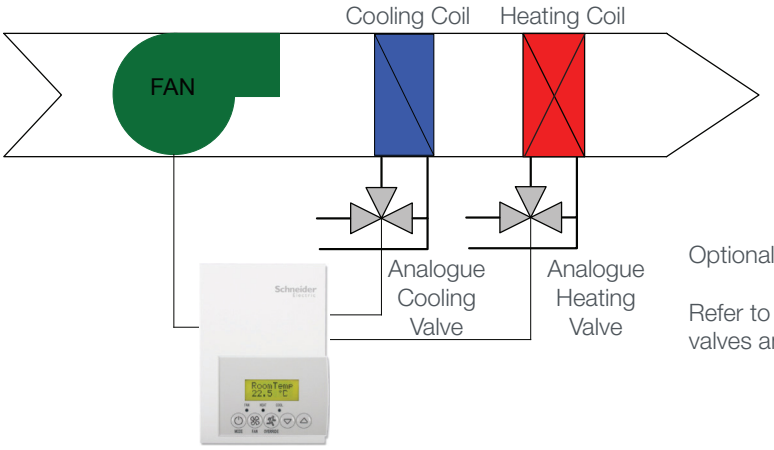
Remote wall mount or duct sensor ready.

Can be configured for 4 pipe systems.

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

Can be configured to single or two speed fan.

SE7350F5045: Heating/cooling: 4-pipe fan coil unit with 3-speed fan, 0-10 VDC analogue valves and dehumidification sequence



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	ON
Lockout	As per user. Default value = 0 No lock
Pipe No	4.0
SeqOpera	4 = Cooling / Heating 4 pipes
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
RA/DA	Reverse Acting (RA) or Direct Acting (DA), depends on actuator
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second)
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

The changeover sensor will send the supply air temperature to the controller.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Cooling valve will modulate to maintain room temperature. Heating valve is closed.

Dehumidification is enabled.

On a call for heat:

Heating valve will modulate to maintain room temperature. Cooling valve is closed.

Dehumidification is disabled.

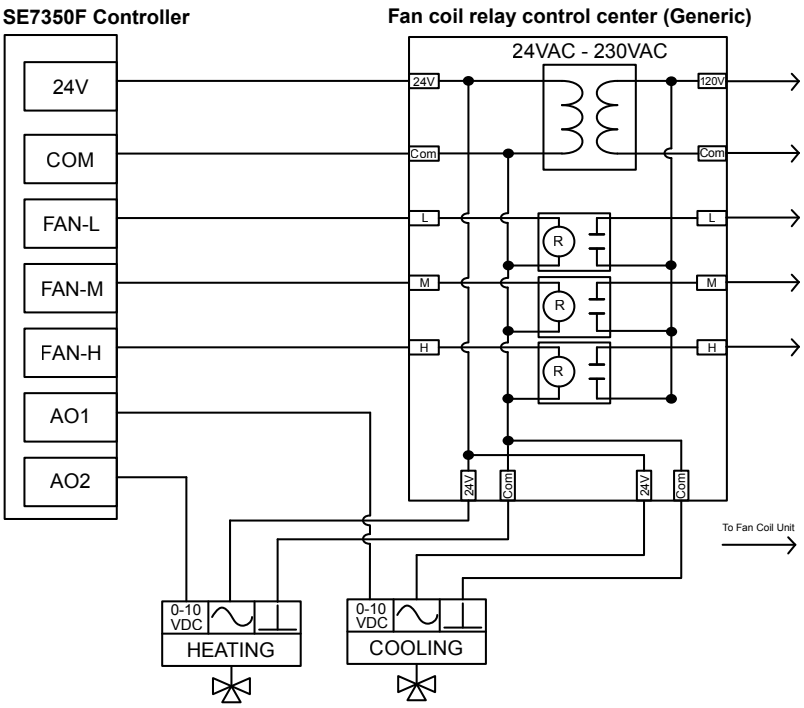
On a demand for dehumidification:

Dehumidification is achieved via the cooling coil using the heating coil for reheat if necessary.

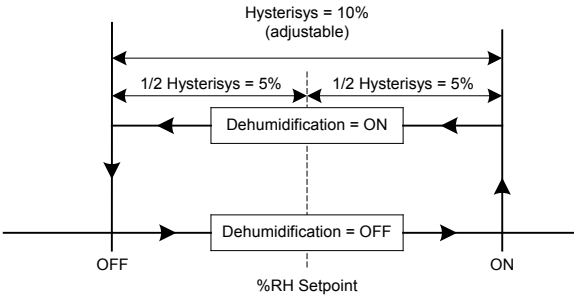
Dehumidification is only allowed in COOL mode (or if cooling is enabled in AUTO mode).

Dehumidification is disabled if the room temperature falls below the low ambient lockout temperature. Which is the cooling setpoint minus the configuration defined deadband value.

Reheat is disabled if PI cooling demand reaches 100%.



Dehumidification ON/OFF sequence:



Options

BACnet, Echelon and Wireless communication models available (see Appendix B for network wiring).

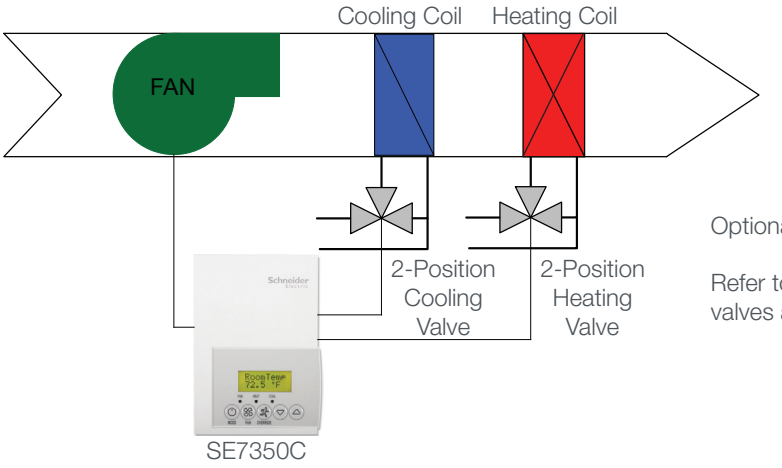
Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

Universal input can be configured for a changeover sensor.

SE7350C5045: Heating/cooling: 4-pipe fan coil unit with 3-speed fan, 2-position valves, and dehumidification sequence



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	ON
Lockout	As per user. Default value = 0 No lock
Pipe No	4.0
CntrlTyp	On/Off
SeqOpera	4 = Cooling / Heating 4 pipes
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
FL time	As per user. Default value = 1.5 minutes. Range 0.5 to 9.0 in 0.5 minutes increments
cph	As per user. 4 to 8 CPH
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second)
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Cooling valve will open to maintain room temperature. Heating valve is closed. Dehumidification is enabled.

On a call for heat:

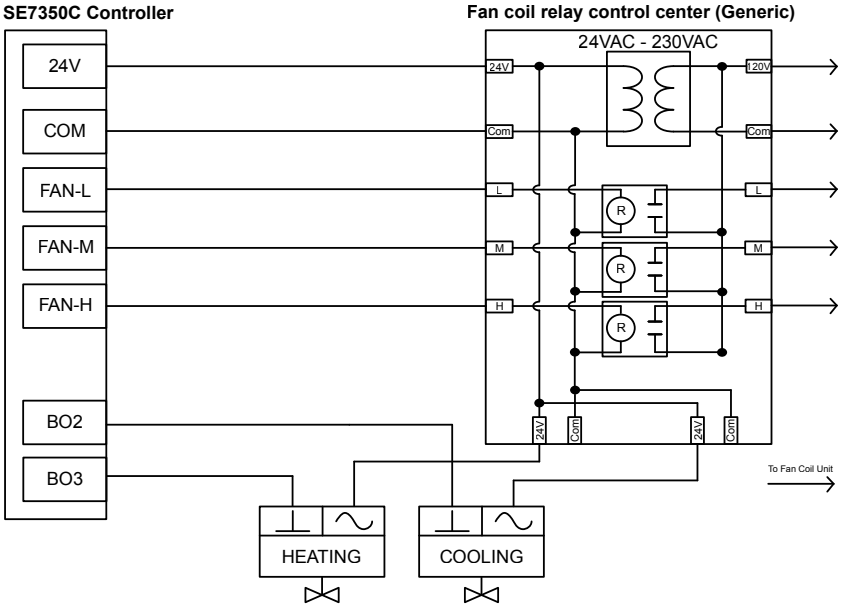
Heating valve will open to maintain room temperature. Cooling valve is closed. Dehumidification is disabled.

On a demand for dehumidification:

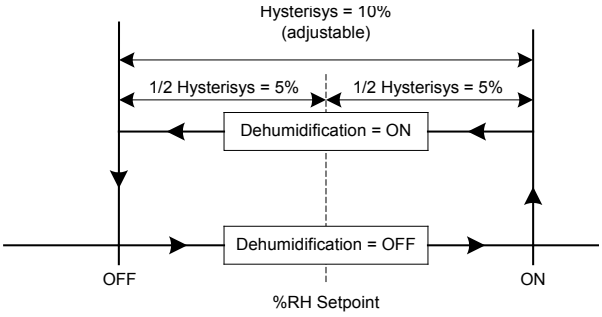
Dehumidification is achieved via the cooling coil using the heating coil for reheat if necessary.

Dehumidification is only allowed in COOL mode (or if cooling is enabled in AUTO mode).

Dehumidification is disabled if the room temperature falls below the low ambient lockout temperature, which is the cooling setpoint minus the configuration defined deadband value.



