CATALOG

SE8000 and SE7000 Series Room Controllers

09.26.2012   12:54 PM

Room 1705

Occupied

Indoor °C

23.5°

24.0

Humidity | Outdoor
45% | 18°C

Schneider
Electric

Schneider
Electric

RoomTemp
72.5 °F

FAN   HEAT   COOL

MODE   FAN   OVERRIDE

Schneider
Electric

Version 10

Schneider Electric Room Controllers bridge the gap between the cost of stand-alone thermostats, and the performance of DDC systems, by simplifying installation and commissioning, to control Rooftop units, fan coil units, terminal units and heat pump applications, for a wide variety of facilities.
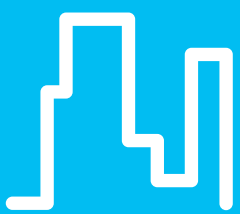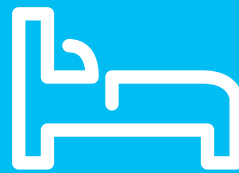
Commercial   Retail   Healthcare   Hotels   Education

SE8000 or SE7000

Common features

Easy to install
No need to interrupt operations when installing room controllers. You can re-use existing wiring or communicate wirelessly to sensors and gateways, thereby lowering installation costs and keeping downtime in check.

Precise comfort
Room controllers look like thermostats, but work like controllers. They deliver the optimal level of comfort while maximizing savings on energy and operational costs.

Easy to commission
No need for software or other tools. Commissioning is done by configuration through the user interface of the room controller, thereby saving on engineering time and cost.

Powerful control
Get the most out of your HVAC systems with the application-specific control and PID algorithms native to room controllers. You can also optimize your space by using the optional occupancy detection and scheduling features.

Easy to scale
The native connectivity of room controllers enables upstream connection to a wide variety of Building Management Systems (BMS), and downstream connection to wired and wireless sensors.

Significant savings
Room controllers provide an accelerated return on investment with savings at all levels: installation, commissioning, energy optimization, and maintenance.

Optional on-board relative humidity sensor

Optional on-board PIR motion sensor

The power to choose for customers who need more.

> Wi-Fi IP ready

> Over 70 design combinations with selectable casings, fascias, and display color schemes, to match any décor.

> Customizable user interface, selectable languages, and advanced BACnet messaging for an unparalleled guest experience.

> Highlight your brand by uploading a custom standby image or logo on the user interface.

> Programmable with Lua4RC to modify control sequences, or override inputs and outputs.

Simply the most cost-effective option on the market.

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SE8000 Series room controllers

SE7000 Series room controllers

Relay Packs

Not all products in the catalogue may be available in every country, please check availability with the local Schneider Electric office.
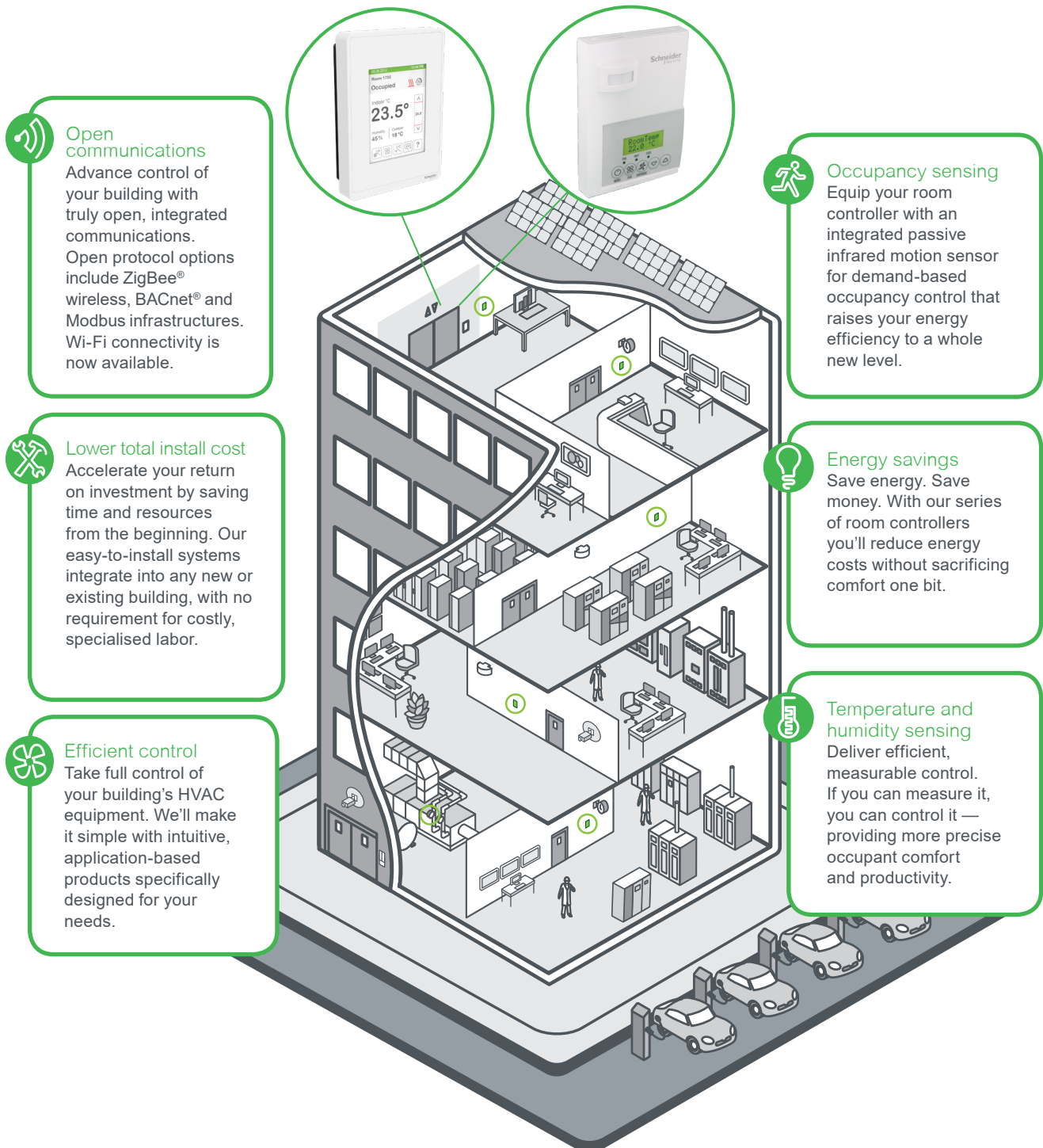
Reduce energy waste & improve comfort.

Accelerate your return on investment with easy to install and commission room controllers

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, Schneider Electric has the ideal, cost-competitive solution. Our 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 Modbus infrastructures. Wi-Fi connectivity is now available.

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 labor.

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 our series of room controllers you'll reduce energy costs without sacrificing comfort one bit.

Temperature and humidity sensing
Deliver efficient, measurable control. If you can measure it, you can control it — providing more precise occupant comfort and productivity.

SE8000 Series Room Controllers

The perfect balance between simplicity and sophistication

The SE8000 Series is a sophisticated addition to the Schneider Electric portfolio of room controllers. With rich, customizable features, the SE8000 Series enables significant energy savings with accurate temperature control in any space. The SE8000 room controllers can be easily integrated into most Building Management Systems (BMS).

Configurable languages

Configurable color schemes

Configurable user interface

Common features

- Configurable sequence of operations
- BACnet Change of value (COV), MS/TP or Modbus RTU
- Scheduler
- Programmable with Lua4RC to modify control sequences or override inputs and outputs
- On-board relative humidity sensor with dehumidification control sequences
- Optional on-board PIR motion sensor with occupancy-based control sequences
- On-board or plug-in ZigBee Pro module
- Wi-Fi connectivity via plug-in module
- Firmware updates via USB

Orderable Fascias

SEZ8250	SER8300 Series (with SC3000)	SE8300 Series	SE8600 Series
> Variable Air Volume (VAV) units	> Line voltage fan coil units	> Low voltage fan coil units > Mixed voltage fan coil units > Zone control	> Rooftop units > Heat pumps > Indoor air quality
Variable Air Volume (VAV) units • Pressure dependent and independent VAV system • Fan speed and sequence of operation • Two pipe • Four pipe • ECM or On/Off fan control • Duct and/or baseboard heaters	**Line voltage fan coil units** • Requires SC3000 relay pack • Fan speed and sequence of operation • Two pipe • Four pipe • ECM fan control	**Low voltage fan coil units** • Fan speed and sequence of operation • Two pipe • Four pipe • ECM fan control **Mixed voltage fan coil units** • Requires SC1300/SC2300 relay pack	**Rooftop units, heat pumps and indoor air quality** • Economizer • CO2 sensor input • Fresh Air Station input **Configurable stages** • 1 heat/1 cool • 2 heat/2 cool • Modulation heat/2 cool • 3 heat/2 cool

Digital stand-alone and communicating room controllers

SEZ8250 | Variable Air Volume (VAV) controller

This SEZ8250 terminal equipment controller provides an easy solution for retrofitting fan coil unit thermostats without requiring other components such as relays, transformers, controllers, sensors, and network wiring to be upgraded. Existing line voltage wiring between the fan coil unit and temperature Controller can be reused further minimizing overall labor and installation costs for both retrofit and new construction control projects. Additional flexibility and energy savings can be achieved with optional wireless door, window, motion and water leak sensors. An elegantly simple casing combines with configurable screen colors to match decor. Display your own logo and custom messages on screen to reinforce your brand and provide a more enjoyable occupant experience.

