# TEC3000 Color Series Wireless, Stand-Alone, and Field-Selectable BACnet® MS/TP or N2 Networked Thermostat

# **Controllers**

Code No. LIT-12013193 Issued February, 2019

### **Product Bulletin**

TEC30xx-1x-000, TEC33xx-1x-000, TEC36xx-1x-000

Refer to the QuickLIT website for the most up-to-date version of this document.

#### Introduction/overview

The TEC3000 Color Series Thermostat Controllers are wireless, stand-alone, and field-selectable BACnet® MS/TP or N2 networked devices that provide on/off, floating, and proportional control of the following:

- local hydronic reheat valves
- pressure-dependent VAV equipment with or without local reheat
- two- or four-pipe fan coils
- · cabinet unit heaters
- other zoning equipment using an on/off, floating, or 0 to 10 VDC proportional control input
- single- or two-stage control of unitary rooftop units (RTUs)
- single- or two-stage control of RTUs with economizers
- single- or two-stage control of heat pumps
- single- or two-stage control of heat pumps with economizers

The wireless and field-selectable BACnet MS/TP or N2 networked thermostat controllers enable remote monitoring and programming through the building automation system, for efficient space temperature control. The wireless thermostat controllers feature a connection to the ZFR Pro wireless network. All models include a USB port configuration that reduces installation time by allowing simple backup and restore features from a USB drive, which enables rapid cloning of configuration between like units. The programming memory of all TEC3000 Series Thermostat Controllers is non-volatile.

Some models have occupancy sensing capability built into the device. These thermostat controllers maximize up to 30% energy savings in high-energy usage commercial buildings, such as schools and hotels, during occupied times by using additional standby setpoints.

Figure 1: TEC3000 Color Series Thermostat Controller shown with and without occupancy sensor in white and black enclosures





A bright, high-definition capacitive touchscreen display provides responsive feedback and improved readability of text and icons. The home screen is configurable to Modern and Classic, and Light and Dark themes.

Models are available in modern black or white highgloss designs with or without the Johnson Controls® logo.

The following fan configurations are supported for fan coil equipment types:

- · single-speed
- multi-speed (two or three discrete speeds)
- variable-speed/EC motors (0 to 10 VDC control)



All models support dehumidification on two-pipe fan coil units with reheat, and four-pipe fan coil units with or without reheat. When no heating is required and mechanical cooling is available, the thermostat controller monitors space humidity and activates dehumidification control as necessary. Heat or reheat is used as required to maintain the space temperature. For optimal dehumidification performance, use a fan coil unit that has a multi-speed or variable-speed fan (VSF).

# **Features and benefits**

Table 1: Features and benefits

Feature	Benefit
Two configurable binary inputs	Provide additional inputs for advanced functions such as remote night setback, service or filter alarms, motion detector, and window status.
Field-Selectable BACnet MS/TP or N2 Networked Communication (TEC36xx-1x-000 Models)	Simplifies the upgrade from N2 networked communication to BACnet MS/TP networked communication without changing hardware.
USB port configuration	Reduces installation time by allowing simple backup and restore features from a USB drive, which enables rapid cloning of configuration between like units.
Programmable in seven languages	Provides English, Spanish, French, German, Italian, Dutch, Portuguese (requires a downloadable language pack)
Backlit full-color liquid crystal display (LCD)	Offers an intuitive color backlit display that makes setup and operation quick and easy. The new display features on all models and offers real-time control status of the environment in easy-to-read, plain text messages with an adjustable backlight that brightens during user interaction.
Configurable touchscreen UI	Allows facility managers to limit the user interaction with the thermostat controller display based on specific energy policies.
Various models available	Offers models in modern black or white high-gloss designs with or without the Johnson Controls logo.
End-of-line switch	Simplifies the layout and installation of communication buses.
Mobile Access Portal (MAP) Gateway compatibility (MAP Release 4.0 or Later)	Allows the user to view equipment and control conditions using mobile devices.
Onboard occupancy sensor (TEC3031-1x-000 and TEC3xx3-1x-000 Models)	Provides energy savings in high-energy usage commercial buildings without additional installation time or cost.
Integral humidity sensor	Monitors space humidity on all models. Activates dehumidification control on two-pipe fan coil units with reheat and four-pipe fan coil units with or without reheat.
Multiple fan configurations for fan coil equipment types	Provide field-selectable single-speed, multi-speed, and variable-speed fan control capabilities.
Full line of remote TE-6300 Series Temperature Sensors (See Table 5)	Support a wide range of remote temperature sensing needs from a single supplier.
Built-in schedule object	Allows all wireless and wired models of thermostat controllers to be scheduled as stand-alone devices; allows wireless and BACnet MS/TP models to be defined and adjusted through the building automation system.
Optimal start	Allows each thermostat controller to anticipate the heating or cooling needs of a space by starting the equipment early enough to reach the setpoint at the beginning of the scheduled occupancy.
Auto-tuned control loops	Reduce commissioning time, eliminate change-of-season recommissioning, and reduce wear and tear of the mechanical devices.
Load shed	Commands a load shed input to offset the heating and cooling setpoints by a fixed amount on networked models. The change rate of the setpoints is adjustable. The load shed feature is in place to help satisfy the California Title 24 requirements that are defined in joint appendix JA5, section JA5.2.4 for demand signal response. The trigger for this event is defined in another controller and passed through the network command.

