



## LifeWhere Gateway, Indoor (Furnace), and Outdoor (AC)

Instructions for:

Model #	Description	New Install	Add to/Replace in Existing System
LPK1000T1003	LPKIT (FURNACE + AC)	x	x
LPK1000T1004	LPKIT (FURNACE ONLY)	x	x
LPK1000T1005	LPKIT (AC ONLY)	x	x
LPX1100T1000	LPX (1) Sense Port, INDOOR ENCLOSURE		x
LPX1200T1000	LPX (1) Sense Port, OUTDOOR ENCLOSURE		x
LPG1000T1000	LifeWhere Gateway		x

Note: Some sections of this manual may not be applicable, depending on the kit

Read before installing. Visit [resideo.com/pro/lifewhere](http://resideo.com/pro/lifewhere) for up to date instructions, videos, LED Codes and troubleshooting information.

### When Installing this Product

Read these instructions carefully. Failure to follow them could damage the product and cause a hazardous situation.

Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.

Installer must be a trained, experienced service technician.

After installation is complete, check out product operation as provided in these instructions.

### Cautions

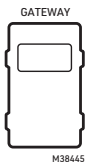
Electrical shock or equipment damage may occur.

Disconnect power supply before beginning installation.

### Package Includes:

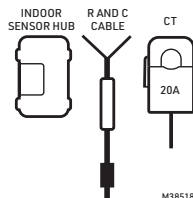
#### LPG1000T1000

- Power Supply with Holster



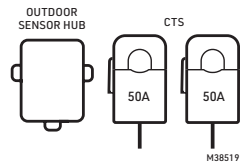
#### LPX1100T1000

- R&C Power Cable
- 20 Amp CT (Sensing)
- Adhesive Mounting Strip



#### LPK1200T1000

- 50 Amp CT (Sensing)
- 50 Amp CT (Charging)
- Mounting Screws



## Before you begin

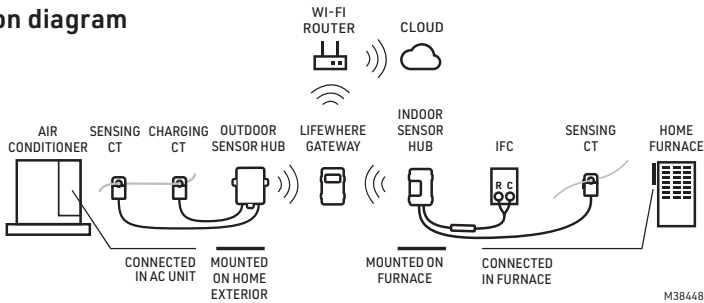
Verify the customer:

- is home
- has his/her mobile device
- has his/her Wi-Fi credentials
- has access to his/her email

## Technician Tools & Supplies Needed

- Drill
- Screwdriver
- Zip Ties

## Application diagram



## General Process

1. Homeowner Downloads App while Technician Gathers Furnace & AC Info (as applicable).
2. Technician Guides Homeowner Through LifeWhere Device Scanning & Data Entry.
3. Gateway Location is Selected and Homeowner Passes Configuration to Gateway via Mobile App.
4. Technician then completes installation of Sensor Hub(s) on Furnace and AC (as applicable)

## Getting Started

1. Ask the customer to download the LifeWhere Home app and create an account. The LifeWhere Home app is available for download from the App Store and the Google Play Store.
2. While the customer is doing that, find the furnace and outside air conditioning unit. Write down or take a photo of the following:

	Furnace	Air Conditioner
Make (Goodman, Carrier, etc.)		
Model (GM123B89, etc)		
Serial #		
Installation or Manufacturing Date		

# Scan devices

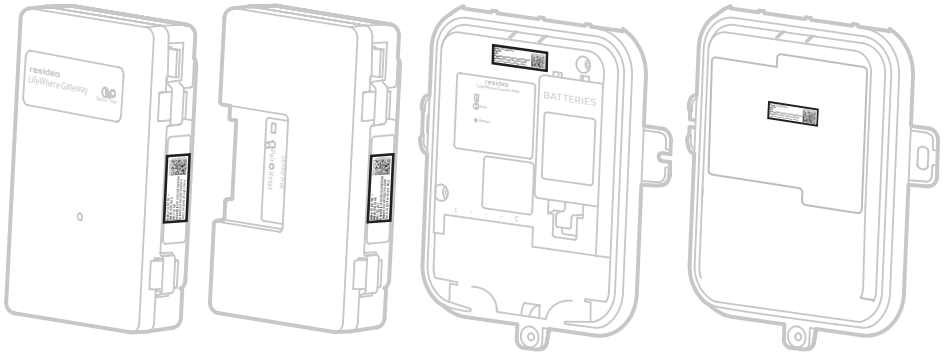
1. Open the box containing the LifeWhere hardware devices.
2. Ask the customer to login to their LifeWhere Home app account.
3. In the app, scan the QR code on the label of each device, name it and add it. Do this for all devices in the box.