Description	
Dimension	Height: 12cm/4.72in /
	Width: 8.6cm/3.38in /
	Depth: 2.5cm/1in
Power	
Voltage (SER8000)	6.5 - 28 Vdc or 20 - 28 Vac,
	50/60Hz / 2.4 watts minimum
Voltage (SC3000)	90 - 277 Vac universal, 50/60Hz
Communication	
Protocol	BACnet MS/TP, or Modbus RTU
	ZigBee Pro (with VCM8000V5000P or on-board ZigBee)
	BACnet/IP and email notification via Wi-Fi (with VCM8002V5031)

Product highlights
• Elegant style combinations, designed to complement any decor
• Customizable color digital touch screen interface with multi-language support
• 2 Pipe or 4 Pipe configuration
• ECM or On/Off fan control
• Variable Air Volume (VAV) applications
• On board configuration interface utility
• Alarm monitoring
• Suitable for both commercial and hospitality markets and systems
• Fully programmable control sequences using scripting
• Configurable fan sequence of operation
• Configurable scheduler
• Change of value (COV) function for BMS integration
• Humidity sensor
• Configurable I/O
• Optional PIR motion sensor
• Advanced occupancy functions for commercial and lodging applications
• Optional wireless door, window, motion and water leak sensors available

Communication
• BACnet MS/TP or Modbus RTU (user selectable)
• ZigBee Pro (P) option for direct MPM integration (On-board or plug-in ZigBee Pro wireless module)
• BACnet/IP and email notification via Wi-Fi (with VCM8002V5031)

Facias
This model can be ordered with silver or white Fascia, and can be customized with many different Fascias. Refer to the Fascia page for more information (later in this document).

Accessories
• CO_2 sensor module
• CO_2/temperature/humidity sensor
• ZigBee wireless window, door, motion and water leak sensors

Part Number	Description	BACnet MS/TP	PIR motion sensor	ZigBee Pro on-board	Fascia & casing
SEZ8250U0B00	VAV Pressure Dependant/Independant Controller	X		No*	Silver
SEZ8250U5B00	VAV Pressure Dependant/Independant Controller	X	X	No*	Silver
SEZ8250U5B00P	VAV Pressure Dependant/Independant Controller	X	X	X	Silver
SEZ8250U0B11	VAV Pressure Dependant/Independant Controller	X		No*	White
SEZ8250U5B11	VAV Pressure Dependant/Independant Controller	X	X	No*	White
SEZ8250U5B11P	VAV Pressure Dependant/Independant Controller	X	X	X	White

*Note: ZigBee Pro plug-in module is available

Digital stand-alone and communicating room controllers

SER8300 | Line-voltage fan coil controller with SC3000 relay pack

This two component retrofit option consists of the SER8300 terminal equipment controller and the SC3000 relay pack (refer to "Relay Packs" on page 38 for more information). Together, they provide an easy solution for retrofitting fan coil unit thermostats without requiring other components such as relays, transformers, controllers, sensors, and network wiring to be upgraded. Existing line voltage wiring between the fan coil unit and temperature Controller can be reused further minimizing overall labor and installation costs for both retrofit and new construction control projects. Additional flexibility and energy savings can be achieved with optional wireless door, window, motion and water leak sensors. An elegantly simple casing combines with configurable screen colors to match decor. Display your own logo and custom messages on screen to reinforce your brand and provide a more enjoyable occupant experience.

Product highlights
• Elegant style combinations, designed to complement any decor
• Customizable color digital touch screen interface with
  multi- language support
• 2 Pipe or 4 Pipe configuration
• ECM fan control
• Line voltage applications
• On board configuration interface utility
• Alarm monitoring
• Suitable for both commercial and hospitality markets and systems
• Fully programmable control sequences using scripting
• Configurable fan sequence of operation
• Configurable scheduler
• Change of value (COV) function for BMS integration
• Humidity sensor with on-board dehumidification strategy
• Configurable I/O
• Optional PIR motion sensor
• Advanced occupancy functions for commercial and
  lodging applications
• Optional wireless door, window, motion and water leak sensors
  available

Communication
• BACnet MS/TP or Modbus RTU (user selectable)
• ZigBee Pro (P) option for direct MPM integration
  (On-board or plug-in ZigBee Pro wireless module)
• BACnet/IP and email notification via Wi-Fi (with VCM8002V5031)

Facias
This model can be ordered with silver or white Fascia, and can be customized with many different Fascias. Refer to the Fascia page for more information (later in this document).

Accessories
• The SC3000 relay pack is a necessary accessory for retrofit
  solution to use with the SER8300 room controller. Refer to the
  SC3000 page for more information (later in this document)
• CO_2 sensor module
• CO_2/temperature/humidity sensor
• ZigBee wireless window, door, motion and water leak sensors

Description	
Dimension	Height: 12cm/4.72in /
	Width: 8.6cm/3.38in /
	Depth: 2.5cm/1in
Power	
Voltage (SER8000)	6.5 - 28 Vdc or 20 - 28 Vac,
	50/60Hz / 2.4 watts minimum
Voltage (SC3000)	90 - 277 Vac universal, 50/60Hz
Communication	
Protocol	Stand-alone, BACnet MS/TP, or Modbus RTU
	ZigBee Pro (with VCM8000V5000P or on-board ZigBee)
	BACnet/IP and email notification via Wi-Fi (with VCM8002V5031)

Part Number	Description	BACnet MS/TP	RH sensor & control	PIR motion sensor	ZigBee Pro on-board	Fascia & casing
SER8350A0B00	Line voltage fan coil Controller	X	X		No*	Silver
SER8350A5B00	Line voltage fan coil Controller	X	X	X	No*	Silver
SER8350A0B11	Line voltage fan coil Controller	X	X		No*	White
SER8350A5B11	Line voltage fan coil Controller	X	X	X	No*	White
SER8350A5B00P	Line voltage fan coil Controller	X	X	X	X	Silver
SER8350A5B11P	Line voltage fan coil Controller	X	X	X	X	White

*Note: ZigBee Pro plug-in module is available

Digital stand-alone and communicating room controllers

SE8300 | Low voltage fan coil controller and zone controller

Smart energy management has never been easier than with the SE8300 series Fan coil room controllers. Designed for new construction and retrofit projects, the room controllers dramatically decrease project delivery costs by reducing installation, configuration and commissioning time. No complex software or tools are required to customize functionality to meet your applications requirements. The room controllers provide all the advanced features and monitoring functions required by modern building automation systems in a simple compact enclosure. An elegantly simple casing combines with configurable screen colors to match decor. Display your own logo and custom messages on screen to reinforce your brand and provide a more enjoyable occupant experience.

Product Highlights
- Elegant style combinations, designed to complement any decor
- Touch screen interface with multi-language support
- 2 Pipe or 4 Pipe configuration
- ECM fan control
- Suitable for both commercial and hospitality markets and systems
- Fully programmable control sequences using scripting
- On board configuration interface utility
- Configurable fan sequence of operation
- Configurable Scheduler.
- Change of value (COV) function for BMS integration.
- Humidity sensor with on-board dehumidification strategy
- Optional PIR motion sensor
- Advanced occupancy and scheduling functions for commercial and lodging applications
- Optional wireless door, window, motion and water leak sensors available.

Communication
- BACnet MS/TP or Modbus RTU (user selectable)
- ZigBee Pro (P) option for direct MPM integration (On-board or plug-in ZigBee Pro wireless module)
- BACnet/IP and email notification via Wi-Fi (with VCM8002V5031)

Facias
This model can be ordered with silver or white Fascia, and can be customized with many different Fascias. Refer to "Fascias" on page 16 for more information (later in this document).