**IMPORTANT:** The TEC3000 Series Thermostat Controller is intended to provide an input to equipment under normal operating conditions. Where failure or malfunction of the thermostat controller could lead to personal injury or property damage to the controlled equipment or other property, additional precautions must be designed into the control system. Incorporate and maintain other devices, such as supervisory or alarm systems or safety or limit controls, intended to warn of or protect against failure or malfunction of the thermostat controller.

**IMPORTANT**: Le TEC3000 Series Thermostat Controller est destiné à transmettre des données entrantes à un équipement dans des conditions normales de fonctionnement. Lorsqu'une défaillance ou un dysfonctionnement du thermostat controller risque de provoquer des blessures ou d'endommager l'équipement contrôlé ou un autre équipement, la conception du système de contrôle doit intégrer des dispositifs de protection supplémentaires. Veiller dans ce cas à intégrer de façon permanente d'autres dispositifs, tels que des systèmes de supervision ou d'alarme, ou des dispositifs de sécurité ou de limitation, ayant une fonction d'avertissement ou de protection en cas de défaillance ou de dysfonctionnement du thermostat controller.

dimensions, in. (mm)

1-13/32
(36)

1 5-5/8
(143)

2 (120)

3

Figure 2: Thermostat controller shown without occupancy sensor,

Callout	Description
1	Security screw
2	Display
3	USB port

#### Repair information

If the TEC3000 Color Series Thermostat Controller fails to operate within its specifications, replace the unit. For a replacement thermostat controller, contact the nearest Johnson Controls representative.

# **Ordering Information**

Table 2: Wireless thermostat controller models (Part 1 of 2)<sup>1</sup>

Code number	Control output	Occupancy	Dehumidification	Johnson Controls logo	Color
TEC3012-13-000	On/off or floating fan coil and zoning	No	Yes	Yes	Black
TEC3012-14-000	On/off or floating fan coil and zoning	No	Yes	Yes	White
TEC3012-15-000	On/off or floating fan coil and zoning	No	Yes	No	Black
TEC3012-16-000	On/off or floating fan coil and zoning	No	Yes	No	White
TEC3013-13-000	On/off or floating fan coil and zoning	Yes	Yes	Yes	Black
TEC3013-14-000	On/off or floating fan coil and zoning	Yes	Yes	Yes	White
TEC3013-15-000	On/off or floating fan coil and zoning	Yes	Yes	No	Black
TEC3013-16-000	On/off or floating fan coil and zoning	Yes	Yes	No	White
TEC3022-13-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	Yes	Black
TEC3022-14-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	Yes	White
TEC3022-15-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	No	Black
TEC3022-16-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	No	White
TEC3023-13-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	Yes	Black
TEC3023-14-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	Yes	White
TEC3023-15-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	No	Black
TEC3023-16-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	No	White
TEC3030-13-000	Single- or two-stage RTU/ heat pump with economizer	No	No	Yes	Black
TEC3030-14-000	Single- or two-stage RTU/ heat pump with economizer	No	No	Yes	White
TEC3030-15-000	Single- or two-stage RTU/ heat pump with economizer	No	No	No	Black
TEC3030-16-000	Single- or two-stage RTU/ heat pump with economizer	No	No	No	White
TEC3031-13-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	Yes	Black
TEC3031-14-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	Yes	White