**NOTE:** Place your phone camera close enough to the label to scan the entire QR code. Camera should be about 1-3 inches away from the QR code. Try to get the horizontal red line in middle of the QR code. You must accept camera permissions in the app to enable scanning.

Gateway  
(QR Code on Side)

Indoor Sensor Hub  
(QR Code on Side)

Outdoor Sensor Hub  
(QR Under Cover and Back of Unit)



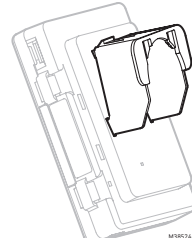
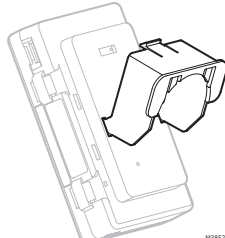
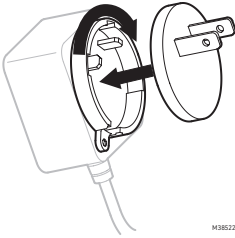
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The following table give examples of each required mobile app entry field:

LifeWhere Home App Entry Field	Notes:
First Name	Homeowner Info to Create Account
Last Name	
Phone Number	
Email	
Account Password	
Gateway Nickname	Example: <i>Main Gateway</i> Used to distinguish between multiple Gateways in a home.
Indoor Sensor Hub Nickname	Example: <i>Basement SH</i> Used to distinguish between multiple Sensor Hubs in a home.
Outdoor Sensor Hub Nickname	Example: <i>Outdoor SH</i> Used to distinguish between multiple Sensor Hubs in a home.
Asset (Appliance) Nickname	Example: <i>Main Furnace</i> Used to name the Asset (Appliance) being monitored.
Asset (Appliance)Type	Default set based on Sensor Hub Model. LPXx1 = <i>Furnace</i> , LPXx2= <i>Air Conditioner</i>
Appliance Make	Example: <i>Goodman, Carrier, Trane, Lennox</i> Manufacturer/Brand of the Appliance
Appliance Model	Example: <i>KG7SC 072D-248</i> Detailed Model # of each appliance
Appliance Serial Number	Example: <i>KGD110902612</i> Detailed Serial Number of each appliance
Manufactured Date	Manufacture Date -OR- Installation Date. Note: Manufacture date may be part of the Serial #
Port Configuration	Default set to <i>Main Power</i> Used to identify what data is being monitored from the appliance.
Home Name	Example: <i>Smith Home,Cabin, Rental, etc</i>
Address	Homeowner Address
City	
State	
Zip	
LifeWhere HVAC Partner	
HVAC Partner ID	

# Assemble and plug in the Gateway

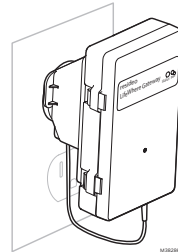
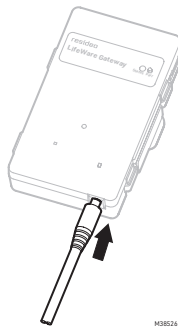
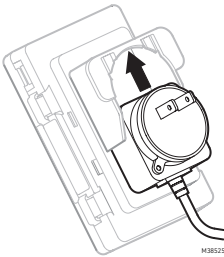
1. Remove the Gateway power supply, prong adaptor and holster from the box.
2. Attach the separate prong adaptor to the power supply. Align the key features and rotate to lock in place. See images below.
3. Attach the separate holster to the back of the Gateway. Insert the two hooks on the bottom and rotate to insert the tab/hook feature at the top.