Dehumidification ON/OFF Sequence:



Options

BACnet, Echelon and Wireless communication models available (see Appendix B for network wiring).

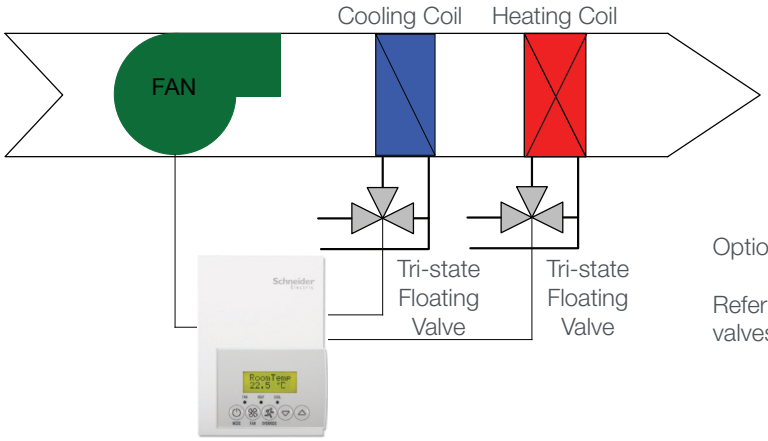
Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Analogue outputs available (SE73xxF5045).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

SE7350C5045: Heating/cooling: 4-pipe fan coil unit with 3-speed fan, tri-state floating valves and dehumidification sequence



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
UI3	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	ON
Lockout	As per user. Default value = 0 No lock
Pipe No	4.0
CntrlTyp	Floating
SeqOpera	4 = Cooling / Heating 4 pipes
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	2 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C). Range = 2, 3, 4 or 5 °F, 1.0 °F increments (1.0 to 2.5 °C, 0.5 °C increments)
cal RS	0 °F or °C
cal RH	0 °F or °C
aux cont	0
Auto Fan	AS or AS AD
FL time	As per user. Default value = 1.5 minutes. Range 0.5 to 9.0 in 0.5 minutes increments
cph	N/A
Reheat	0 for ON/OFF (4CPH), 1 for PWM (10 second)
UI3 dis	Displays supply air temperature

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

The changeover sensor will send the supply air temperature to the controller.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Cooling valve will modulate to maintain room temperature. Heating valve is closed. Dehumidification is enabled.

On a call for heat:

Heating valve will modulate to maintain room temperature. Cooling valve is closed. Dehumidification is disabled.

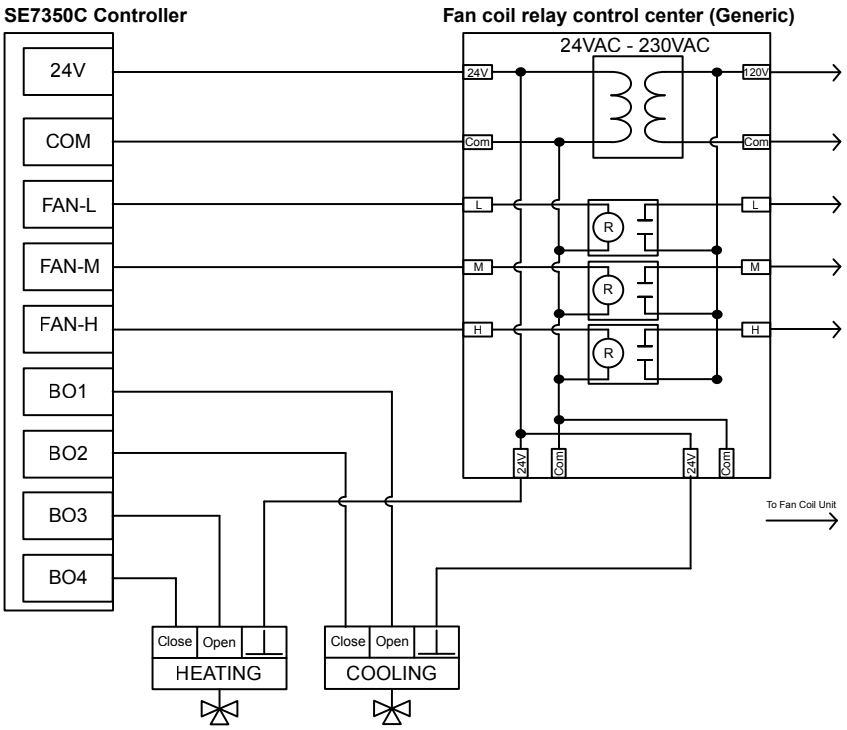
On a demand for dehumidification:

Dehumidification is achieved via the cooling coil using the heating coil for reheat if necessary.

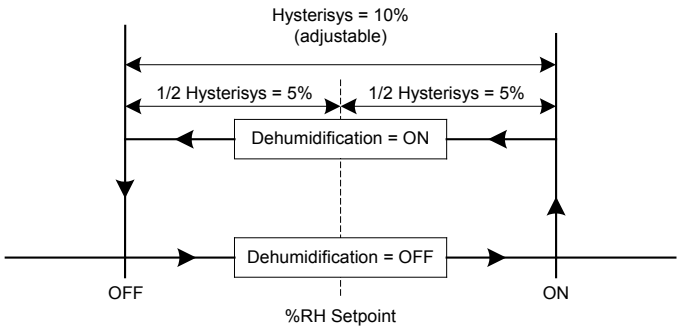
Dehumidification is only allowed in COOL mode (or if cooling is enabled in AUTO mode).

Dehumidification is disabled if the room temperature falls below the low ambient lockout temperature. Which is the cooling setpoint minus the configuration defined deadband value.

Reheat is disabled if cooling demand reaches 100%.



Dehumidification ON/OFF Sequence:



Options

BACnet, Echelon and Wireless communication models available (see Appendix B for network wiring).

Remote wall mount or duct sensor ready.

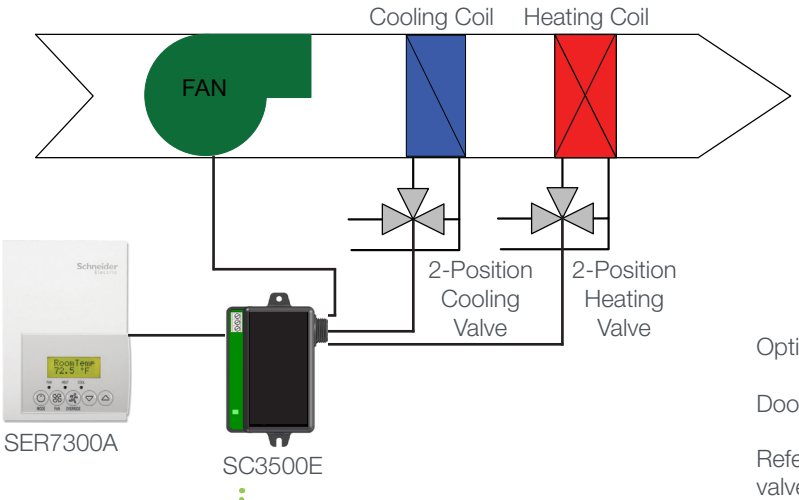
Analogue outputs available (SE73xxF5045).

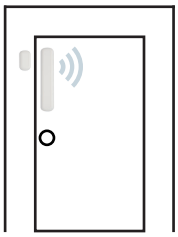
Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring.

Universal input can be configured for a changeover sensor.

SER7300A5045 - SC3500E5045: Heating/cooling: 4-pipe fan coil unit with 3-speed fan, 2-position valves with wireless door switch





VWA5000D5045W

Optional PIR cover: COV-PIR-FCU-C-5045.

Door Switch: VWA5045D5045W.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	Door
BI2	None
RUI1	None
RBI2	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	OFF
Lockout	As per user. Default value = 0 No lock
PulsedHt	OFF
Pipe No	4.0
SeqOpera	2 = Cooling / Heating 4 pipes
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	3 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
deadband	As per user. Default value 2.0 °F (1.0 °C).
cal RS	0 °F or °C
cal RH	0 °F or °C
Auto Fan	AS or AS AD
Cool cph	As per user. 4 to 8 CPH
Heat cph	As per user. 4 to 8 CPH
CoolNoNc	NC
HeatNoNc	NC
Fan Cont	ON

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

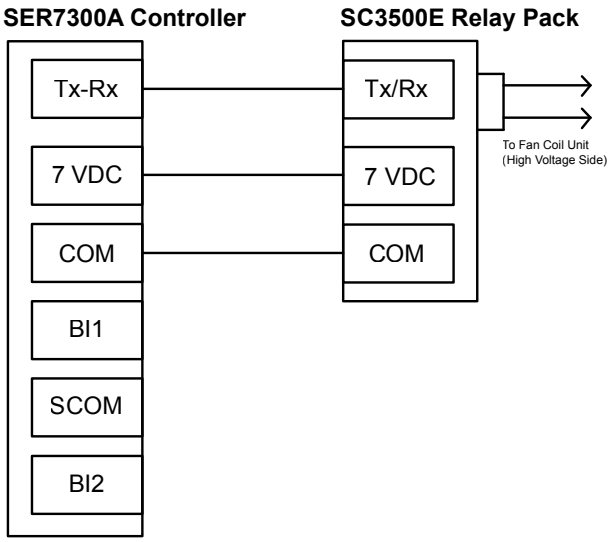
Cooling valve will open to maintain room temperature. Heating valve is closed.

