

Beanbag Thermostat 600 series

Quick installation guide



Suitable for FCU systems

Prerequisites

For installation

Tools / things you may need:



Flat head screw driver



Philips head screw driver



Drill machine



Wire stripper



Plier



Hammer



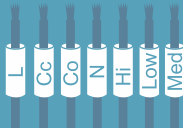
Wall anchors and screws



Cable



Pencil/Pen



Identification sleeves



Measuring tape

For commissioning

To commission your system, you need:



Router with internet



Smartphone



version 11.0 and above



Lollipop (version 5.0) and above



Beanbag mobile app

Prerequisites

For network configuration



Router specifications

- Configure a dedicated SSID for Beanbag Cool on router / AP
- Choose an SSID - minimum 5 characters
- Choose a password - minimum 8 characters
- Set the SSID broadcast to **Disabled** or **Hide** for enhanced security
- Set security to WPA/WPA2/Open



Wi-Fi specifications

802.11 B/G, 2.4 GHz wireless router

Note: Disable 'N', if enabled previously.

Wi-Fi signal strength 0 to (-) 60 dBm

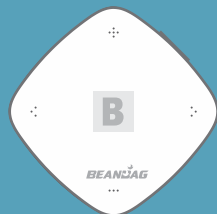
Good to know *

- Data consumption- Approx 0.5 MB per device per day
- Wi-Fi bandwidth - approximately 5 Kbps per device
- Number of connections (Optimal) per access point- Depends on the type of router installed. May lead to frequent disconnections, as number increases beyond the specified limit.

*** Numbers indicative only**

Technical specifications

Mechanical		
Dimensions		105(H) x 105(W) x 35(D)
Case material		PC FR
Weight		160.5 gms
Mounting		Snap-fit wall mount
Power supply	230 V variant	90 -265 V, 50 – 60 Hz
	24 V AC variant	21 -27 V, 50 – 60 Hz
Output	230 V variant	3 Amp Max.
	24 V AC variant	0 -10 V
Environmental		
Impulse voltage rating		Cat II, 2.5 kV
Enclosure protection		IP30
Pollution degree		2
Operating temperature range		0°C to +50°C
Storage temperature range		-20°C to +70°C
Humidity range		10 to 95%
Set-point range		18°C to 30°C
Compliance		
Standards		EN 60730-1, EN 60730-2-9 Radio ETSI EN 300 328

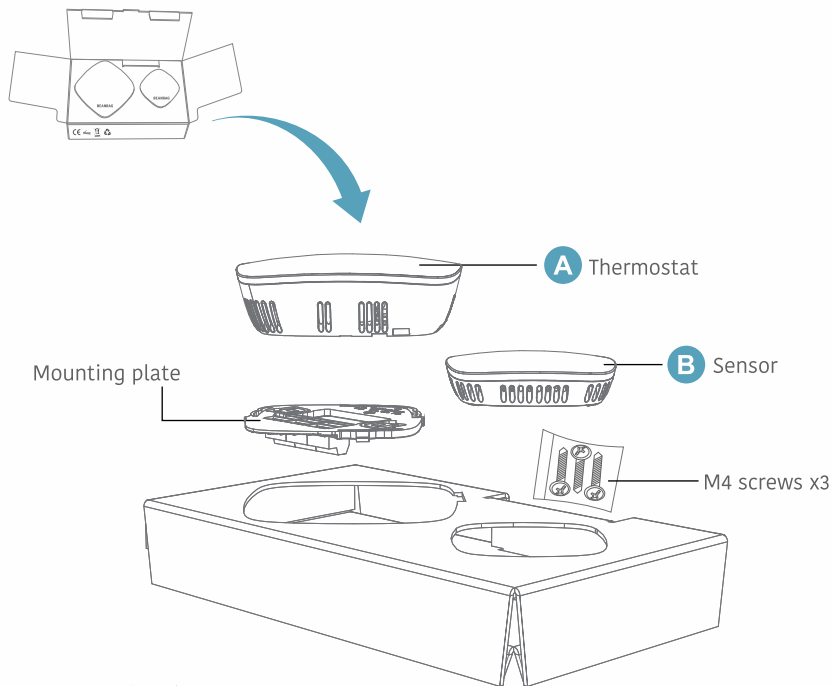


Installation



Disconnect power before installation

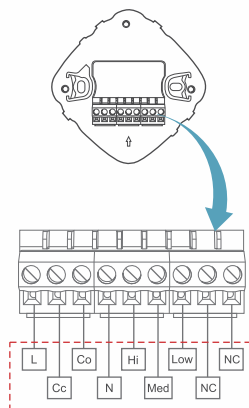
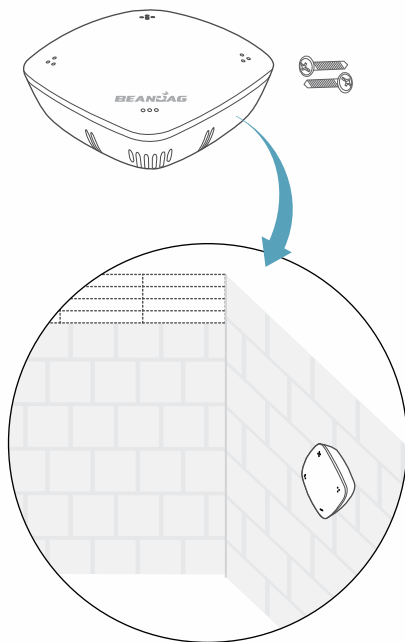
In the box