4. Slide the power supply into the holster
5. Plug the barrel connector into the bottom of the Gateway.

**NOTE:** The extra wire can remain coiled below the gateway, or wrapped around the holster.

6. Select Gateway Location:

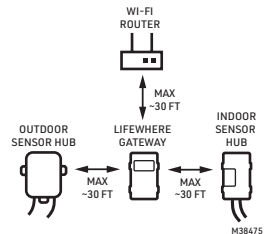


## Gateway location recommendation

The Gateway should be placed in the residence roughly midway between the outdoor air conditioning unit and the furnace. The Gateway location requires:

- a wall outlet
- access to the home Wi-Fi network

**NOTE:** The recommended distances are straight-line through general residential construction materials. Signal loss is greater through dense materials such as metal siding, brick, concrete, etc. After Gateway and Sensor Hubs are installed and powered up, you can check signal strength under Settings > Devices > Asset Nickname > Advanced.



7. After choosing the Gateway location, plug it into a 120 V outlet. The Gateway LED will go through a startup sequence and settle on a solid Pink.
8. Return to the LifeWhere Home App for additional Instructions. The Technician will guide Homeowner through the remainder of the process.

# Furnace installation

**!** Turn off the power at the breaker box or switch that controls the heating and cooling equipment.

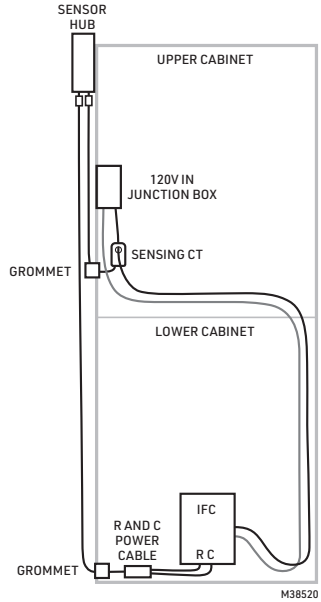
1. With the power to the furnace turned off, remove the furnace cover to locate the furnace control.
2. Identify the incoming power wire (coming into the furnace from the power switch). This wire is typically black or red, but does not have to be.

**NOTE:** Location of both 120V In Junction Box and IFC will vary depending on model. If either is located in the same cabinet as the blower motor, be sure to secure any wires in this cabinet properly.

3. Clip 20 A CT sensor around this wire. Remove and discard the small pieces of paper shipped between the clamped CTs. Be sure the CT latch is snapped shut.
4. Route the 3.5 mm jack end out of the furnace cabinet to Sensor Hub.

**NOTE:** Best practice is to route the wire out of the furnace cabinet through an existing grommet that has sufficient space. If none are available, drill a new hole and insert a grommet (not included) to protect the wire.

5. Wire the R & C power cable into the Integrated Furnace Control (IFC). Wire the red to R and the white to C. There should be 24 VAC across these terminals.



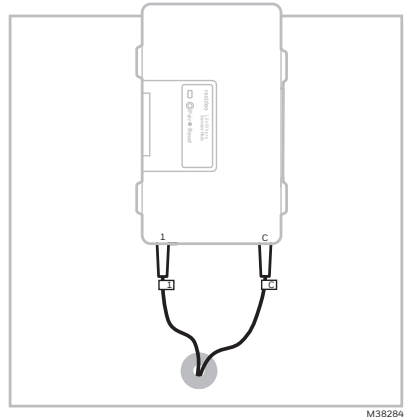
**NOTE:** C might be labeled as "COM" or "24 V."

6. Plug the R & C power cable 3.5 mm jack labeled C into the C port.
7. Plug the CT (20 A) into the 1 port.
8. Affix the Indoor Sensor Hub to the outside of the furnace cabinet at the top of the unit with the double sided tape on the back of the Hub. Clean the cabinet surface before adhering the Hub to the furnace cabinet.

**NOTE:** If possible, put the Sensor hub on the side of the furnace closest to where the Gateway is installed to optimize signal strength

9. Replace the furnace cover, then turn power back on to the furnace.

**NOTE:** Sensor Hub LED will turn on (Orange Blinking) if Gateway has been configured in previous step.



# Air conditioner installation

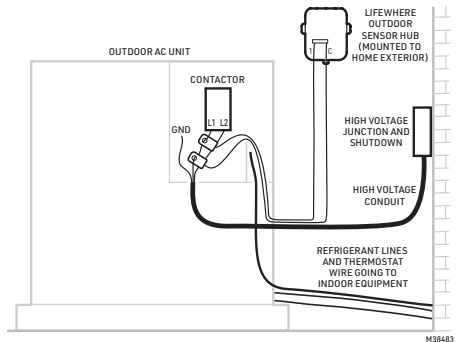
1. At the thermostat, turn mode to OFF.
2. Turn off power to the AC unit (either at the outdoor unit or at the main breaker panel).