Accessories
- CO_2 sensor module
- CO_2/temperature/humidity sensor
- ZigBee wireless window, door, motion and water leak sensors

Description	
Dimension	Height: 12cm/4.72in
	Width: 8.6cm/3.38in
	Depth: 2.5cm/1in
Power	
Voltage	6.5 - 28 Vdc or 20 - 28 Vac
	50/60Hz / 4VA + Output Load
	(64 VA Max.)
Communication	
Protocol	BACnet MS/TP, or Modbus RTU
	ZigBee Pro (with VCM8000V5000P or on-board ZigBee)
	BACnet/IP and email notification via Wi-Fi (with VCM8002V5031)

Part Number	Description	BACnet MS/TP	RH sensor & control	PIR motion sensor	ZigBee on-board	Fascia & casing
SE8350U0B00	Low voltage fan coil Controller	X	X		No*	Silver
SE8350U5B00	Low voltage fan coil Controller	X	X	X	No*	Silver
SE8350U0B11	Low voltage fan coil Controller	X	X		No*	White
SE8350U5B11	Low voltage fan coil Controller	X	X	X	No*	White
SE8350U5B00P	Low voltage fan coil Controller	X	X	X	X	Silver
SE8350U5B11P	Low voltage fan coil Controller	X	X	X	X	White

*Note: ZigBee Pro plug-in module is available

Digital stand-alone and communicating room controllers

SE8600 | Rooftop unit, heat pump and indoor air quality room controller

Smart energy management has never been easier than with the SE8600 room controllers for Rooftop units, heat pumps and indoor air quality applications. Designed for new construction and retrofit projects, the room controllers dramatically decrease project delivery costs by reducing installation, configuration and commissioning time. No complex software or tools are required to customize functionality in order to meet your applications requirements. The room controllers provide all the advanced features and monitoring functions required by modern building automation systems in a simple compact enclosure. An elegantly simple casing combines with configurable screen colors to match decor. Display your own logo and custom messages on screen to reinforce your brand and provide a more enjoyable occupant experience.

Product highlights

- Elegant style combinations, designed to complement any decor
- Customizable color digital touch screen interface with multi-language support
- Configurable as 1H / 1C, 2H / 2C, 3H / 2C and Modulating (Analog) Heat / 2C for Rooftop units
- CO_2 and fresh air inputs for Indoor Air Quality (IAQ) applications
- Suitable for both commercial and hospitality markets and systems
- Fully programmable control sequences using scripting
- On board configuration interface utility
- Configurable sequence of operations
- Configurable Economizer
- Configurable Scheduler
- Change of value (COV) function for BMS integration
- Humidity sensor with on-board dehumidification strategy
- Optional Passive Infrared (PIR) occupancy sensor
- Advanced occupancy functions for commercial and lodging applications
- Optional wireless door, window, motion and water leak sensors available.

Communication

- BACnet MS/TP or Modbus RTU (user selectable)
- ZigBee Pro (P) opiton for direct MPM integration (On-board or plug-in ZigBee Pro wireless module)
- BACnet/IP and email notification via Wi-Fi (with VCM8002V5031)

Facias

This model can be ordered with silver or white Fascia, and can be customized with many different Fascias. Refer to "Fascias" on page 16 for more information (later in this document).

Accessories

- CO_2 sensor module
- CO_2/temperature/humidity sensor
- ZigBee wireless window, door, motion and water leak sensors

Description	
Dimension	Height: 12cm/4.72in
	Width: 8.6cm/3.38in
	Depth: 2.5cm/1in
Power	
Voltage	28 Vdc or 20 - 28 Vac
	50/60Hz / 4VA + Output Load
	(64 VA Max.)
Communication	
Protocol	BACnet MS/TP, or Modbus RTU
	ZigBee Pro (with VCM8000V5000P or on-board ZigBee)
	BACnet/IP and email notification via Wi-Fi (with VCM8002V5031)

Part Number	Description	BACnet MS/TP	RH sensor & control	PIR motion sensor	ZigBee Pro on-board	Fascia & casing
SE8650U0B00	RTU, heat pump & IAQ Controller	X	X		No*	Silver
SE8650U5B00	RTU, heat pump & IAQ Controller	X	X	X	No*	Silver
SE8650U0B11	RTU, heat pump & IAQ Controller	X	X		No*	White
SE8650U5B11	RTU, heat pump & IAQ Controller	X	X	X	No*	White
SE8650U5B00P	RTU, heat pump & IAQ Controller	X	X	X	X	Silver
SE8650U5B11P	RTU, heat pump & IAQ Controller	X	X	X	X	White

*Note: ZigBee Pro plug-in module is available

Wireless accessories and specifications
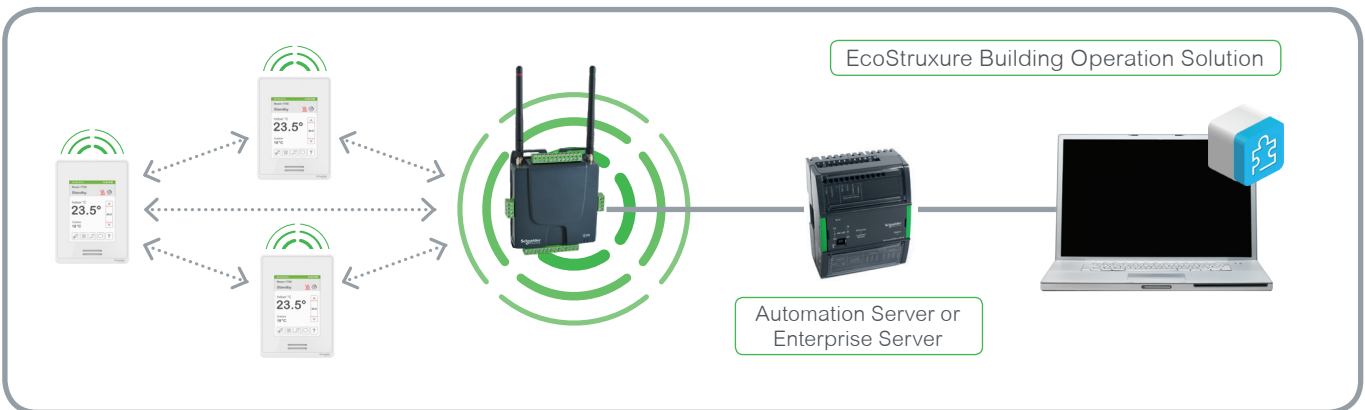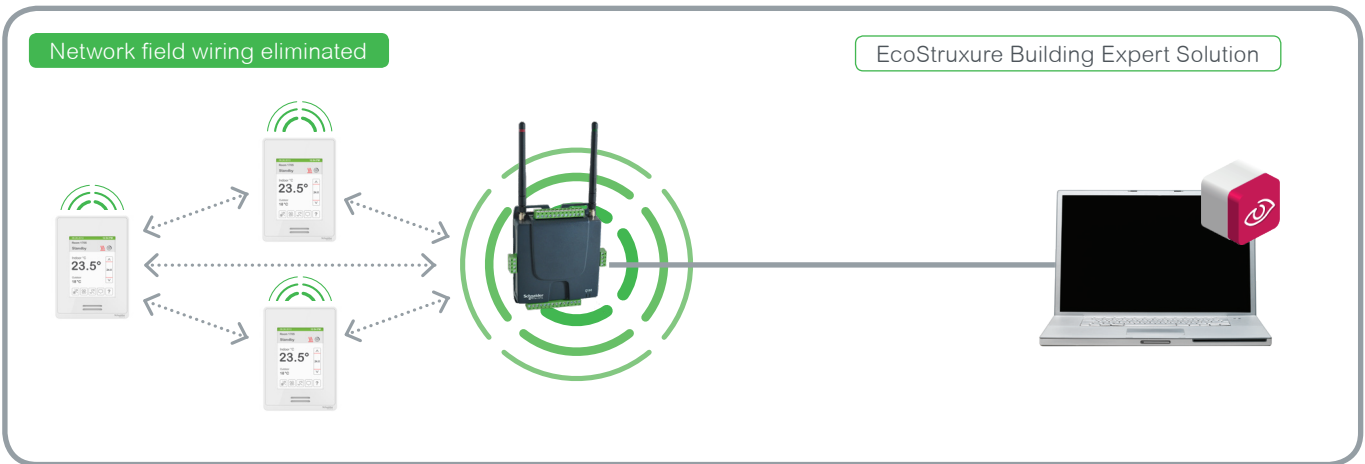
BMS wireless integration

The wireless versions of the SE8000 room controllers provide a simple yet powerful solution which targets such retrofit installations where running new communication wiring is cost prohibitive. The wireless room controllers can dramatically reduce project installation costs by re-using the existing control wiring already in place between older electronic thermostats and the terminal equipment. No new network wires are required since the controllers rely on a fully integrated ZigBee wireless mesh network infrastructure. Connecting wireless SE8000 room controller devices into an integrated BMS network is made easy with two integration methods, either via a gateway or a wireless serial adapter.