On a call for heat:

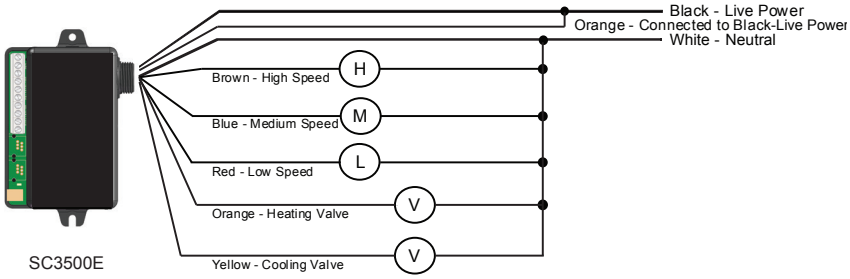
Heating valve will open to maintain room temperature. Cooling valve is closed.

Wireless Door Switch:

The wireless door switch will automatically toggle occupancy. See page 48 for more details.



Typical Wiring Example for SC Relay Pack



For 2 pipe applications use cooling valave yellow wire connection

For electric reheat applications wher ecurrent draw is under above 10A use a line powered coil pilot duty relay contactor for the heating element in place of the heating valve.

Options

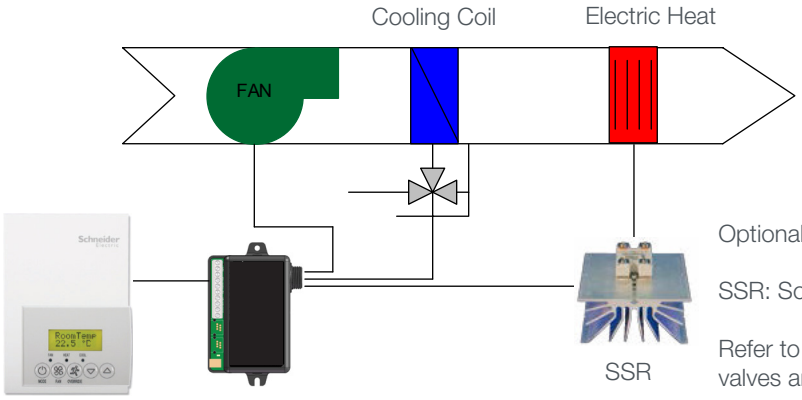
BACnet and Wireless communication models available (see Appendix B for network wiring).

Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

SER7350A5045 - SC3404E5045: Cooling and electric heat: 2-pipe fan coil unit with 3-speed fan, dehumidification, 2-position valves



Optional PIR cover: COV-PIR-FCU-C-5045.

SSR: Solid State Relay (Generic)

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
RUI1	None
RBI2	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	ON
Lockout	As per user. Default value = 0 No lock
PulsedHt	ON
Pipe No	2.0
SeqOpera	2 = Cooling with Reheat
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	3 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
deadband	As per user. Default value 2.0 °F (1.0 °C).
cal RS	0 °F or °C
cal RH	0 °F or °C
Auto Fan	AS or AS AD
Cool cph	As per user. 4 to 8 CPH
Heat cph	As per user. 4 to 8 CPH
CoolNoNc	NC
HeatNoNc	NC
Fan Cont	ON

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Cooling valve will open to maintain room temperature. Heating valve is closed. Dehumidification is enabled.

On a call for heat:

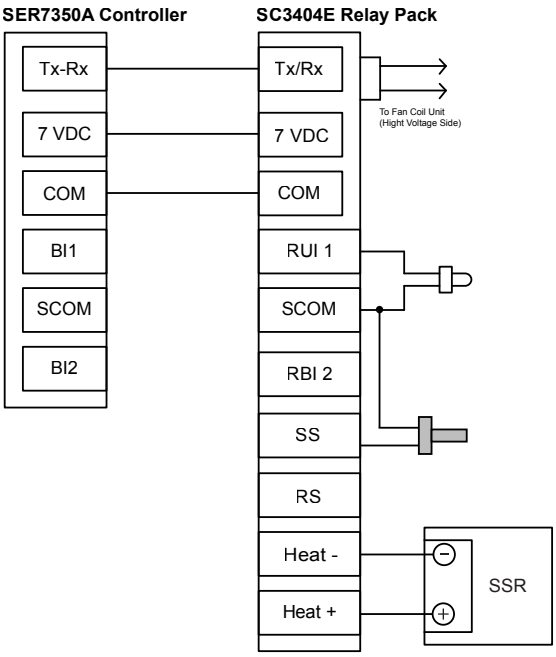
Heating valve will open to maintain room temperature. Cooling valve is closed. Dehumidification is disabled.

On a demand for dehumidification:

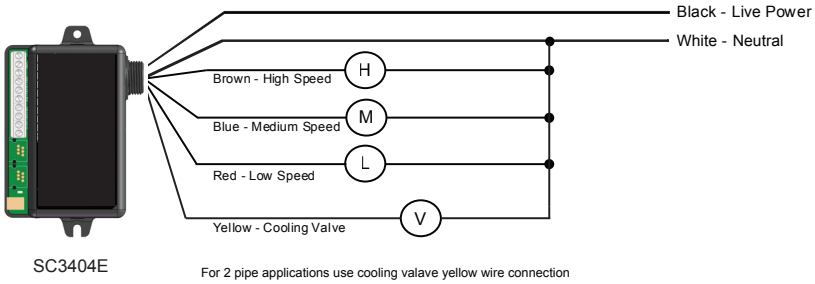
Dehumidification is achieved via the cooling coil using the heating coil for reheat if necessary.

Dehumidification is only allowed in COOL mode (or if cooling is enabled in AUTO mode).

Dehumidification is disabled if the room temperature falls below the low ambient lockout temperature, which is the cooling setpoint minus the configuration defined deadband value.



Typical Wiring Example for SC Relay Pack



For 2 pipe applications use cooling valave yellow wire connection

For electric reheat applications wher ecurrent draw is under above 10A use a line powered coil pilot duty relay contactor for the heating element in place of the heating valve.

Options

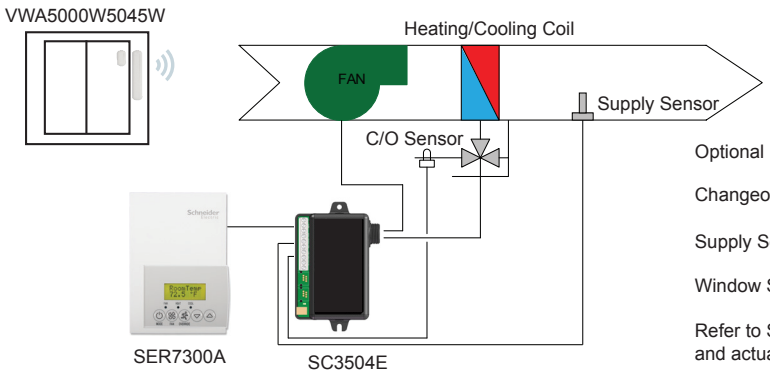
BACnet and Wireless communication models available (see Appendix B for network wiring).

Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

SER7300A5045 - SC3504E5045: Heating/cooling with changeover sensor: 2-pipe fan coil unit with 3-speed fan and wirelesss window switch



Optional PIR cover: COV-PIR-FCU-C-5045.

Changeover Sensor: 10K Ohm type 2.

Supply Sensor: 10K Ohm type 2.

Window Switch: VWA5000W5045W.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	Window
BI2	None
RUI1	COS
RBI2	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	OFF
Lockout	As per user. Default value = 0 No lock
PulsedHt	OFF
Pipe No	2.0
SeqOpera	0 = Cooling only
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	3 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C).
cal RS	0 °F or °C
cal RH	0 °F or °C
Auto Fan	AS or AS AD
Cool cph	As per user. 4 to 8 CPH
Heat cph	As per user. 4 to 8 CPH
CoolNoNc	NC
HeatNoNc	NC
Fan Cont	ON

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

If the supply water temperature is less than 24°C (75F), the cooling valve will open to maintain room temperature. Heating valve is closed.

On a call for heat:

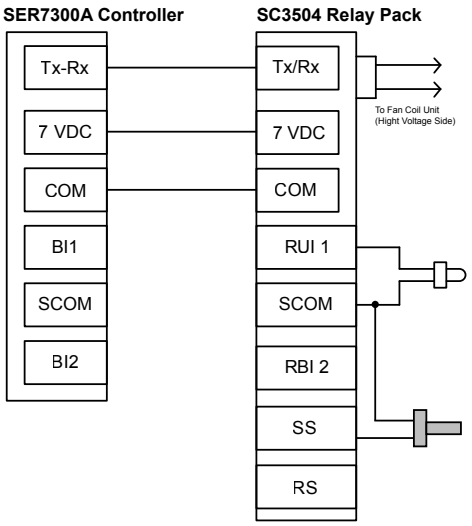
If the supply water temperature is greater than 25°C (77F), the heating valve will open to maintain room temperature. Cooling valve is closed.

Supply Air Sensor:

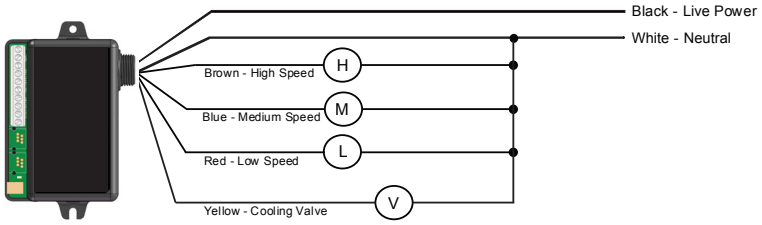
Only used for monitoring. Will be displayed automatically if sensor is connected.

Wireless Window Switch:

The wireless window switch will automatically lock out heating/cooling when window is opened. See page 48 for more details.