Table 2: Wireless thermostat controller models (Part 2 of 2)<sup>1</sup>

Code number	Control output	Occupancy	Dehumidification	Johnson Controls logo	Color
TEC3031-15-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	No	Black
TEC3031-16-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	No	White

<sup>1.</sup> Multiple fan configurations are supported for fan coil equipment types.

Table 3: Stand-alone thermostat controller models (Part 1 of 2)<sup>1</sup>

Code number	Control output	Occupancy	Dehumidification	Johnson Controls logo	Color
TEC3312-13-000	On/off or floating fan coil and zoning	No	Yes	Yes	Black
TEC3312-14-000	On/off or floating fan coil and zoning	No	Yes	Yes	White
TEC3312-15-000	On/off or floating fan coil and zoning	No	Yes	No	Black
TEC3312-16-000	On/off or floating fan coil and zoning	No	Yes	No	White
TEC3313-13-000	On/off or floating fan coil and zoning	Yes	Yes	Yes	Black
TEC3313-14-000	On/off or floating fan coil and zoning	Yes	Yes	Yes	White
TEC3313-15-000	On/off or floating fan coil and zoning	Yes	Yes	No	Black
TEC3313-16-000	On/off or floating fan coil and zoning	Yes	Yes	No	White
TEC3322-13-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	Yes	Black
TEC3322-14-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	Yes	White
TEC3322-15-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	No	Black
TEC3322-16-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	No	White
TEC3323-13-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	Yes	Black
TEC3323-14-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	Yes	White
TEC3323-15-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	No	Black
TEC3323-16-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	No	White
TEC3330-13-000	Single- or two-stage RTU/ heat pump with economizer	No	No	Yes	Black
TEC3330-14-000	Single- or two-stage RTU/ heat pump with economizer	No	No	Yes	White

Table 3: Stand-alone thermostat controller models (Part 2 of 2)<sup>1</sup>

Code number	Control output	Occupancy	Dehumidification	Johnson Controls logo	Color
TEC3330-15-000	Single- or two-stage RTU/ heat pump with economizer	No	No	No	Black
TEC3330-16-000	Single- or two-stage RTU/ heat pump with economizer	No	No	No	White
TEC3331-13-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	Yes	Black
TEC3331-14-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	Yes	White
TEC3331-15-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	No	Black
TEC3331-16-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	No	White

<sup>1.</sup> Multiple fan configurations are supported for fan coil equipment types.

Table 4: Field-selectable BACnet MS/TP or N2 Networked Thermostat Controller models (Part 1 of 2)

Code number	Control output	Occupancy	Dehumidification	Johnson Controls logo	Color
TEC3612-13-000	On/off or floating fan coil and zoning	No	Yes	Yes	Black
TEC3612-14-000	On/off or floating fan coil and zoning	No	Yes	Yes	White
TEC3612-15-000	On/off or floating fan coil and zoning	No	Yes	No	Black
TEC3612-16-000	On/off or floating fan coil and zoning	No	Yes	No	White
TEC3613-13-000	On/off or floating fan coil and zoning	Yes	Yes	Yes	Black
TEC3613-14-000	On/off or floating fan coil and zoning	Yes	Yes	Yes	White
TEC3613-15-000	On/off or floating fan coil and zoning	Yes	Yes	No	Black
TEC3613-16-000	On/off or floating fan coil and zoning	Yes	Yes	No	White
TEC3622-13-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	Yes	Black
TEC3622-14-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	Yes	White
TEC3622-15-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	No	Black
TEC3622-16-000	0 to 10 VDC proportional fan coil and zoning	No	Yes	No	White
TEC3623-13-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	Yes	Black