EcoStruxure Building Expert Solution

Designed for small and medium commercial buildings, EcoStruxure™ Building Expert Solution integrates room controllers using Managers (MPM-GW, MPM-UN, MPM-VA), and provides remote management and supervision of the system through EcoStruxure™ Building Expert, a Web iBMS hosted directly by the MPM. For more information, visit https://www.schneider-electric.com/en/work/campaign/innovation/overview.jsp.
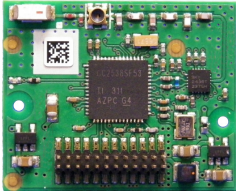
Part Number	Description
MPM-GW, MPM-UN, MPM-VA	Managers (MPM) from the EcoStruxure Building Expert Solution line of products

Network field wiring eliminated

EcoStruxure Building Expert Solution

EcoStruxure Building Operation Solution

Automation Server or Enterprise Server

*The MPM models correspond to room controllers using ZigBee Pro (P) communications only.

Communication and sensors

SE8000 room controllers can be adapted to communicate via one of three VCM modules: Wireless ZigBee Pro extended profile, CO_2 detection sensor, or Wi-Fi extended profile. This allows the SE8000 room controllers to pair with a variety of wireless sensors and switches for more precise control of HVAC systems in response to occupancy, as well as to communicate wirelessly for integration with BMS and networks.

Part Number	Description	Compatibility
VCM8000V5045P	Wireless ZigBee Pro communication card	SE8000 room controllers
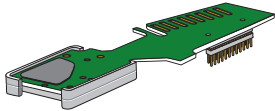
Part Number	Description	Compatibility
VCM8001V5045	CO_2 sensor module	SE8000 room controllers

Part Number	Description	Compatibility
VCM8002V5031	Wi-Fi module	SE8000 room controllers

Part Number	Description	Compatibility
SED-CO2-G-5045	Wireless CO_2 sensor with room temperature and humidity	SE8000 room controllers
SED-TRH-G-5045	Wireless sensor with room temperature and humidity	SE8000 room controllers

Part Number	Description	Compatibility
SED-WMS-P-5045	Wireless wall mounted motion sensor	SE8000 room controllers

Part Number	Description	Compatibility
SED-MTH-G-5045	Motion/Temperature/Humidity Sensor	SE8000 room controllers

Part Number	Description	Compatibility
SED-WDC-G-5045	Window/Door Sensor	SE8000 room controllers

Part Number	Description	Compatibility
SED-WLS-G-5045	Water Leakage Sensor	SE8000 room controllers

Fascias

The Fascias for the SE8600 and SE8300 Series room controllers enable the customization of the exterior appearance of the room controllers to match and blend with any decor. The default Fascia that comes with SE8600 and SE8300 Series room controllers can be replaced with another snap-on Fascia.

FAS - 00	FAS - 01	FAS - 03	FAS - 05	FAS - 06
Silver	White	Glossy translucent white	Light tan wood	Dark brown wood

FAS - 07	FAS - 10	FAS - 11	FAS - 12
Dark black wood	Brushed steel finish	Metallic bronze	High gloss black
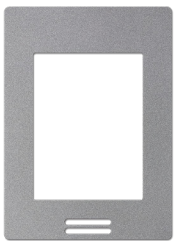
Part Number	Description
FAS-00	Silver
FAS-01	White
FAS-03	Glossy translucent white
FAS-05	Light tan wood
FAS-06	Dark brown wood
FAS-07	Dark black wood
FAS-10	Brushed steel finish
FAS-11	Metallic bronze
FAS-12	High gloss black

Some Fascias may not be available in all markets. Verify Fascia availability in your area.

SE7000 Series Room Controllers

Digital stand-alone and communicating room controllers

The SE7000 series offers a variety of application-specific products to increase the comfort of building occupants while reducing energy costs and consumption and accelerating return on investment. These digital controllers give users easy-to-install, thermostat-like functionality that can sense occupancy and adjust set-point or fan speed control. The SE7000 room controllers can be easily integrated into most Building Management Systems (BMS).

SE7200 Series	SE7300 and SER7300 Series	SE7600 Series
> Zoning, heating/cooling	**> Fan coil, three-speed fan**	**> Rooftop or heat pump**
• Reheat control	• Low-voltage, line-voltage and mixed-voltage fan coil unit control	• Economizer option
• Induction units		• Humidification/dehumidification heat pumps
• Chilled beam	• Multiple fan speed, heating and cooling stages configurations	• Rooftop, 3 heat/2 cool
• Under floor heating	• Humidity control options	• Water source with dehumidification, 1 heat/2 cool
• Perimeter radiant heat	• Relay pack accessories for line-voltage and mixed-voltage applications	
• Pressure dependent VAV	**Zone control**	
	• Fin-tube radiators	
	• Cabinet heaters	
	• Radiant panel heaters	
	• Electric re-heat zones	
	• Terminal reheat	

Digital stand-alone and communicating room controllers

SE7200 | Communicating and network-ready Variable Air Volume, Pressure Dependent (VAV-PD) zone controllers

Smart energy management has never been easier than with the SE7200 series. Designed for new construction or retrofit projects, the controllers dramatically decrease total costs by reducing installation time, configuration and commissioning time. The SE7200 series provides the advanced features and monitoring functions required by modern building automation systems without the use of software and commissioning tools. This application is known as Variable Air Volume - Pressure Dependent (VAV-PD).

Part Number	Description	Output	PIR Cover	Communication
SE7200C5045	Zone Controller Net Ready Floating Output - VAV PD	Floating or on/off	No	Stand-alone (network ready)
SE7200C5045B	Zone Controller BACnet Floating Output - VAV PD	Floating or on/off	No	BACnet
SE7200F5045	Zone Controller Net Ready Analog Output - VAV PD	0 - 10 Vdc	No	Stand-alone (network ready)
SE7200F5045B	Zone Controller BACnet Analog Output - VAV PD	0 - 10 Vdc	No	BACnet

SE7300 | Low voltage communicating and network-ready fan coil controllers

The SE7300 series provides the advanced features and monitoring functions required by modern building automation systems without the use of software and commissioning tools. The SE7300 is a low voltage fan coil terminal equipment controller suitable for commercial and hospitality markets. It can also be used as a zone controller or mixed voltage solution.

Commercial interface (local override)

Part Number	Description	Humidity	Output	PIR Cover	Communication
SE7350C5045	Fan Coil Unit Control with Humidification Control Net Ready Floating Output Communication Module	Yes	Floating or on/off	No	Stand-alone (network ready)
SE7350C5045B	Fan Coil Unit Control with Humidification Control BACnet Floating Output Communication Module	Yes	Floating or on/off	No	BACnet
SE7350F5045	Fan Coil Unit Control with Humidification Control Net Ready Analog Output Communication Module	Yes	0 - 10 Vdc	No	Stand-alone (network ready)
SE7350F5045B	Fan Coil Unit Control with Humidification Control BACnet Analog Output Communication Module	Yes	0 - 10 Vdc	No	BACnet

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

Part Number	Description	Humidity	Output	PIR Cover	Communication
SE7355C5045	Fan Coil Unit Control with Humidification Control Net Ready Floating Output Hotel	Yes	Floating or on/off	No	Stand-alone (network ready)
SE7355C5045B	Fan Coil Unit Control with Humidification Control BACnet Floating Output Hotel	Yes	Floating or on/off	No	BACnet
SE7355F5045	Fan Coil Unit Control with Humidification Control Net Ready Analog Output Hotel	Yes	0 - 10 Vdc	No	Stand-alone (network ready)
SE7355F5045B	Fan Coil Unit Control with Humidification Control BACnet Analog Output Hotel	Yes	0 - 10 Vdc	No	BACnet

SE7300-ECM | ECM fan coil controllers

More and more engineers are commonly specifying fan coil units that function with electronically commutated motors, which offer better energy efficiency and reduced operating costs. The SE7300 ECM fan coil Controller allows you to capitalise on this additional energy savings by optimising fan control sequences of electronically commutated motors. The Controller is optimised to offer full proportional operation versus the traditional three-speed tap operation. This wall-mounted Controller features an easy-to-read digital display and built-in commissioning and configuration utility, temperature sensor and optional humidity and passive infrared occupancy sensor (PIR) cover.

Commercial interface (local override)

Part Number	Description	PIR Cover	Communication
SE7300F5045B-ECM	ECM Fan Coil Unit Control BACnet Analog Output Communication Module	No	BACnet

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

Part Number	Description	PIR Cover	Communication
SE7305F5045B-ECM	ECM Fan Coil Unit Control BACnet Analog Output Hotel	No	BACnet

SER7300 | Line-voltage fan coil terminal equipment controller with relay packs

The SER7300 fan coil unit solution requires installation of only two components, the SER7300 terminal equipment controller and the VC3000 relay pack (refer to "Relay Packs" on page 38 for more information). This allows reuse of existing line-voltage wiring between the fan coil unit and temperature controller, thereby reducing overall costs, labor, and installation time for both retrofit and new construction control projects.