Typical Wiring Example for SC Relay Pack



SC3504E

For 2 pipe applications use cooling valave yellow wire connection

For electric reheat applications wher ecurrent draw is under above 10A use a line powered coil pilot duty relay contactor for the heating element in place of the heating valve.

Options

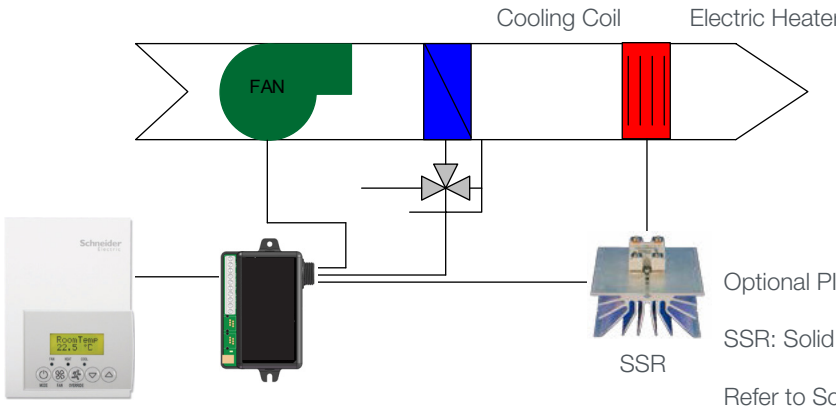
BACnet and Wireless communication models available (see Appendix B for network wiring).

Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

SER7350A5045 - SC3400E5045: Cooling and electric heat: 2-pipe fan coil unit with 3-speed fan and dehumidification, 2-position valves



Optional PIR cover: COV-PIR-FCU-C-5045.

SSR: Solid State Relay (Generic)

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
RUI1	None
RBI2	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	ON
Lockout	As per user. Default value = 0 No lock
PulsedHt	ON
Pipe No	2.0
SeqOpera	2 = Cooling with Reheat
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	3 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
deadband	As per user. Default value 2.0 °F (1.0 °C).
cal RS	0 °F or °C
cal RH	0 °F or °C
Auto Fan	AS or AS AD
Cool cph	As per user. 4 to 8 CPH
Heat cph	As per user. 4 to 8 CPH
CoolNoNc	NC
HeatNoNc	NC
Fan Cont	ON

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

Cooling valve will open to maintain room temperature. Heating valve is closed. Dehumidification is enabled.

On a call for heat:

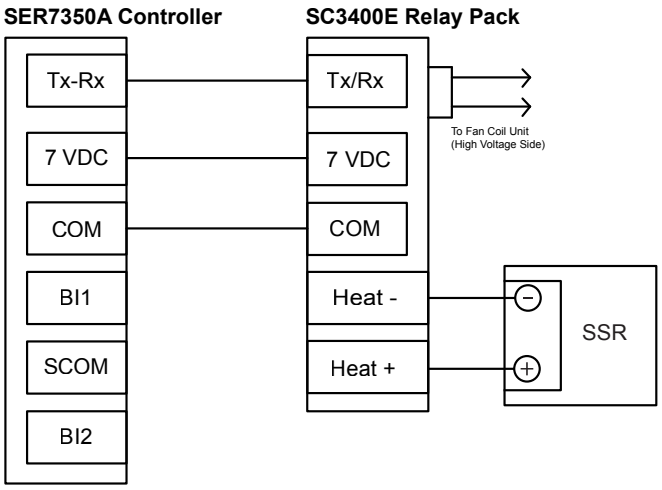
Electric heat will opearate to maintain room temperature. Cooling valve is closed. Dehumidification is disabled.

On a demand for dehumidification:

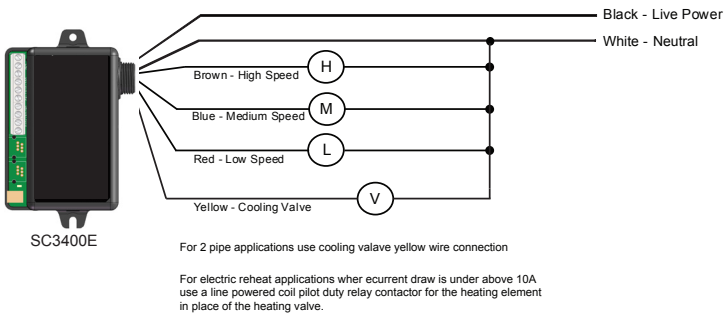
Dehumidification is achieved via the cooling coil using the heating coil for reheat if necessary.

Dehumidification is only allowed in COOL mode (or if cooling is enabled in AUTO mode).

Dehumidification is disabled if the room temperature falls below the low ambient lockout temperature, which is the cooling setpoint minus the configuration defined deadband value.



Typical Wiring Example for SC Relay Pack



For 2 pipe applications use cooling valave yellow wire connection

For electric reheat applications wher ecurrent draw is under above 10A use a line powered coil pilot duty relay contactor for the heating element in place of the heating valve.

Options

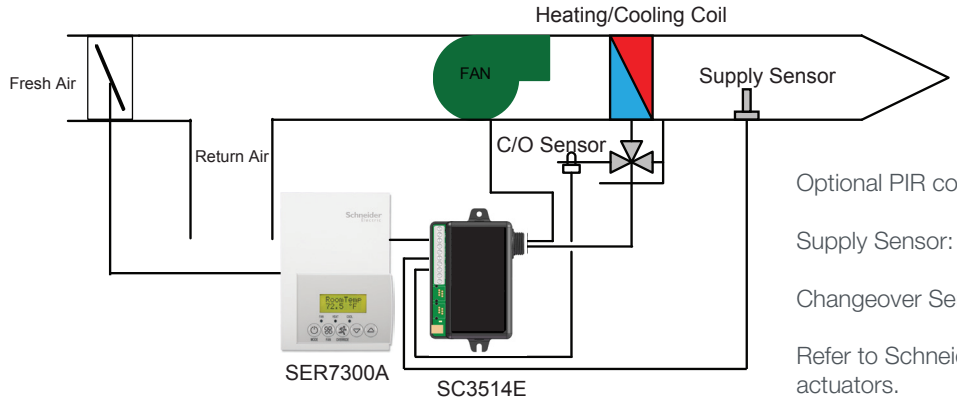
BACnet and Wireless communication models available (see Appendix B for network wiring).

Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

SER7300A5545 - SC3514E5045: Heating/cooling: 2-pipe fan coil unit with 3-speed fan and fresh air damper, 2-position valves



Optional PIR cover: COV-PIR-FCU-C-5045.

Supply Sensor: 10K Ohm type 2.

Changeover Sensor: 10K Ohm type 2.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
RUI1	COS
RBI2	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	OFF
Lockout	As per user. Default value = 0 No lock
PulsedHt	Occ
Pipe No	2.0
SeqOpera	0 = Cooling only
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	3 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C).
cal RS	0 °F or °C
cal RH	0 °F or °C
Auto Fan	AS or AS AD
Cool cph	As per user. 4 to 8 CPH
Heat cph	As per user. 4 to 8 CPH
CoolNoNc	NC
HeatNoNc	NC
Fan Cont	ON

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating. The occupancy output will open the fresh air damper to minimum position.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling. The fresh air damper will close.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

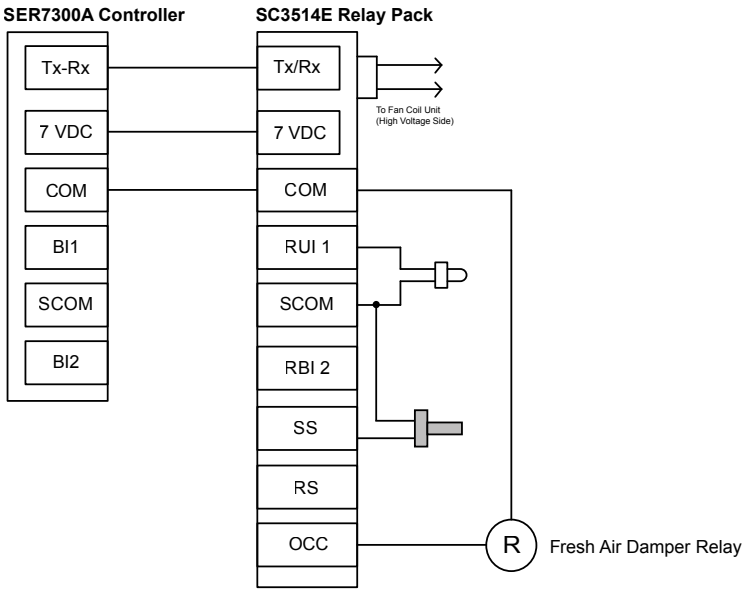
If the supply water temperature is less than 24°C (75F), the cooling valve will open to maintain room temperature. Heating valve is closed.

On a call for heat:

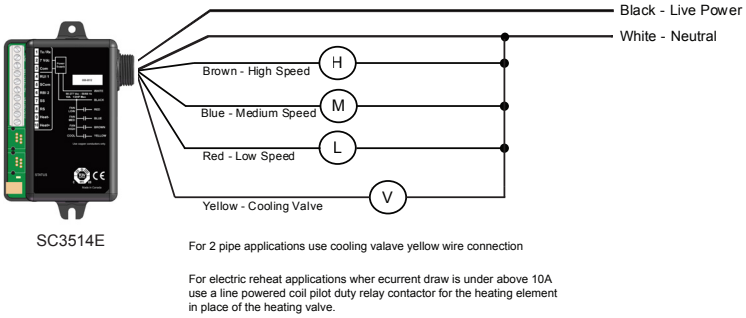
If the supply water temperature is greater than 25°C (77F), the heating valve will open to maintain room temperature. Cooling valve is closed.