**NOTE:** If AC is running at the time of installation, it is recommended to first shut down the unit from the thermostat before turning off at the outdoor shutoff or main breaker to avoid system resets after power is restored.

3. Open the cover on the outdoor AC unit where the electrical connection and thermostat wire are housed.
4. Locate the two incoming wires going to the contactor (L1) and (L2). Clamp both 50A CTs around either (L1) or (L2) as space permits. CTs may be placed on the same wire or separately. Ensure both CTs are firmly clamped around the wire and the latch is snapped shut.
5. Route 3.5 mm jack out of the cabinet through the grommet that the thermostat wire (low voltage) is coming through, typically the bottom of the cabinet.

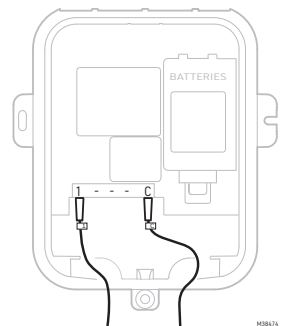
**NOTE:** If the existing grommet can't accommodate the additional wires, drill another hole and add a grommet (not included) to protect the wires, or find another way to route the wires out of the enclosure.

6. Pull excess wire through the hole and ensure the CTs and wires are not near any other terminal blocks, etc. Use zip ties and/or tape to route wires as necessary (not provided).
7. Plug the CT 3.5 mm jacks into the labeled ports: C to C (powering CT) and 1 to 1 (sensing CT). Push the 3.5 mm jack firmly into the ports.
8. Assess the locations on the adjacent structure that the CT cables will reach.
9. Drill pilot holes and add anchors (if necessary) to mount the enclosure to the home exterior.
10. Close the cover of the enclosure with the screw provided. Orientation with wire exiting the bottom of the enclosure is required.
11. Coil and/or wrap excess wire with zip ties and attach it to the conduit that the thermostat wire is typically routed through.



12. Double check that the CT clamps are closed and all wires are routed properly.
13. Put the cover back on the wiring connections at the AC unit.
14. Turn power back on to the AC unit.

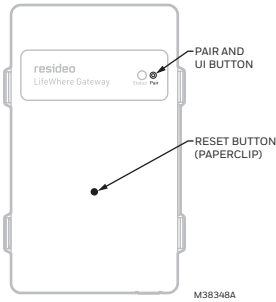
**NOTE:** The Sensor Hub LED will remain off until the AC unit is running and provides enough current to start up the Sensor Hub. In the off-season, unit will go into deep sleep mode. See LED and UI button tables in following pages for additional information.



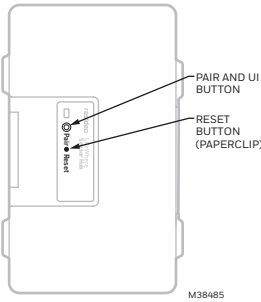
# User Interface and Reset Button Functions

For the latest LED colors and actions, visit <https://support.lifewhere.com>.

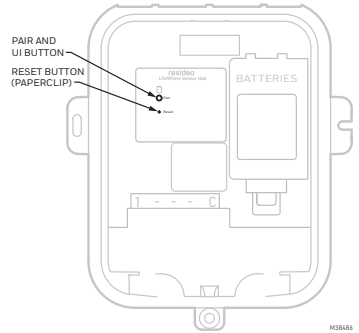
## Gateway



## Indoor Sensor Hub



## Outdoor Sensor Hub



## Gateway

Function	Button Press	Release Button at State:	Comments
Enable AP (Access Point) Mode	Pair/UI Press & HOLD for 3-10 Sec until ...	...LED is OFF	Temporarily Enables AP Mode Used for Changing Device Config with Mobile App. LED will be Green while in AP mode.
Reset Wi-Fi Configuration	Pair/UI Press & HOLD for 10-12 Sec...	...LED Is off, continue holding until LED is RED	Used to Clear WiFi Credential in the event they are entered incorrectly. Wifi credentials can only be restored through mobile app, Gateway will need to be in AP (access point) mode, see above
Re-boots Gateway	Reset Button (paperclip req)	N/A	Same as power cycle. No configuration or WiFi information is erased

## Sensor Hub

Function	Button Press	Release Button at State:	Comments
Bring out of Deep Sleep Mode	Pair/UI Press & Release	Immediately	Must have been powered up through Charging CT or R&C Power Cable prior. New unit out of box must be powered up from Charging CT or R&C Power Cable.
Re-boot	Reset Button (paperclip req) [LED will go off]	N/A	Re-initializes firmware. Sensor Hub may need to wake up through Charging CT or R&C Power Cable input current.