Commercial interface (local override)

Part Number	Description	Humidity	PIR Cover	Communication
SER7350A5045	Fan Coil Unit Control with Humidification Control Net Ready Communication Module	Yes	No	Stand-alone (network ready)
SER7350A5045B	Fan Coil Unit Control with Humidification Control BACnet Communication Module	Yes	No	BACnet

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

Part Number	Description	Humidity	PIR Cover	Communication
SER7355A5045	Fan Coil Unit Control with Humidification Control Net Ready Hotel	Yes	No	Stand-alone (network ready)
SER7355A5045B	Fan Coil Unit Control with Humidification Control BACnet Hotel	Yes	No	BACnet

Check in to comfort.
Check out the savings.

Hotel guest comfort meets energy savings with our Series room controllers

RoomTemp
22.0 °C

SE7600 | Communicating and network-ready Rooftop controllers

Primarily designed for use in small to mid-sized commercial building applications, SE7600 Series room controllers can be installed in any building using a standard Rooftop or heat pump unit with a requirement for advanced fresh air control. Capable of controlling economiser-free cooling and demand-based ventilation strategies, the SE7600 Series provides fresh air measurement input right out of the box.

Part Number	Description	Scheduling	Economizer	Heat/Cool Stages	Humidity	PIR Cover	Communication
SE7652B5045	Rooftop Local Scheduling / Programmable Controller 2x Heat / 2x Cool Net Ready	Yes	No	2H/2C	No	No	Stand-alone (network ready)
SE7652B5045B	Rooftop Local Scheduling / Programmable Controller 2x Heat / 2x Cool BACnet	Yes	No	2H/2C	No	No	BACnet
SE7656B5045	Rooftop Local Scheduling / Programmable Controller + ECO Net Ready	Yes	Yes	2H/2C	No	No	Stand-alone (network ready)
SE7656B5045B	Rooftop Local Scheduling / Programmable Controller + ECO BACnet	Yes	Yes	2H/2C	No	No	BACnet
SE7657B5045	Rooftop Local Scheduling / Programmable Controller Net Ready + Humidification / Dehumidification Control	Yes	No	2H/2C	Yes	No	Stand-alone (network ready)
SE7657B5045B	Rooftop Local Scheduling / Programmable Controller BACnet + Humidification / Dehumidification Control	Yes	No	2H/2C	Yes	No	BACnet

Schneider Electric Room Controllers provide comfort and energy savings using their native application-specific control sequences, PID algorithms, occupancy detection and schedule management.
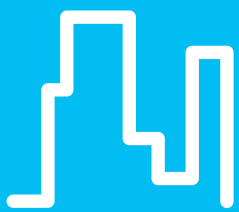
Building + Efficient control = Green energy

Digital stand-alone and communicating room controllers

SE7656E | Communicating and network-ready Indoor air quality controllers

Indoor air quality is increasingly becoming a major concern to businesses, building managers, tenants, and employees because of its direct impact on the comfort, well-being, and productivity of the building's occupants. The SE7656E indoor air quality Controller, along with a CO_2 sensor, is a cost-effective solution capable of controlling economiser-free cooling and demand-based ventilation strategies, while providing a fresh air measurement input. When connected to a building automation system, the Controller can monitor and verify the CO_2 and fresh air levels, ensuring optimal air quality and energy efficiency.

Part Number	Description	Scheduling	Heat/Cool Stages	PIR Cover	Communication
SE7656E5045	Indoor Air Quality Local Scheduling / Programmable Controller 2x Heat / 2x Cool + ECO Net Ready	Yes	2H/2C	No	Stand-alone (network ready)
SE7656E5045B	Indoor Air Quality Local Scheduling / Programmable Controller 2x Heat / 2x Cool + ECO BACnet	Yes	2H/2C	No	BACnet

SE7652F | Communicating and network-ready Rooftop controllers for modulating heat

The new SE7652F Rooftop terminal equipment Controller with modulating heat can make your building more comfortable while still meeting the ventilation codes for minimum building fresh air requirements. The easy-to-install SE7652F includes modulating heat functionality, which allows the addition of an extra supply air temperature control loop to better control and condition the supply air levels for a more comfortable occupant environment.

Part Number	Description	Scheduling	Heat/Cool Stages	PIR Cover	Communication
SE7652F5045	Modulating Heat Application Local Scheduling / Programmable Controller 1x Heat / 2x Cool Net Ready	Yes	1H (analogue)/2C	No	Stand-alone (network ready)
SE7652F5045B	Modulating Heat Application Local Scheduling / Programmable Controller 1x Heat / 2x Cool BACnet	Yes	1H (analogue)/2C	No	BACnet

SE7652H | Communicating and network-ready Heat pump controllers

Primarily designed for use in small to mid-sized commercial building applications, SE7600 Series room controllers can be installed in any building using a standard heat pump unit with a requirement for advanced fresh air control. Capable of controlling economiser-free cooling and demand-based ventilation strategies, the SE7600 Series provides fresh air measurement input right out of the box.

Part Number	Description	Scheduling	Heat/Cool Stages	PIR Cover	Communication
SE7652H5045	Heat Pump Local Scheduling / Programmable Controller 3x Heat / 2x Cool Net Ready	Yes	3H/2C	No	Stand-alone (network ready)
SE7652H5045B	Heat Pump Local Scheduling / Programmable Controller 3x Heat / 2x Cool BACnet	Yes	3H/2C	No	BACnet

SE7652W | Water source heat pump controllers

The new SE7652W water source heat pump Controller (with dedicated dehumidification sequences) provides exceptional control of water source heat pumps for commercial buildings. Common indoor air quality issues such as mold, mildew, condensation, poor occupant comfort, and overall building health can be effectively resolved in an energy-efficient manner. Simple to install and commission, this wall-mounted device monitors water temperature, as well as other points, offering added value without the additional costs related to more complex systems.

Part Number	Description	Scheduling	Heat/Cool Stages	PIR Cover	Communication
SE7652W5045	Water Source Heat Pump Local Scheduling / Programmable Controller 3x Heat / 2x Cool Net Ready	Yes	3H/2C	No	Stand-alone (network ready)
SE7652W5045B	Water Source Heat Pump Local Scheduling / Programmable Controller 3x Heat / 2x Cool BACnet	Yes	3H/2C	No	BACnet

Digital stand-alone and communicating room controllers

SEZ7000 | Commercial zoning systems Variable Volume and Temperature (VVT)

The SEZ commercial zoning system has been specifically designed to bring a simple scalable solution to mid-market commercial applications without the cost associated with a typical DDC zoning system. Models include Rooftop and heat pump units controlling analogue heat, CO_2 levels, and indoor air quality. Zoning controllers that provide floating and analogue damper control are also available. A single central Controller unit can support up to 32 individual zone controllers.

All zoning system controllers can be fitted with an on-board passive infrared (PIR) occupancy sensor cover that allows for advanced occupancy strategies, enabling greater energy savings to zones during scheduled events when no occupants are present.

Commercial zoning system - Zone controllers

Part Number	Description	Output	PIR Cover	Communication
SEZ7260C5045B	Zone System Control BACnet 2x Floating - Variable Volume & Temperature (VVT) Zone	Floating or on/off	No	BACnet
SEZ7260C5045W	Zone System Control ZigBee Wireless 2x Floating - Variable Volume & Temperature (VVT) Zone	Floating or on/off	No	Wireless
SEZ7260F5045B	Zone System Control BACnet 2x Analog - Variable Volume & Temperature (VVT) Zone	0 - 10 Vdc	No	BACnet
SEZ7260F5045W	Zone System Control ZigBee Wireless 2x Analog - Variable Volume & Temperature (VVT) Zone	0 - 10 Vdc	No	Wireless

Commercial zoning system - Rooftop master controllers

Part Number	Description	Heat/Cool Stages	IAQ	Econom.	Mod. Heat	Comm.
SEZ7656E1045B	Zone System Control BACnet 2x Heat / 2x Cool Indoor Air Quality - Variable Volume & Temperature (VVT) Master	2H/2C	Yes	Yes	No	BACnet
SEZ7656E1045W	Zone System Control ZigBee Wireless 2x Heat / 2x Cool Indoor Air Quality - Variable Volume & Temperature (VVT) Master	2H/2C	Yes	Yes	No	Wireless
SEZ7656F1045B	Zone System Control BACnet 1Heat / 2Cool Modulating Heat Application - Variable Volume & Temperature (VVT) Master	1H/2C	No	No	Yes	BACnet
SEZ7656F1045W	Zone System Control ZigBee Wireless 1x Heat / 2x Cool Modulating Heat Application - Variable Volume & Temperature (VVT) Master	1H/2C	No	No	Yes	Wireless
SEZ7656R1045B	Zone System Control BACnet 2x Heat / 2x Cool Rooftop - Variable Volume & Temperature (VVT) Master	2H/2C	No	No	No	BACnet
SEZ7656R1045W	Zone System Control ZigBee Wireless 2x Heat / 2x Cool Rooftop - Variable Volume & Temperature (VVT) Master	2H/2C	No	No	No	Wireless

Commercial zoning system - Heat pump controllers

Part Number	Description	Communication
SEZ7656H1045B	Zone System Control BACnet Heat Pump - Variable Volume & Temperature (VVT) Master	BACnet
SEZ7656H1045W	Zone System Control ZigBee Wireless Heat Pump - Variable Volume & Temperature (VVT) Master	Wireless

Digital stand-alone and communicating room controllers

VH7200 | Humidistats

Schneider Electric humidistats offer exceptional control of both humidification and dehumidification equipment found in typical commercial buildings. Models with advanced built-in functions such as a modulating high limit and outdoor temperature humidity setpoint reset are also available.