Supply Air Sensor:

Only used for monitoring. Will be displayed automatically if sensor is connected.



Typical Wiring Example for SC Relay Pack



For 2 pipe applications use cooling valave yellow wire connection

For electric reheat applications wher ecurrent draw is under above 10A use a line powered coil pilot duty relay contactor for the heating element in place of the heating valve.

Options

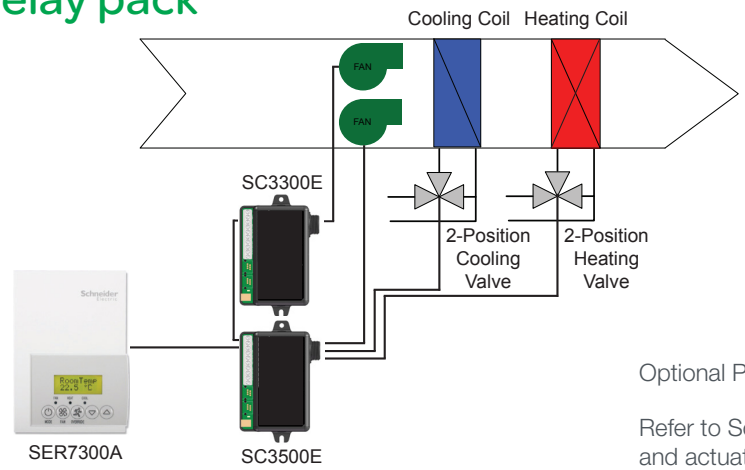
BACnet and Wireless communication models available (see Appendix B for network wiring).

Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

SER7300A5045 -SC3500E5045 -SC3300E5045: Heating/ cooling: 4-pipe fan coil unit with 3-speed fan, 2-position valves with slave relay pack



Optional PIR cover: COV-PIR-FCU-C-5045.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	None
BI2	None
RUI1	None
RBI2	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	OFF
Lockout	As per user. Default value = 0 No lock
PulsedHt	OFF
Pipe No	4.0
SeqOpera	2 = Cooling / Heating 4 pipes
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	3 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
deadband	As per user. Default value 2.0 °F (1.0 °C).
cal RS	0 °F or °C
cal RH	0 °F or °C
Auto Fan	AS or AS AD
Cool cph	As per user. 4 to 8 CPH
Heat cph	As per user. 4 to 8 CPH
CoolNoNc	NC
HeatNoNc	NC
Fan Cont	ON

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

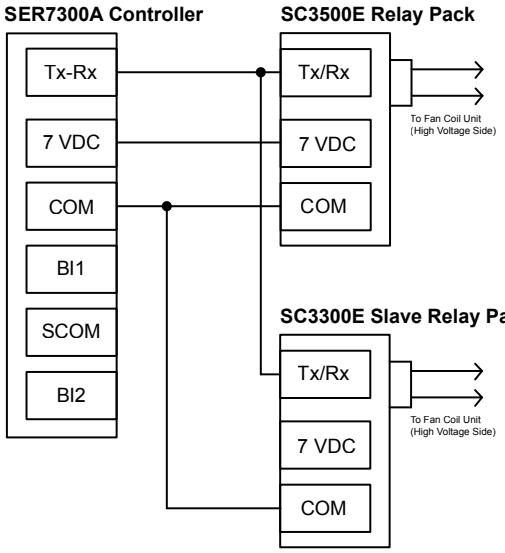
The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

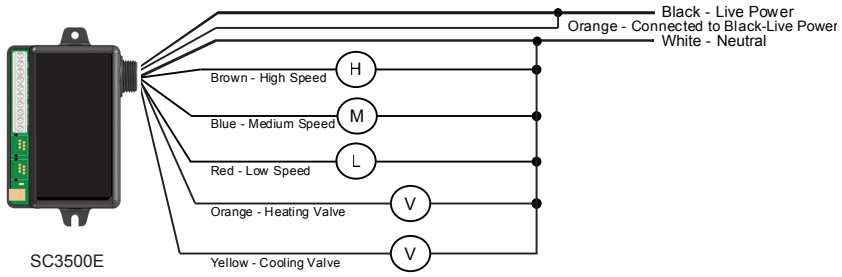
Cooling valve will open to maintain room temperature. Heating valve is closed.

On a call for heat:

Heating valve will open to maintain room temperature. Cooling valve is closed.



Typical Wiring Example for SC Relay Pack



For 2 pipe applications use cooling valave yellow wire connection

For electric reheat applications wher ecurrent draw is under above 10A use a line powered coil pilot duty relay contactor for the heating element in place of the heating valve.

Options

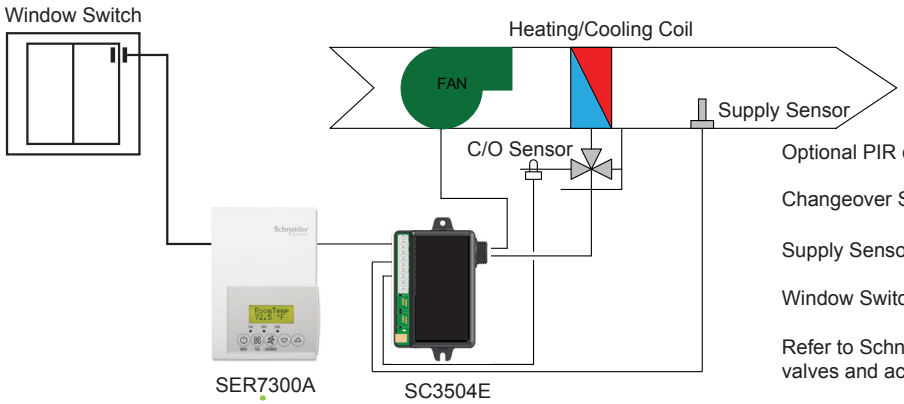
BACnet and Wireless communication models available (see Appendix B for network wiring).

Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

SER7300A5045 - SC3504E5045: Cooling and electric heat: 2-pipe fan coil unit with 3-speed fan, 2-position valves with wired window switch



Optional PIR cover: COV-PIR-FCU-C-5045.

Changeover Sensor: 10K Ohm type 2.

Supply Sensor: 10K Ohm type 2.

Window Switch: Generic Window Switch

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	Window
BI2	None
RUI1	COS
RBI2	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	OFF
Lockout	As per user. Default value = 0 No lock
PulsedHt	OFF
Pipe No	2.0
SeqOpera	2 = Cooling with Electric Reheat
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	3 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
DoorTime	N/A
deadband	As per user. Default value 2.0 °F (1.0 °C).
cal RS	0 °F or °C
cal RH	0 °F or °C
Auto Fan	AS or AS AD
Cool cph	As per user. 4 to 8 CPH
Heat cph	As per user. 4 to 8 CPH
CoolNoNc	NC
HeatNoNc	NC
Fan Cont	ON

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

If the supply water temperature is less than 24°C (75F), the cooling valve will open to maintain room temperature. Heating valve is closed.

On a call for heat:

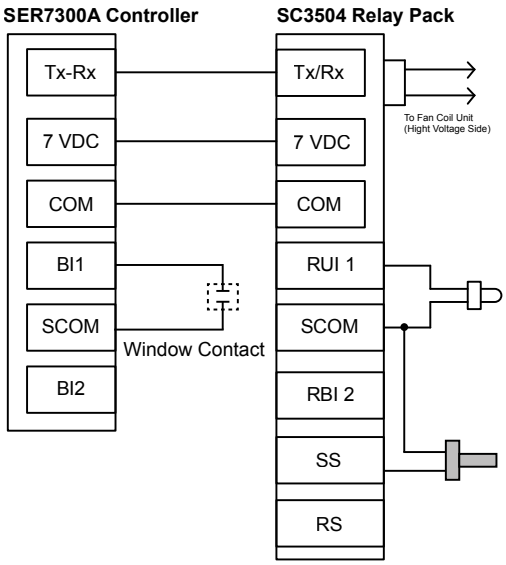
If the supply water temperature is greater than 25°C (77F), the heating valve will open to maintain room temperature. Cooling valve is closed.

Supply Air Sensor:

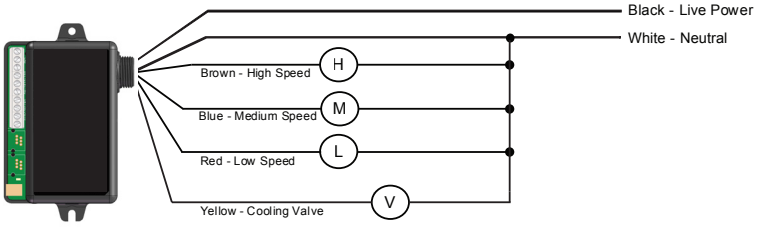
Only used for monitoring. Will be displayed automatically if sensor is connected.

Wireless Window Switch:

The window switch will automatically lock out heating/cooling when window is opened.



Typical Wiring Example for SC Relay Pack



For 2 pipe applications use cooling valave yellow wire connection

For electric reheat applications wher ecurrent draw is under above 10A use a line powered coil pilot duty relay contactor for the heating element in place of the heating valve.

Options

BACnet and Wireless communication models available (see Appendix B for network wiring).