Table 4: Field-selectable BACnet MS/TP or N2 Networked Thermostat Controller models (Part 2 of 2)

Code number	Control output	Occupancy	Dehumidification	Johnson Controls logo	Color
TEC3623-14-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	Yes	White
TEC3623-15-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	No	Black
TEC3623-16-000	0 to 10 VDC proportional fan coil and zoning	Yes	Yes	No	White
TEC3630-13-000	Single- or two-stage RTU/ heat pump with economizer	No	No	Yes	Black
TEC3630-14-000	Single- or two-stage RTU/ heat pump with economizer	No	No	Yes	White
TEC3630-15-000	Single- or two-stage RTU/ heat pump with economizer	No	No	No	Black
TEC3630-16-000	Single- or two-stage RTU/ heat pump with economizer	No	No	No	White
TEC3631-13-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	Yes	Black
TEC3631-14-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	Yes	White
TEC3631-15-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	No	Black
TEC3631-16-000	Single- or two-stage RTU/ heat pump with economizer	Yes	No	No	White

Table 5: Accessories (order separately) (Part 1 of 2)

Code number	Description	
TEC-WALLPLT	Wallplate for retrofitting existing installations or concealing mounting surface damage; can be used with any TEC3000 Color Series Thermostat Controller	
MS-WNC1820-0A	WNC1800-0SZ with base, 120 to 230 VAC power, ZFR1820 ProCordFlag, with 3 ft (0.9 m) cable	
MS-WNC1823-0A	WNC1800-0SZ with base, 120 to 230 VAC power, ZFR1823 ProCordWall, with 10 ft (3 m) cable	
MS-WNC1820-0B	WNC1800-0SZ with base, 24 VAC power, ZFR1820 ProCordFlag, with 3 ft (0.9 m) cable	
MS-WNC1823-0B	WNC1800-0SZ with base, 24 VAC power, ZFR1823 ProCordWall, with 10 ft (3 m) cable	
MS-ZFR1821-0B	ZFR1821 Pro Flag Repeater, 24 VAC/DC power, with 3 ft (0.9 m) cable	
MS-ZFR1822-0B	ZFR1822 Pro Wall Mount Repeater, 24 VAC/DC power, with 10 ft (3 m) cable	
MS-ZFR1821-0	ZFR1821 Pro Flag Router, with 3 ft (0.9 m) cable	
MS-ZFR1822-0	ZFR1822 Pro Wall Mount Router, with 10 ft (3 m) cable	
ZFR-CBLEXT-0	10 ft (3 m) extension cable accessory, RJ12 F-F coupler	
ZFR-WALLCOVER	ZFR Repeater wallplate cover	
ZFR-USBHA-0	Wireless USB dongle	

Table 5: Accessories (order separately) (Part 2 of 2)

Code number	Description
TE-6300 Series <sup>1</sup>	Remote temperature sensors
T-4000-119	Allen-head adjustment tool (30 per bag)

<sup>1.</sup> See Table 6 for ordering details regarding Johnson Controls TE-6300 Series Remote Temperature Sensors.

Table 6: Johnson Controls TE-6300 Series Temperature Sensors (order separately) (Part 1 of 2)

Sensor type	Mounting style	Probe length	Product code number
Nickel (1k ohm)	Adjustable <sup>1</sup>	8 in. (203 mm)	TE-6311A-1
(1K Ohm)	Averaging	8 ft (2.4 m)	TE-6315M-1
			TE-6315V-2 <sup>1</sup>
		17 ft (5.2 m)	TE-6316M-1
			TE-6316V-2 <sup>1</sup>
	Duct	4 in. (102 mm)	TE-631GM-1
		8 in. (203 mm)	TE-6311M-1
			TE-6311P-1
		18 in. (457 mm)	TE-631JM-1
	Flange	4 in. (102 mm)	TE-631GV-2
		8 in. (203 mm)	TE-6311V-2
	Flush	N/A	TE-6310F-0
			TE-6310F-1
	Outside air	3 in. (76 mm)	TE-6313P-1
	Strap-mount	3 in. (76 mm)	TE-631S-1
	Wall <sup>2</sup>	N/A	TE-6314P-1
	Well	6 in. (152 mm)	TE-631AM-2
		8 in. (203 mm)	TE-6312M-1
Platinum	Adjustable	8 in. (203 mm)	TE-6351-A
(1k ohm)	Duct	4 in. (102 mm)	TE-635GM-1
		8 in. (203 mm)	TE-6351M-1
			TE-6351P-1
		18 in. (457 mm)	TE-635JM-1
	Flange	4 in. (102 mm)	TE-635GV-2
		8 in. (203 mm)	TE-6351V-2
	Flush	N/A	TE-6350F-0
			TE-6350F-1
	Strap-mount	3 in. (76 mm)	TE-635S-1
	Outside air	3 in. (76 mm)	TE-6353P-1
	Wall <sup>2</sup>	N/A	TE-6324P-1
	Well	6 in. (152 mm)	TE-635AM-2
		8 in. (203 mm)	TE-6352M-1