## Gateway LED: Normal operation

Gateway LED Color/Status	Description of Status	Note
Yellow Blinking	Wi-Fi is initializing either in AP (Access Point) or Cloud Mode	Normal state during initial power up
Pink Solid	Gateway is not configured, AP (Access Point) not active. Use Mobile App to Configure	Normal state during initial power up
Green Solid	Wi-Fi is AP (Access Point) mode and can be configured with Mobile App	Proceed with App Instructions
Cyan Solid	Wi-Fi is waiting for communication from server for time of day	N/A
Blue/Green Blinking ~30Sec	Normal Operation, Sending Data to Cloud	N/A
Blue Solid ~30Sec	Normal Operation, Gateway is configured and ready for cloud communications	Normal Standby Mode
Blue/Green Blinking ~3min+	Receiving Firmware update in progress (3+min)	Wait for completion (back to solid blue)
Blue/Pink Blinking ~1-2sec	Normal Operation, Communicating with Sensor Hub(s)	N/A
Blue/Pink Blinking ~1+ min	Sending Firmware update to Sensor Hub update in progress	Wait for completion (back to solid blue)

## Gateway LED: Error states

Gateway LED Color/Status	Description	Resolution
Blue Solid for ~120sec + (1) or more Pink Blinks	WiFi Config is Correct and connected to cloud. Configuration is missing and/or incorrect	Put Gateway into AP Mode, Connect to LifePulse Network, Reconfig Gateway for Current # of Sensor Hubs
"Blue Solid for ~90sec + (1) Green Blinks Blue Solid for ~30sec + (1) Pink Blinks"	Gateway is Communicating with Sensor Hub(s), but not to Cloud. This is normal on occasion, but if this persists, reset is required	Reset Gateway by power cycle (Paperclip Reset OR Unplug/Re-Plug in Outlet)
Blue Solid for ~120sec + (1) Green Blinks	No Communication with Sensor Hub	Paperclip reset on Sensor Hub
Red Solid	Error	Contact Customer Care at 1-855-LFWHERE
"Blue/Green Blinking for ~30sec Blue Solid for ~30sec Blue/Pink Blinking 3X (repeat)"	Error connecting to user's Wi-Fi after rebooting.	Check WiFi network status (up/down). Check if WiFi SSID or password has changed. If SSID/Password has changed, put Gateway into AP mode and follow in-app instructions to reset
Yellow Blinking for ~20 sec + Red Blink + White Bink	WiFi Network not discoverable.	Check other WiFi devices for connection to same network. Modem or Router may be un-powered or resetting. If SSID or p-word has changed, Re-Enter through in App Instructions
Pink/Yellow Blinking, then Solid Green	WiFi Password entered incorrectly during initial setup	Follow in-app instructions to re-enter password



## Sensor Hub LED: Normal operation

Sensor Hub ORANGE LED	Sensor Hub RED LED	Description of Status	Note/Resolution	Applies to Indoor/Outdoor Sensor Hub
Blinking 1x/sec	Off	Sensor Hub Powered and in Standby	Upon Battery Wakeup/Initial Power, awaiting pairing	Indoor/Outdoor
Blinking 1x/sec	Blinking 1-2x/2min	Sensor Hub Exchanging Data with Gateway	Normal Operation	Indoor/Outdoor
Blinking 1x/sec	Rapid Blinking	OTA Update in Progress	Do Not Disconnect	Indoor/Outdoor

## Sensor Hub LED: Error states

Sensor Hub ORANGE LED	Sensor Hub RED LED	Description of Status	Note/Resolution	Applies to Indoor/Outdoor Sensor Hub
Solid	Off	Was configured to Gateway, but currently cannot connect	Gateway OTA Download in Process (Blue/Green), Wait for completion –OR– If Gateway in Standby (Solid Blue) then reset Gateway	Indoor/Outdoor
Off	Solid	Unconfigured to Gateway	Add to Gateway Configuration via Mobile App	Indoor/Outdoor
Off	Blinking 1x/Sec	Low Battery	Batteries may take time to charge through several AC runs	Outdoor
Off	Off	Initial Install	Need to Run AC to initialize/power up Sensor Hub	Outdoor
Off	Off	Deep Sleep	Occurs during off-season (outdoor)	Outdoor