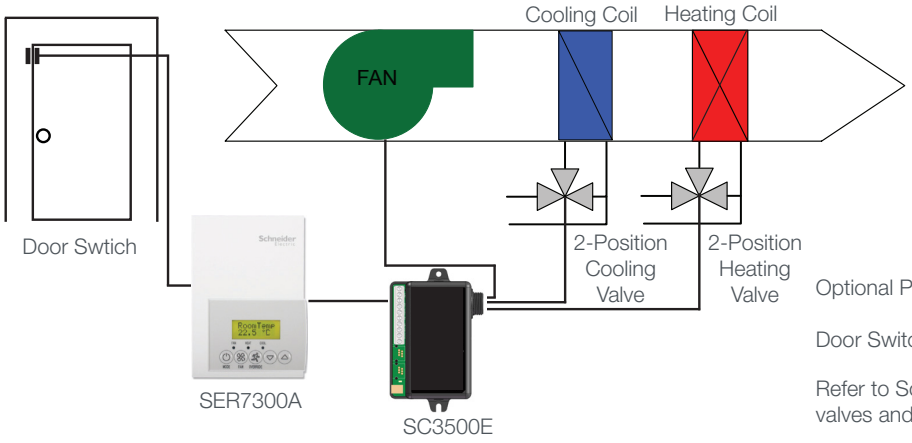
Models available with factory installed PIR cover.

Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

SER7300A5045 - SC3500E5045: Heating/cooling: 4-pipe fan coil unit with 3-speed fan, 2-position valves with wired door switch



Optional PIR cover: COV-PIR-FCU-C-5045.

Door Switch: Generic wired door switch.

Refer to Schneider Electric Catalogue for valves and actuators.

Configuration parameter name	Configuration settings
PswrdSet	0 is factory set, range is: 0-1000
BI1	Door
BI2	None
RUI1	None
RBI2	None
MenuScro	ON
AutoMode	ON
C or F	As per user. Default value = °F
%RH disp	OFF
Lockout	As per user. Default value = 0 No lock
PulsedHt	OFF
Pipe No	4.0
SeqOpera	2 = Cooling / Heating 4 pipes
Fan Menu	2
DHumiLCK	ON
%RH set	As per user. Default value = 50%. Range = 30% to 95%
DehuHyst	As per user. Default value = 5%. Range = 2% to 20%
DehuCool	As per user. Default value = 100%. Range = 20% to 100%
St-By TM	0.5 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
Unocc TM	0.0 hours is factory set, range is: 0.0 to 24.0 hours in 0.5hr increments
St-By HT	69 °F is factory set, range is: 40 to 90 °F (4.5 to 32.0 °C)
St-By CL	78 °F is factory set, range is: 54 to 100 °F (12.0 to 37.5 °C)
Unocc HT	As per user. Default value = 62 °F (17 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
Unocc CL	As per user. Default value = 80 °F (27 °C). Range = 54 to 100 °F (12 to 37.5 °C)
heat max	As per user. Default value = 90 °F (32 °C). Range = 40 to 90 °F (4.5 to 32.0 °C)
cool min	As per user. Default value = 54 °F (12 °C). Range = 54 to 100 °F (12 to 37.5 °C)
Pband	3 °F is factory set, range is: 2 to 10 °F (0.6 to 5.6 °C)
Set Type	Permanent
SptFunc	Dual Stp or AttchStp
TOccTime	As per user. Default value 2 hours. Range = 0 to 24 hours
deadband	As per user. Default value 2.0 °F (1.0 °C).
cal RS	0 °F or °C
cal RH	0 °F or °C
Auto Fan	AS or AS AD
Cool cph	As per user. 4 to 8 CPH
Heat cph	As per user. 4 to 8 CPH
CoolNoNc	NC
HeatNoNc	NC
Fan Cont	ON

Sequence of operation and wiring

Occupied Mode:

Setpoints will revert to those defined by occupied cooling and heating.

Stand-by Mode (only available when PIR motion detector cover is used):

Setpoints will revert to those defined by stand-by cooling and heating.

Unoccupied Mode:

Setpoints will revert to those defined by unoccupied heating and cooling.

Occupied Override Mode:

The system will revert to occupied mode for the duration determined by the “ToccTime” parameter.

On a call for cool:

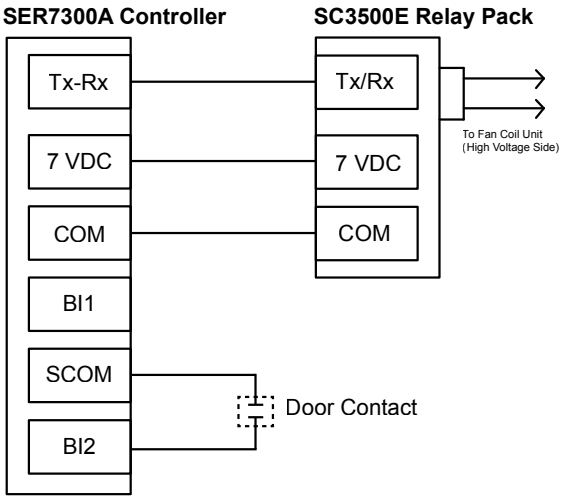
Cooling valve will open to maintain room temperature. Heating valve is closed.

On a call for heat:

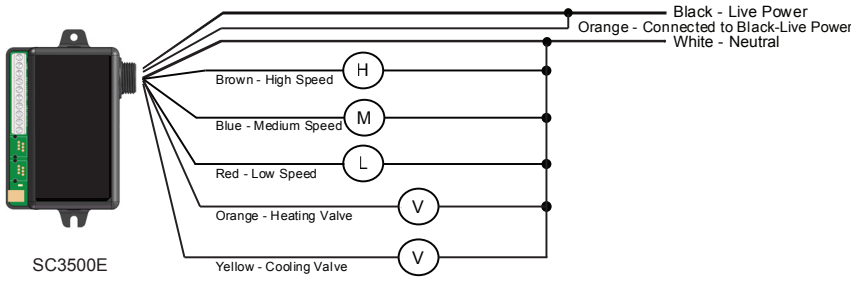
Heating valve will open to maintain room temperature. Cooling valve is closed.

Door Switch:

The door switch will automatically toggle occupancy.



Typical Wiring Example for SC Relay Pack



For 2 pipe applications use cooling valave yellow wire connection

For electric reheat applications wher ecurrent draw is under above 10A use a line powered coil pilot duty relay contactor for the heating element in place of the heating valve.

Options

BACnet and Wireless communication models available (see Appendix B for network wiring).

Models available with factory installed PIR cover.

Remote wall mount or duct sensor ready.

Can be configured for 2 pipe systems (with changeover).

Binary inputs can be configured to control occupancy via door or window contact, remote night setback or to provide alarms for service or filter monitoring / Universal input can be configured for a changeover sensor.

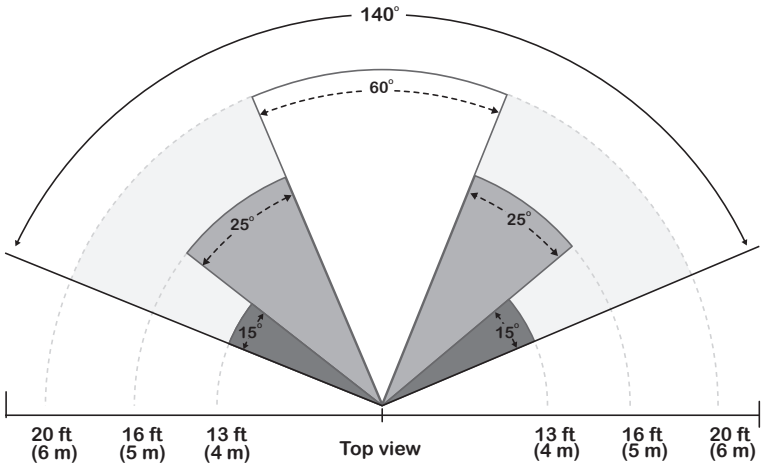
APPENDIX A - PASSIVE INFRA-RED SENSOR

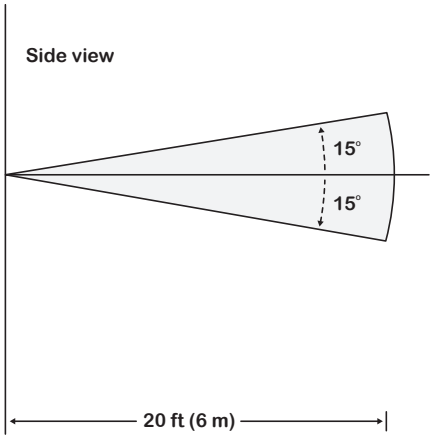
Sequence of Operation

Initially, the Room Controller is in Stand-by mode and Stand-by setpoints are used. When the Passive Infra-Red (PIR) sensor detects motion, the Occupancy status switches to Occupied and the Stand-By Time timer is reset. The Occupied setpoints are used for this operation. If no motion is detected in the room for the entire Stand-By Time duration (adjustable parameter), the room switches to Stand-by mode and Stand-by setpoints are used. While in Stand-by mode, if no motion is detected for the entire Unoccupied Time period (adjustable parameter), the room switches to Unoccupied mode and uses its Unoccupied setpoints. While in Stand-By or Unoccupied mode, any motion switches the room back to Occupied mode.