All models are available in BACnet® MS/TP or stand-alone "Network Ready" versions. All models contain a binary input, which can be set by the user to monitor an electrode humidifier canister service status or may be used as a general purpose service indicator.

The VH7200 humidity controller family is specifically designed for control of humidification and dehumidification equipment such as steam header direct injection, desiccant wheel, or stand-alone humidification / dehumidification equipment. The product features a complete embedded humidity control solution with an intuitive backlit LCD display that walks the installer through the configuration steps, making the process extremely simple. Accurate relative humidity control is achieved due to the product's unique PI time proportional control algorithm, which virtually eliminates humidity offset associated with traditional, differential-based humidity controllers.

Part Number	Application	Humidification Output	Dehumidifica Output
VH7200A1000	Model with Outdoor Reset only	On/Off 24 Vac	On-Off 24 Vac
VH7270F1000	Model with Outdoor Reset & Proportional High Limit	0-10 Vdc	On-Off 24 Vac
VH7270K1000	Model with Outdoor Reset & Proportional High Limit	0-10 Vdc & On/Off 24 Vac	On-Off 24 Vac

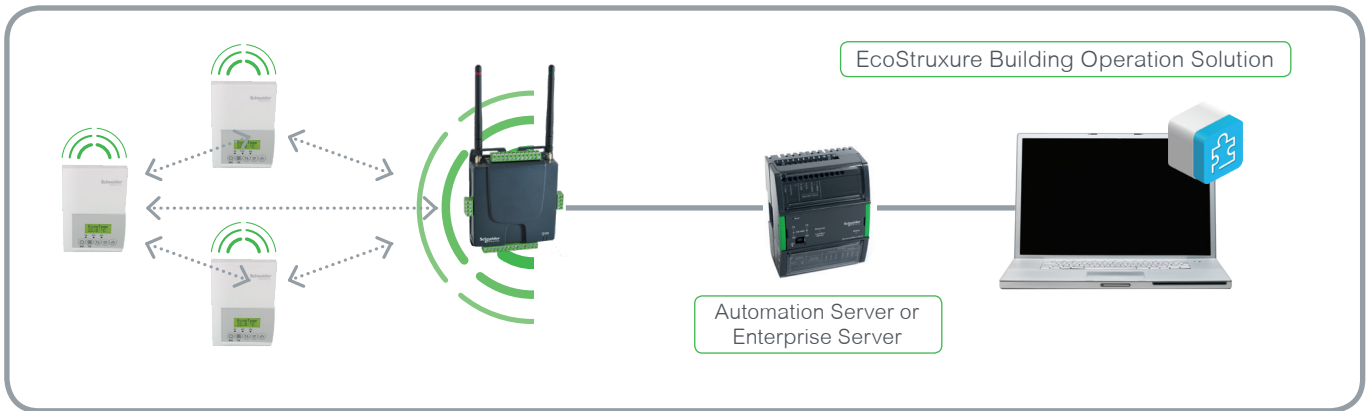# Wireless accessories and specifications

BMS wireless integration

The wireless versions of the SE7000 provide a simple yet powerful solution which targets such retrofit installations where running new communication wiring is cost prohibitive. The wireless room controllers can dramatically reduce project installation costs by re-using the existing control wiring already in place between older electronic thermostats and the terminal equipment. No new network wires are required since the controllers rely on a fully integrated ZigBee wireless mesh network infrastructure. Connecting wireless SE7000 series devices into an iBMS network is made easy with two integration methods, either via a gateway.

EcoStruxure Building Expert Solution

Designed for small and medium commercial buildings, EcoStruxure™ Building Expert Solution integrates room controllers using Managers (MPM-GW, MPM-UN, MPM-VA), and provides remote management and supervision of the system through EcoStruxure™ Building Expert, a Web iBMS hosted directly by the MPM. For more information, visit https://www.schneider-electric.com/en/work/campaign/innovation/overview.jsp.

Part Number	Description
MPM-GW, MPM-UN, MPM-VA	Managers (MPM) from the EcoStruxure Building Expert Solution line of products

Network field wiring eliminated

EcoStruxure Building Expert Solution

EcoStruxure Building Operation Solution

Automation Server or Enterprise Server

* The MPM models correspond to room controllers using ZigBee Pro (P) communications only.

From wired to wireless systems, remote sensors to communication boards and covers, SE7000 Series room controllers can be tailored for any application-specific needs.

Covers

SE7000 Series room controllers are compatible with passive infrared cover accessories. room controllers equipped with a passive infrared cover provide advanced active occupancy logic, which will automatically switch occupancy levels from 'occupied' to 'stand-by' and 'unoccupied' as appropriate. This built-in intelligence provides energy savings during occupied hours without sacrificing occupant comfort.

Part Number	Description	Compatibility
COV-BC-5031	Kit cover blind	SE7000 models
COV-FCU-C-5031	Cover for commercial room controllers	SE7300 models
COV-FCU-L-5031	Cover for hotel room controllers	SE7300 models
COV-PIR-FCU-C-5031	PIR cover for commercial room controllers	SE7300 models
COV-PIR-FCU-L-5031	PIR cover for hotel room controllers	SE7300 models
COV-RTUHP-5031	Cover for room controllers	SE7600 models
COV-PIR-RTUHP-5031	PIR cover for room controllers	SE7600 models
COV-ZN-5031	Cover for room controllers	SE7200 models
COV-PIR-ZN-5031	PIR cover for room controllers	SE7200 models

Communication adapters

SE7000 Series room controllers are network ready, designed to accept the addition of communication. With a network card available for field upgrade, your system can be networked to an integrated building management system for the most advanced control and functionality.

In the Part Number, please note that:
- W: Legacy ZigBee for replacement.
- P: ZigBee Pro, compatible with all room controllers.
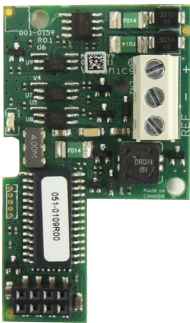
Part Number	Description	Compatibility
VCM7000V5000W	Wireless Communication Card - 7000 - ZigBee Pro extended profile retrofit communication module	7000 Series Room Controllers (72, 73, R73, and 76)
VCM7000V5000P	Wireless Communication Card - 7000 - ZigBee proprietary wireless retrofit communication module	7000 Series Room Controllers (72, 73, R73, 76xx(B,H) and 76x7(B))
VCM7260Z5000B	BACnet replacement communication module	7260(C,F)
VCM7260Z5000W	ZigBee replacement communication module	7260(C,F)
VCM7300T5000B	Communication Module BACnet 73 with Relay Module - BACnet retrofit communication module	R73xx(A)
VCM7300T5000E	Communication Module LON 73 with Relay Module - Echelon retrofit communication module	R73xx(A)
VCM7300V5000B	BACnet Communication Card - 7200/7300 - BACnet retrofit communication module	7200(C,F) and 73xx(C,F)
VCM7300V5000E	LON Communication Card - 7200/7300 - Echelon retrofit communication module	7200(C,F) and 73xx(C,F)
VCM7600W5000B	BACnet retrofit communication module	76xx(W,E,F)
VCM7600W5000W	ZigBee proprietary wireless retrofit communication module	76xx(W,E,F)
VCM7600V5000B	BACnet Communication Card - BACnet retrofit communication module	76xx(B,H)
VCM7600V5000E	LON Communication Card - Echelon retrofit communication module	76xx(B,H)
VCM7607V5000B	BACnet Communication Card - 76X7 -BACnet retrofit communication module	76x7(B)
VCM7607V5000E	LON Communication Card - Echelon retrofit communication module	76x7(B)
VCM7656Z5000B	BACnet replacement communication module	Z7656(E,F,R,H)
VCM7656Z5000W	ZigBee replacement communication module	Z7656(E,F,R,H)
VWG-APP-1031	Wireless Communication Card	JACE 200/600/700

The VCM7607V5045E (terminal equipment Controller Echelon LonTalk communication adapter) is not available for: SE7652W, SE7652F Controller models.

Remote sensors

Our discreet line of wall mount room sensors is used for advanced room temperature sensing. Each model is equipped with three thermistors and two dip switches for various averaging combinations, with a temporary override key and an occupancy LED available in the advanced model.