# Specifications

## Gateway

**Dimensions in in. (mm):** 4.6 x 2.9 x 1.4 (117 x 74 x 36)

**Weight in oz. (g):** 3 (85)

**Operational Temperature Range:** 32°–104° F (0°–40° C)

**Input Voltage:** 5 Vdc

## Indoor Sensor Hub

**Dimensions in in. (mm):** 4.6 x 2.9 x 1.5 (117 x 74 x 38)

**Weight in oz. (g):** 5 (142)

**Operational Temperature Range:** -40°–158° F (-40°–70° C)

**Input Voltage:** 2.5–6.2 Vdc

## Outdoor Sensor Hub

**Dimensions in in. (mm):** 8.6 x 7.2 x 1.5 (218 x 183 x 38)

**Weight in oz. (g):** 5 (142)

**Operational Temperature Range:** -40°–158° F (-40°–70° C)

**Input Voltage:** 2.5–6.2 Vdc

## 20 A CT sensors

**Dimensions in in. (mm):** 48 x 1 x 1.6 (1219 x 25 x 41)

**Weight in oz. (g):** 2.5 (71)

**Operational Temperature Range:** -13°–158° F (-25°–70° C)

## 50 A CT sensor

**Dimensions in in. (mm):** 72 x 1.6 x 2 (1829 x 41 x 51)

**Weight in oz. (g):** 2.5 (71)

**Operational Temperature Range:** -40°–158° F (-40°–70° C)

## R & C Power Cable

**Dimensions in in. (mm):** 50 x 0.7 x 0.7 (1270 x 18 x 18)

**Weight in oz. (g):** 3 (85)

**Operational Temperature Range:** -40°–158° F (-40°–70° C)

**Input Voltage:** 24 Vac

**Output Voltage:** 5.5 Vdc

## Gateway Power Supply

**Dimensions in in. (mm):** 1.75 x 1.75 x 2 (45 x 45 x 51)

**Weight in oz. (g):** 2.5 (70)

**Operational Temperature Range:** 50°–158° F (10°–70° C)

**Input Voltage:** 100–240 Vac

**Output Voltage:** 5 Vdc

## Warranty

Resideo warrants this product, excluding battery, to be free from defects in workmanship or materials, under normal use and service, for a period of two (2) years from the date of first purchase by the original purchaser. If at any time during the warranty period the product is determined to be defective due to workmanship or materials, Resideo shall repair or replace it (at Resideo's option).

If the product is defective,

(i) return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it; or  
(ii) call Resideo Customer Care at 1-800-633-3991. Customer Care will make the determination whether the product should be returned to the following address: Resideo Return Goods, 1985 Douglas Dr. N., Golden Valley, MN 55422, or whether a replacement product can be sent to you.

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by Resideo that the defect was caused by damage which occurred while the product was in the possession of a consumer.

Resideo's sole responsibility shall be to repair or replace the product within the terms stated above. RESIDEO SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY RESIDEO MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE TWO YEAR DURATION OF THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. If you have any questions concerning this warranty, please write Resideo Customer Care, 1985 Douglas Dr, Golden Valley, MN 55422 or call 1-800-633-3991.

**CAUTION: ELECTRICAL HAZARD**

Can cause electrical shock or equipment damage. Disconnect power before beginning installation.

**CAUTION: EQUIPMENT DAMAGE HAZARD**

Compressor protection is bypassed during testing. To prevent equipment damage, avoid cycling the compressor quickly.

## WEEE Disposal Notification

The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent potential negative consequences for the environment and human health.

## Approvals

UL Classified under File SA45166 to UL 1995-2018 and CAN-CSA C22.2 No. 236-15

## Regulatory information

### FCC REGULATIONS

#### § 15.19 (a)(3)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1 This device may not cause harmful interference, and
- 2 This device must accept any interference received, including interference that may cause undesired operation.

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.

### IC REGULATIONS

#### RSS-GEN

This device complies with Industry Canada's license-exempt RSSs.

Operation is subject to the following two conditions:

- 1 This device may not cause interference; and
- 2 This device must accept any interference, including interference that may cause undesired operation of the device.

#### FCC Warning (Part 15.21) (USA only)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent potential negative consequences for the environment and human health.



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