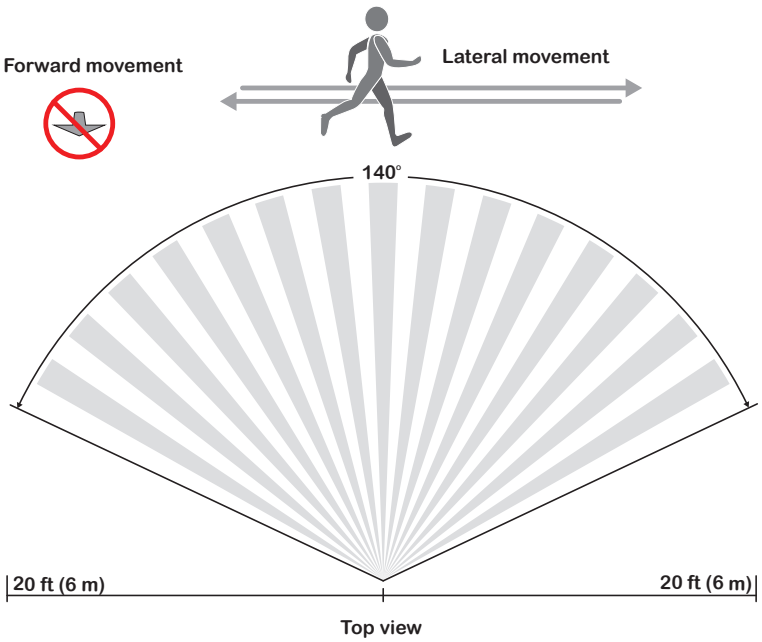
PIR ranges measure 20 feet (6 meters) at 140° and 13 feet (4.5 meters) minimum between 15° to 30° laterally. A typical installation height of approximately 5 feet (1.5 meters) is considered in these measurements.

The below illustrates the resolution.



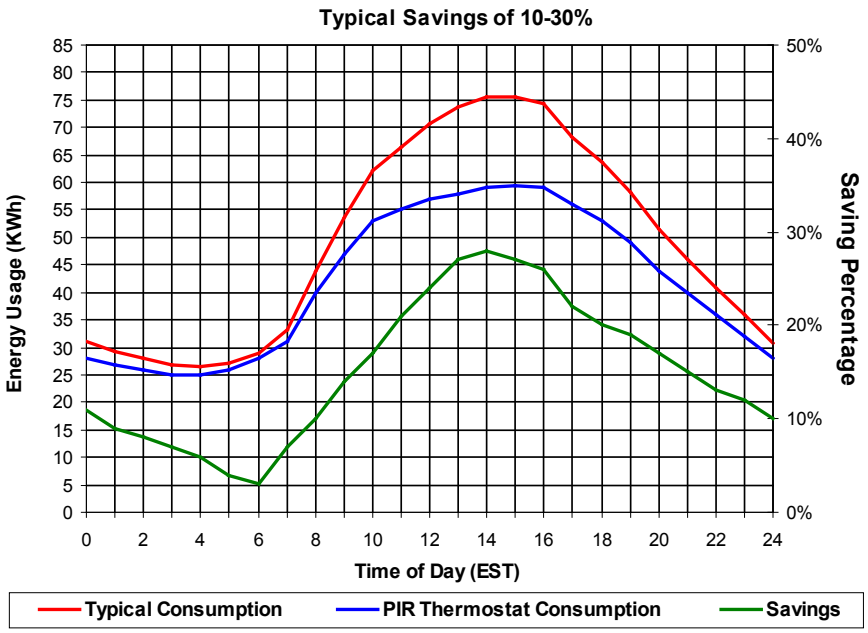


Fresnel lens beam and detection field



Energy Savings

PIR can maximize your energy saving from 10-30% by adjusting temperature set points in unoccupied zones during scheduled periods.



Deployment

Placement of the Room Controller must be given consideration. It is recommended to install the Room Controller as close to a door as possible (but not so as to be blocked by the door), or in an area with high occupant movement.

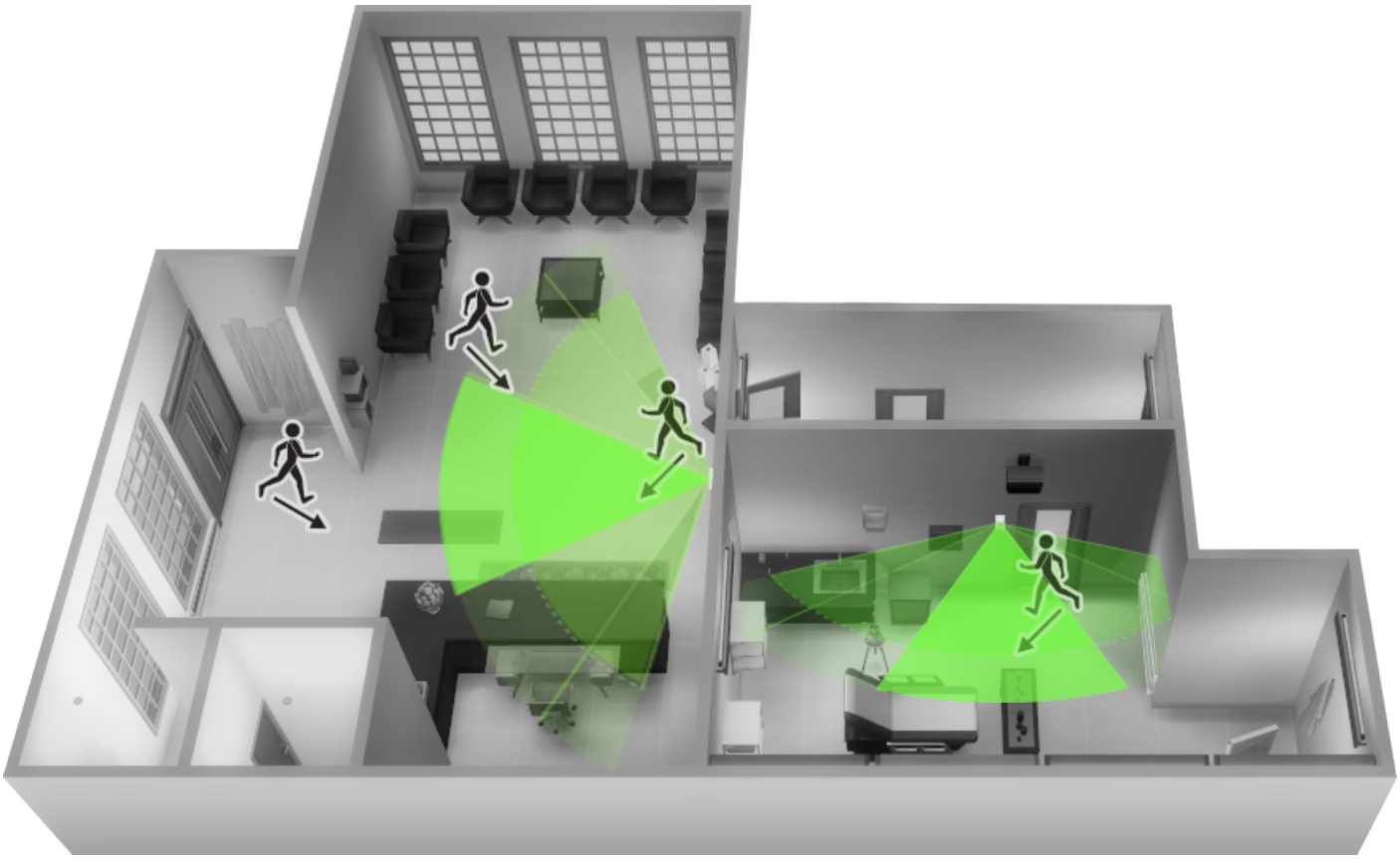
Ideally the Room Controller should be installed 5 feet (1.5 meters) above the floor surface to ensure maximum detection range is achieved. As well, Room Controller placement should ensure the occupant crosses the lens beam in a perpendicular path within the prescribed detection zone.

Example of Recommended Deployment

The below shows Room Controllers installed in ideal locations for two rooms.

The examination room shows one Room Controller installed adjacent to the door. In this area of the room, occupant traffic is high and ensures the occupant will almost always cross the PIR detection path laterally and within the detection range.

The waiting room shows one Room Controller installed beside a door in the middle of the room. As shown in the diagram below, occupant traffic is high in several areas of the room including the entrance, waiting room, access to the door and activity around the
reception desk. Moreover, for each case aforementioned, occupant movement almost always moves lateral to the PIR, which ensures detection by the PIR, as well as respecting the PIR detection range.