Table 6: Johnson Controls TE-6300 Series Temperature Sensors (order separately) (Part 2 of 2)

Sensor type	Mounting style	Probe length	Product code number
Platinum	1k ohm averaging <sup>1</sup>	10 ft (3 m)	TE-6327P-1
equivalent		20 ft (6.1 m)	TE-6328P-1
	100 ohm averaging <sup>1</sup>	10 ft (3 m)	TE-6337P-1
		20 ft (6.1 m)	TE-6338P-1
Thermistor	Adjustable	8 in. (203 mm)	TE-6341A-1
(2.2k ohm)	Duct	8 in. (203 mm)	TE-6341P-1
	Flange	4 in. (102 mm)	TE-634GV-2
		8 in. (203 mm)	TE-6341V-2
	Outside air	3 in. (76 mm)	TE-6343P-1
	Wall <sup>2</sup>	N/A	TE-6344P-1
	Well	8 in. (203 mm)	TE-6342M-1
		6 in. (152 mm)	TE-634AM-2
Thermistor	Adjustable	8 in. (203 mm)	TE-6361A-1
(10k ohm) Type II	Duct	4 in. (102 mm)	TE-636GM-1
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		8 in. (203 mm)	TE-6361M-1
			TE-6361P-1
		18 in. (457 mm)	TE-636JM-1
	Flange	4 in. (102 mm)	TE-636GV-2
		8 in. (203 mm)	TE-6361V-2
	Flush	N/A	TE-6360F-0
			TE-6360F-1
	Outside air	3 in. (76 mm)	TE-6363P-1
	Strap-mount	3 in. (76 mm)	TE-636S-1
	Well	6 in. (152 mm)	TE-636AM-2
		8 in. (203 mm)	TE-6362M-1

<sup>1.</sup> Two TE-6001-8 Element Holders come with the platinum-equivalent averaging sensors. Order separately to use with a nickel averaging sensor.

## **Technical specifications**

### TEC3000 Color Series Thermostat Controllers (Part 1 of 3)

Power requirements		19 to 30 VAC, 50/60 Hz, 4 VA at 24 VAC nominal, Class 2 or safety extra-low voltage (SELV)
USB port power rating		120 to 250 mA current draw supported
Analog output rating (for TEC3x2x models)		0 to 10 VDC into 2k ohm resistance (minimum)
Relay contact rating (for TEC3x1x and TEC3x3x models)	On/off or floating control (for TEC3x1x models)	19 to 30 VAC, 1.0 A maximum, 15 mA minimum, 3.0 A in-rush, Class 2 or SELV
Fan relay output rating (for TEC3x1x and TEC3x2x models)		19 to 30 VAC, 1.0 A maximum, 15 mA minimum, 3.0 A in-rush

<sup>2.</sup> Order the TE-1800-9600 Mounting Hardware separately to mount the wall unit to a wallbox.