Duct-Mounted Temperature Sensors

Part Number	Description
S1010D1000	Duct-mounted changeover sensor 10K - Change Over Duct Sensing - Mounting: Through hole in duct, with eyelet
S1010E1000	Capsule type temperature sensor - Remote sensing easy to dissimulate for indoor and outdoor use - Water temperature sensing strapped on pipe or in an immersion well

Duct & Outside Air Sensors

Part Number	Description
S2000D1000	Duct supply air sensor with junction box - Remote return air temperature sensing with the sensor mounted on the return air duct. - Outside air temperature sensing with the sensor installed in the fresh air plenum. - Supply air temperature sensor
S2020E1000	Outdoor air supply sensor - Outside air temperature sensing with the sensor installed directly exposed to the elements. - Sensor uses a water resistant NEMA 4 PVC enclosure for outdoor applications

| Part Number	Description
S3010W1031	Room sensor - Remote room sensing - 3 thermistors with 2 dip switches are provided with each sensor for various averaging combinations
S3020W1031	Room sensor with temporary override key and occupancy LED - Remote room sensing with override key and occupancy LED - 3 thermistors with 2 dip switches are provided with each sensor for various averaging combinations

Part Number	Description
022-0003	Sensor Plenum 4K7
022-0114	Sensor changeover 47K

Electronic heat control

Schneider Electric turns up the heat when is comes to electric heat controls. Choose between solid state relays, solid state relays with integrated heat sink, SCR power controls with various choice of analog input signals, electronic relays for electric baseboard heaters and Vernier low voltage step controllers.

R810

The R810 power switches have been designed for safe and reliable control of electric heat loads. This broad line of value priced products is used by most major North American duct heater manufacturers. The appropriate PWM or pulsed input signal can be provided by a DDC panel or a VT7225 thermostat.
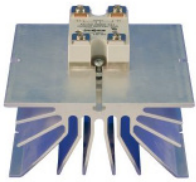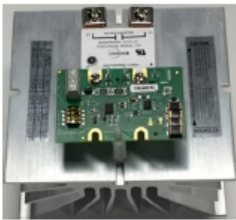
Part Number	Voltage	Phase	Current	Heatsink Length	Weight (lbs)
R810-621-REV2	600 Volts	1	25 Amp	3.0 " (76mm)	1.80
R810-623-REV2	600 Volts	3	25 Amp	6.5 " (165mm)	2.65
R810-641-REV2	600 Volts	1	45 Amp	6.5 " (165mm)	2.40
R810-643-REV2	600 Volts	3	45 Amp	10.0 " (254mm)	3.70
R810-671-REV2	600 Volts	1	75 Amp	10.0 " (254mm)	3.50

R820

The R820 series SCR power controls are designed for cost effective, precise modulation of electric loads for most electric heating applications. (Applicable on resistive loads only)

The R820 series consists of SCR's power controls, c/w factory assembled heatsink for surface or in-panel mounting.

Part Number	Voltage	Phase	Current
R820-621-REV2	24 - 600 Volts	1	25 Amp
R820-623-REV2	24 - 600 Volts	3	25 Amp
R820-641-REV2	24 - 600 Volts	1	45 Amp
R820-643-REV2	24 - 600 Volts	3	45 Amp
R820-671-REV2	24 - 600 Volts	1	75 Amp
R820-PCB-A01	24 Vac Electronic PCB	1 or 3	- - -

R850V

The R850V series step controller is designed for cost effective, precise modulation of multi-stage control application. A common application is a multi step electric duct heater.

An integrated vernier control output will give a precise and full modulation of the load from 0 to 100% of the total capacity.

Part Number	Description
R850V-8	8-stage unit

If more than 8 stage are required, the R850V-8 can be used as a master unit with another R850V as a slave unit. Adding another unit can bring the total step number up to 16.

R851B

The R851B series step controller is designed for cost effective, precise modulation of multi-stage control application. A common application is a multi step electric boiler.

An integrated vernier control output will give a precise and full modulation of the load from 0 to 100% of the total capacity.

Part Number	Description
R851B-8	8-stage unit

If more than 8 stages are required, the R851B-8 can be used as a master unit with another R851B as a slave unit. Adding another unit can bring the total step number up to 16.

R851V

The R851V series step controller is designed for cost effective, precise modulation of multi-stage control application. A common application is a multi step electric duct heater.

An integrated vernier control output will give a precise and full modulation of the load from 0 to 100% of the total capacity.

Part Number	Description
R851V-8	8-stage unit

If more than 8 stages are required, the R851V-8 can be used as a master unit with another R851V as a slave unit. Adding another unit can bring the total step number up to 16.

VT7225 | Modulating electric heat controllers

The VT7225 series controllers are microcomputer-based, proportional and integral (PI) devices with one analog 0 to 10 Vdc output, one 8 Vdc and one 24 Vac proportioning pulsed output. The analog 0 to 10 Vdc modulating output can control the room or supply temperature by modulating directly a 0 to 10 Vdc SCR power controller. The Vdc and Vac pulsed outputs can control the room or supply temperature by modulating directly 4-32 Vdc triggered solid state relays (SSR's) using a time proportioning control algorithm on a 1 second time cycle.

Part Number	Description	Output	PIR Cover	Communication
VT7225	Room Controller Heater Analog and PWM Output. Replaces: C1025C-1000, C1025F-1000 & T920.	0-10 Vdc or PWM	No	Stand-alone (network ready)

Specifications

	SE7200 and VT7225	SE7300	SE7600
Agency approval	CE, C-Tick, UL	CE, C-Tick, UL	CE, C-Tick, UL
Weight	0.34 kg (0.75 lb)	0.34 kg (0.75 lb)	0.34 kg (0.75 lb)
Dimensions (H x W x D)			
Non-PIR model	125 mm x 87 mm x 30 mm (4.92" x 3.41" x 1.16")	125 mm x 87 mm x 30 mm (4.92" x 3.41" x 1.16")	125 mm x 87 mm x 30 mm (4.92" x 3.41" x 1.16")
PIR model	125 mm x 87 mm x 38 mm (4.92" x 3.41" x 1.47")	125 mm x 87 mm x 38 mm (4.92" x 3.41" x 1.47")	125 mm x 87 mm x 38 mm (4.92" x 3.41" x 1.47")
Power supply	10 - 30 Vac (50/60 Hz)	10 - 30 Vac (50/60 Hz)	10 - 30 Vac (50/60 Hz)
Outputs			
Analog	0 - 10 Vdc	0 - 10 Vdc	0 - 10 Vdc
Triac	30 Vac, 1 amp	30 Vac, 1 amp	30 Vac, 1 amp
Operating conditions	0 - 50 °C (32 - 122 °F) 0 - 95% RH (Non-condensing)	0 - 50 °C (32 - 122 °F) 0 - 95% RH (Non-condensing)	0 - 50 °C (32 - 122 °F) 0 - 95% RH (Non-condensing)
Temperature sensor type	10K Type 2	10K Type 2	10K Type 2
Temperature sensor accuracy	± 0.5 °C (± 0.9 °F) @ 21 °C (70 °F)	± 0.5 °C (± 0.9 °F) @ 21 °C (70 °F)	± 0.5 °C (± 0.9 °F) @ 21 °C (70 °F)
Humidity sensor type*	N/A	Single point calibrated bulk polymer type sensor	Single point calibrated bulk polymer type sensor
Humidity sensor read range*	N/A	10 - 90% RH (Non-condensing)	10 - 90% RH (Non-condensing)
Humidity sensor accuracy*	N/A	± 5% @ 20 - 80% RH (Non-condensing)	± 5% @ 20 - 80% RH (Non-condensing)
Dehumidification setpoint range*	N/A	30 to 95% RH	30 to 95% RH
Economizer accuracy*	N/A	N/A	± 3% typical

* Available with selected models.