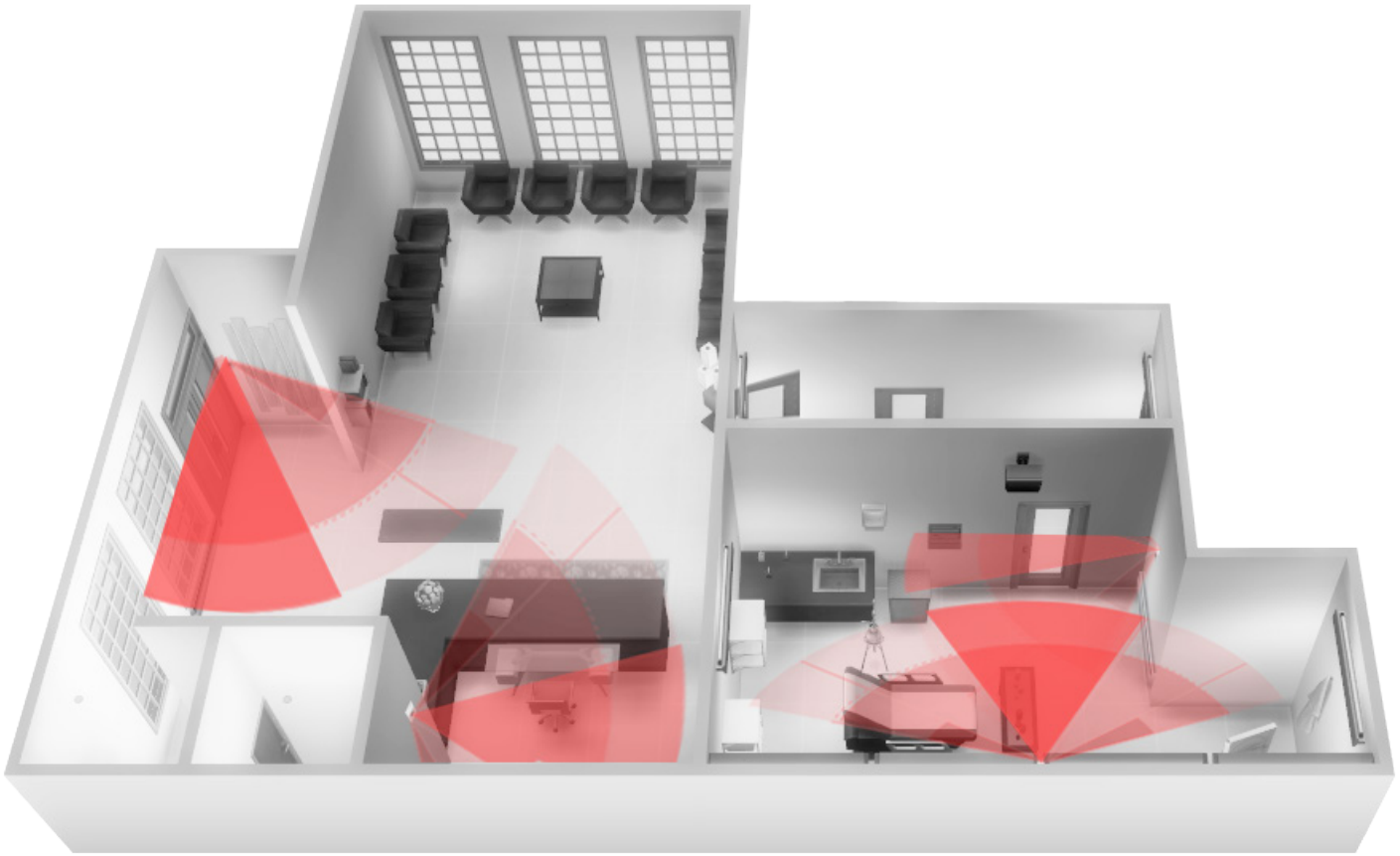
Recommended Installation

Example of Non-Recommended Deployment

The below shows four Room Controllers (two for each room) installed in non-ideal locations for the two rooms.

The examination room shows one Room Controller installed in a low traffic area near the door, and a second Room Controller installed on the wall directly opposite the door. For the Room Controller installed in the corner wall, the PIR could be blocked by the opened door, while occupant traffic cold also be minimal in this area of the room. For the second Room Controller installed opposite the door, the PIR detection could fall outside the specified detection zone, while at the same time most occupant movement would be not be lateral to the PIR, thereby not respecting optimal crossing patterns for PIR detection.

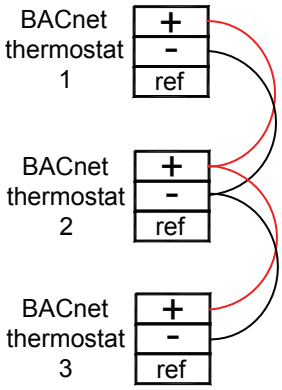
The waiting room shows one Room Controller installed in the corner of the room, and a second Room Controller installed beside the
reception area. For the Room Controller installed in the corner, the opening/closing of the door creates high probability that the PIR would get blocked, and therefore, occupancy going undetected. For the Room Controller installed beside the reception area, occupant traffic could fall outside the detection zone, and the receptionist would often be below the 5 foot recommended installation height for the Room Controller.



Non-Recommended Installation

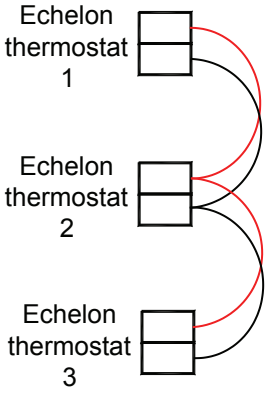
Appendix B - option network wiring if communicating models are used

BACnet communication wiring



Notes:
- Wiring should be daisy chained
- Respect polarity
- If using 2 conductors shielded wires, connect the shield of each feed together on the back of the controller. ONLY ground the shield at one location. DO NOT connect the shield to the ref terminal.

Echelon communication wiring

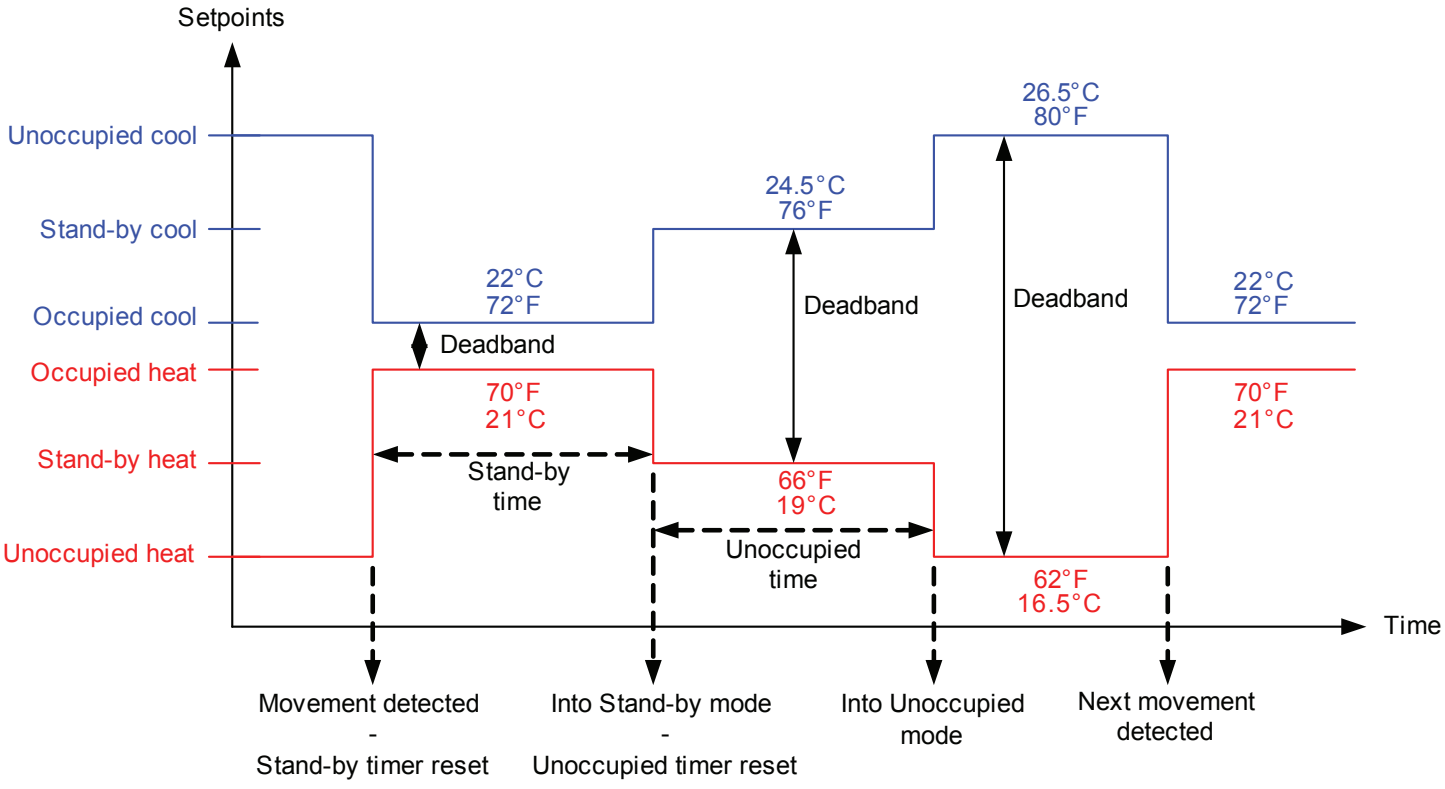


Notes:
- No polarity

Wireless communication

Notes:
- No communication wires needed

Appendix C - controllers' occupancy sequence of operation schematic



Appendix D - VWA5000 series - wireless door & window switch

Wirelss door & window switch

Wireless door switches used with the local PIR cover provide advanced local occupancy routines allowing for increased energy savings during occupied hours without sacrificing occupant comfort.

The wireless swtiches are only compatible with the SER7300 Series Controllers.

Wireless window switches are used to monitor outside windows and or patio and balcony doors being opened or closed. This allows preventing unnecessary energy consumption by the tenants.

Typical applications of Fan Coil Terminal Equipment Controllers with VWA5000W series Zigbee™ wireless switches can be used in network ready mode with or without integration to a central management system to allow for advanced functions such as central reservation occupancy functions.

A combination of up to twenty VWA5000W door and or window switches can be used simultaneously with a single Fan Coil Terminal Equipment Controller.

The VWA5000W switches are factory delivered with 2 AAA batteries and are ready to be installed, configured and used right out of the box. Due to the extremely small current consumption of the switches, the expected battery life is approximately 10 years and is equivalent to the battery shelf life.

No tools are required for commissioning or servicing the door switch. A very simple interface with an on-board LED & hidden switch provide all the required functions for local interaction. Local information for battery life and connectivity (heartbeat) are provided at the Fan Coil Terminal Equipment Controller local display level or through the Zigbee™ wireless network. Each switch is also factory supplied with a magnet, a locking security tamper proof screw and self tapping mounting screws for installation.

Model selection

Window Switch	Door Switch
VWA5045W5045W	VWA5045D5045W

Simple & quick installation