## TEC3000 Color Series Thermostat Controllers (Part 2 of 3)

Auxiliary output rating/triac output (for TEX3x1x and TEC3x2x models)		19 to 30 VAC, 1.0 A maximum, 15 mA minimum, 3.0 A in-rush
Binary inputs		For TEC3x1x and TEC3x2x models: Dry contact across terminal COM to terminals BI1, BI2, or COS
		For TEC3x3x models: Dry contact across terminal COM to terminals BI1 or BI2
Analog inputs		For TEC3x1x and TEC3x2x models (two Als): Nickel, platinum, A99B, 2.25k ohm NTC, 10k ohm NTC, 10k ohm NTC Type 3 across terminal COM to terminals R SEN or COS, 0-10 VDC
		For TEC3x3x models (three Als): Nickel, platinum, A99B, 2.25k ohm NTC, 10k ohm NTC, 10k ohm NTC Type 3 across terminal COM to terminals R SEN, SAT, or OAT, 0-10 VDC
Temperature and humidity sensor type		Local digital sensor
Wire size		18 AWG (1.0 mm diameter) maximum, 22 AWG (0.6 mm diameter) recommended
MS/TP network guidelines		For wired models: Up to 100 devices maximum for each Network Automation Engine (NAE); 4,000 ft (1,219 m) maximum cable length. Refer to the MS/TP Technical Bulletin for the Metasys, FX, or Verasys® system installed.
		For wireless models: Up to 100 devices maximum for each Network Automation Engine (NAE)
Wireless band (for wireless models)		Direct-sequence spread-spectrum 2.4 GHz ISM bands
Transmission power (for wireless models)		10 mW maximum
Transmission range (for wireless models)		50 ft (15.2 m) recommended indoor
		250 ft (76.2 m) line of sight, maximum
Temperature range	Backlit display	-40.0°F/-40.0°C to 122.0°F/50.0°C in 0.5° increments
	Heating control	40.0°F/4.5°C to 90.0°F/32.0°C
	Cooling control	54.0°F/12.0°C to 100.0°F/38.0°C
Accuracy	Temperature	±0.9F°/±0.5C° at 70.0°F/21.0°C typical calibrated
	Humidity	±5% RH from 20 to 80% RH at 50°F to 90°F (10°C to 32°C)
Minimum deadband		2F°/1C° between heating and cooling
Occupancy sensor motion detection (occupancy sensing models)		Minimum of 94 angular degrees up to a distance of 15 ft (4.6 m); based on a clear line of sight
Ambient conditions	Operating	32°F to 122°F (0°C to 50°C); 95% RH maximum, noncondensing
	Storage	-22°F to 122°F (-30°C to 50°C); 95% RH maximum, noncondensing

#### TEC3000 Color Series Thermostat Controllers (Part 3 of 3)

Compliance	BACnet International	BACnet Testing Laboratories™ (BTL) 135-2001 Listed BACnet Advanced Application Controller (B-AAC)
	United States	UL Listed, File E27734, CCN XAPX, Under UL60730
		Networked models: FCC Compliant to CFR 47, Part 15, Subpart B, Class B
		Wireless models: Transmission complies with FCC Part 15.247 regulations for low power unlicensed transmitters; transmitter identification FCC: OEJ-WRZRADIO
	Canada	UL Listed, File E27734, CCN XAPX7, Under E60730
		Networked models: Industry Canada, ICES-003
		Wireless models: Industry Canada (IC) RSS-210; Transmitter identification ZFR1810-1: IC: 279A-WRZRADIO
C€	Europe (for networked models only)	CE Mark – Johnson Controls declares that this product is in compliance with the essential requirements and other relevant provisions of the EMC Directive and the RoHS Directive.
	Australia and New Zealand	RCM Mark, Australia/NZ Emissions Compliant
Shipping weight	Models without occupancy sensor	0.75 lb (0.34 kg)
	Models with occupancy sensor	0.77 lb (0.35 kg)

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products.

#### **United States Emissions Compliance**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Canadian Emissions Compliance

This Class (B) digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la Classe (B) respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

#### Software terms

Use of the software that is in (or constitutes) this product or access to the cloud or hosted services applicable to this product, if any, is subject to applicable terms set forth at <a href="www.johnsoncontrols.com/techterms">www.johnsoncontrols.com/techterms</a>. Your use of this product constitutes an agreement to such terms. If you do not agree to be bound by such terms, you may return the unused product to your place of purchase.



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