Remote sensor specifications

All sensors

Sensor type	10 K ohm NTC thermistor
Maximum wire length	1,525m (5000ft) for 24 GA wire and up

Room Sensors

Operating conditions	0 °C to 50 °C (32 °F to 122 °F) 0% to 95% RH non-condensing
Storage conditions	-30 °C to 50 °C (-22 °F to 122 °F) 0% to 95% RH non-condensing
Dimensions	125 mm x 86 mm x 29 mm (4.94" x 3.38" x 1.13")
Approximate shipping weight	155 grams (0.34 lbs)
Enclosure material	ABS - FRI [WT1337V] UV stabilised

Duc Sensor

Operating conditions	Up to 85 °C (185 °F) 0% to 95% RH non-condensing
Sensing bulb type	Plastic heatshrink
Wire length	305mm (12")
Probe length and diameter	114mm (4-1/2") and 6mm (1/4")

Duct Sensor

| Operating conditions	-40 °C to 50 °C (-40 °F to 122 °F) 0% to 95% RH non-condensing
Storage conditions	-40 °C to 70 °C (-40 °F to 122 °F) 0% to 95% RH non-condensing
Approximate shipping weight	300 grams (0.7 lbs)
Probe tip plastic type	Fire retarding grade "HB" ABS

Outdoor Sensor

Operating conditions	-40 °C to 50 °C (-40 °F to 122 °F) 0% to 100% RH non-condensing
Storage conditions	-40 °C to 50 °C (-40 °F to 122 °F) 0% to 100% RH non-condensing
Approximate shipping weight	500 grams (1.1 lbs)
Enclosure plastic type	NEMA 4 PVC

Electronic heat control

R810 Power Switching Modules
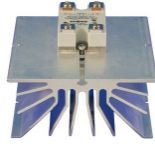
Operating conditions	0 °C to 80 °C (32 °F to 176 °F) 0% to 95% RH non-condensing
Power supply	4-32 Vdc time proportioning signal into 2KΩ resistance

R820 Power Controls

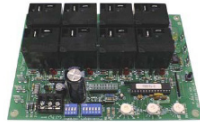| Operating conditions	0 °C to 80 °C (32 °F to 176 °F) 0% to 95% RH non-condensing
Thermostatic protection	Self-resetting. Auto shut off when SCR ambient temp. is above 82°C (180°F)
Power supply	24 Vac -15%, +10% 50/60 Hz; 2 VA Use a Class 1 (properly fused) or Class 2, CSA or UL recognized transformer

R850 Step Controller

Operating conditions	0 °C to 80 °C (32 °F to 176 °F) 0% to 95% RH non-condensing
Relay outputs	Isolated relay 30 Vac @ 1.0 amps. max. per output, up to a maximum of 4.0 amps. total per R850 controller.
Vernier stage	Vdc pulsed: 6 Vdc, 30 mA max. 0 to 10 Vdc 5 mA max.
Input impedance	0 to 10 Vdc into 10 KΩ minimum
Power supply	24 Vac -15%, +10% 50/60 Hz; 4 VA Use a Class 1 (properly fused) or Class 2, CSA or UL recognized transformer for power supply & relay outputs.

R851B Step Controller

Operating conditions	0 °C to 80 °C (32 °F to 176 °F) 0% to 95% RH non-condensing
Relay outputs	Pilot duty: - 24 - 120 Vac – 720 VA - 240 Vac – 690 VA Motor load: - 120 Vac – 1 HP - 240 Vac – 2 HP
Vernier stage	0 to 10 Vdc, 5 mA max.
Input impedance	0 to 10 Vdc into 10 KΩ minimum
Power supply	24 Vac -15%, +10% 50/60 Hz; up to 18 VA Use a Class 1 (properly fused) or Class 2, CSA or UL recognized transformer for power supply & relay outputs.
UL recognized	File # E212649

R851V Step Controller

Operating conditions	0 °C to 80 °C (32 °F to 176 °F) 0% to 95% RH non-condensing
Relay outputs	Pilot duty: - 24 - 120 Vac – 720 VA - 240 Vac – 690 VA Motor load: - 120 Vac – 1 HP - 240 Vac – 2 HP
Vernier stage	0 to 10 Vdc 5 mA max. Vdc pulsed, 6 Vdc, 30 mA max
Input impedance	0 to 10 Vdc into 10 KΩ minimum
Power supply	24 Vac -15%, +10% 50/60 Hz; up to 18 VA Use a Class 1 (properly fused) or Class 2, CSA or UL recognized transformer for power supply & relay outputs.
UL recognized	File # E212649

Humidistats

VH7200 Humidistats

Humidistat power requirements	19-30 Vac 50 or 60 Hz; 2 VA (RC & C) Class 2
Operating conditions	0 °C to 50 °C (32 °F to 122 °F) 0% to 95% R.H. non-condensing
Storage conditions	-30 °C to 50 °C (-22 °F to 122 °F) 0% to 95% R.H. non-condensing
Resolution	Temperature: ± 0.1 °C (± 0.2 °F) Humidity: ± 0.1%
Control accuracy	Humidity: ± 5% RH from 20 to 100% RH at 50 to 90°F (10 to 32°C)
Humidification setpoint range	10% RH to 90% RH
Dehumidification setpoint range	15% RH to 95% RH
Outdoor air temperature range	-40 °C to 50 °C (-40 °F to 122 °F)
Binary inputs	Relay dry contact only across "Scom" and "DI1" terminals
Contact output rating	Each relay output: 30 Vac, 1 Amp. Max. / 30 Vac, 3 Amp. in-rush
Analog output rating	0 t0 10 Vdc into 2KΩ resistance minimum
Wire gauge	18 gauge maximum, 22 gauge recommended
Dimensions	4.94" x 3.38" x 1.13"
Approximate shipping weight	0.75 lb (0.34 kg)

Relay Packs

VC3000 | Relay Pack

A compact and easy to install Relay Pack for line-voltage fan coil units to be used in combination with room controllers. The VC3000 is a Relay Pack for line-voltage fan coil units. The device is used with SER7300 and SER8300 room controllers as a two component retrofit option.

Features

The VC3000 Relay Pack features an on-board universal voltage power supply and line-voltage relays which directly drive fractional horsepower fan motors and valves. This eliminates the need to install and wire costly pilot relays and transformers.

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

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

Description	
Dimension	Height: 12cm/4.72in / Width: 8.6cm/3.38in / Depth: 2.5cm/1in
Power	
Voltage	7.0 Vdc +/- 10% 2.4 watts minimum

Part Number	Details
VC3300E5000	Fan Coil Unit Relay Pack 3 slave fan outputs
VC3400E5000	Transformer Relay Pack 4 relay outputs 1 smart Vdc output 4 inputs
VC3404E5000	Fan Coil Unit Relay Pack 4 relay outputs 1 smart Vdc output 4 inputs
VC3500E5000	Transformer Relay Pack 5 relay outputs 4 inputs
VC3504E5000	Fan Coil Unit Relay Pack 5 relay fan outputs 4 outputs

VC1300 | Mixed Voltage fan-coil package

A compact and easy to install Relay Pack for fan control for Mixed Voltages with 24Vac transformer units to be used in combination with SE7300 and SE8300 room controllers as a two component Mixed Voltage solution.

Mixed Voltage Application

In combination with the SE7300/SE8300 Series room controllers, the VC1300 allows control of a fan-coil requiring Mixed Voltage for the following:

• Line voltage for the 3-speed fan control (120Vac unit)
• Low voltage for valve control
• LED indication of relay status

Description	
Dimension	Height: 5cm/2in / Width: 14cm/5.5in / Depth: 17cm/6.7in
Power	
Voltage	110-130 Vac / 24 Vac
Contacts ratings	Resistive: 7 Amp / 1680 W ; Motor and or compressor: ¼ Hp / 10 LRA / 2.5 FLA approved for 30,000 operations at 240 Vac
24Vac low voltage power output	0.5A, 12 VA max
Outputs	
Number of outputs	3 on/off outputs

Part Number	Description
VC1300E5000	Fan coil relay board 110/130v for Mixed Voltages with 24Vac Transformer

VC2300 | Mixed Voltage fan-coil package

A compact and easy to install Relay Pack for fan control for Mixed Voltages with 24Vac transformer units to be used in combination with SE7300 and SE8300 room controllers as a two component Mixed Voltage solution.

Mixed Voltage Application

In combination with the SE7300/SE8300 Series room controllers, the VC2300 allows control of a fan-coil requiring Mixed Voltage for the following:

• Line voltage for the 3-speed fan control (220/240Vac unit)
• Low voltage for valve control
• LED indication of relay status

Description	
Dimension	Height: 5cm/2in / Width: 14cm/5.5in / Depth: 17cm/6.7in
Power	
Voltage	220-240 Vac / 24 Vac
Contacts ratings	Resistive: 7 Amp / 1680 W ; Motor and or compressor: ¼ Hp / 10 LRA / 2.5 FLA approved for 30,000 operations at 240 Vac
24Vac low voltage power output	0.5A, 12 VA max
Outputs	
Number of outputs	3 on/off outputs

Part Number	Description
VC2300E5000	Fan coil relay board 220/240v for Mixed Voltages with 24Vac Transformer

Energy savings for a healthy bottom line

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

RoomTemp
22.0 °C

Healthcare

Gain full room control of your environment, whether it's a patient room, waiting room, or anywhere within your facility. Our Series room controllers give you the flexibility to customise and configure based on your needs.

Retail

Enhance your system operation and efficiency with the Series room controllers. From a stand-alone device to simplified building management, Schneider Electric room controllers are ideal for your ever-changing location.

Education

Whether it's a large campus with multiple buildings or a single primary school, the room controllers allow for scalability to control a wide variety of environments through occupied and unoccupied periods.

Hotels/lodging

Guest comfort meets energy efficiency with room controllers. The intuitive user interface allows guests to control their own environments while our occupancy sensor and simple programming ensure efficiency.

Commercial buildings

room controllers allow users to save costs and energy while providing a comfortable environment for maximum productivity. The system can be modified on site to match your specific energy conservation needs.

For more information, please visit www.schneider-electric.com

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