RoHS



A Beanbag Thermostat 600 series



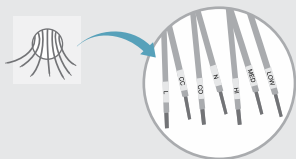
Note: These pin descriptors may vary with the variant. For the actual description, refer the mounting plate/ product package.

A1. Identify and label the wires

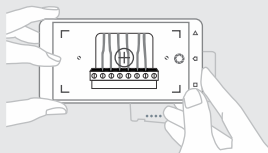
i The following chart describes the control function for each wire in the Thermostat. Identify, map, label and connect your wires accordingly. The labels are variant specific and may differ with thermostat variants.

Pin No.	230 V		24 V modulating valve	
	Label	Pin description	Label	Pin description
1	L	Line voltage 230 V	24V	Line voltage 24 VAC
2	Cc	Cooling valve closed	Y+	Control output 0-10 Vdc
3	Co	Cooling valve open	Y-	Neutral 24 VAC
4	N	Neutral/Ground	Com	Neutral 24 VAC
5	Hi	Fan speed high	Hi	Fan speed high
6	Med	Fan speed medium	Med	Fan speed medium
7	Low	Fan speed low	Low	Fan speed low
8	S1/Hc	Key tag AC input 1/Heat valve closed	Hc	Heat valve closed
9	S2/Ho	Key tag AC input 2/Heat valve open	Ho	Heat valve open

When installing for the first time, identify the wires and label accordingly



If replacing, take a picture of your old thermostat connections and label accordingly

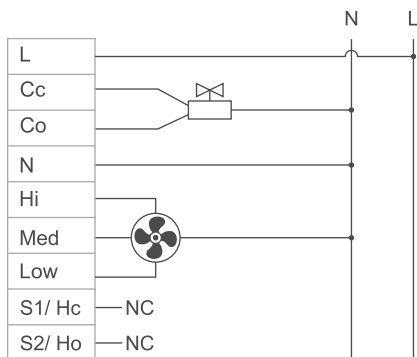


or

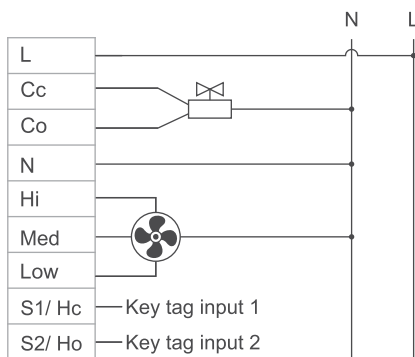
Refer the wiring diagrams on page 9

i Connection diagrams

230 V (2 way valve)

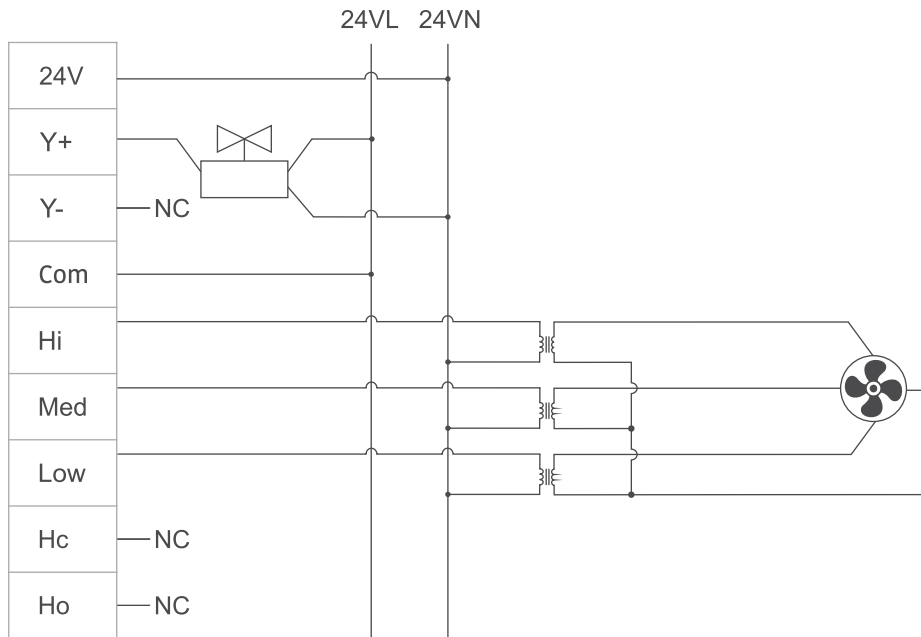


230 V (2 way valve, key tag variant)



Connection diagrams

24 volt modulating valve 3 wire

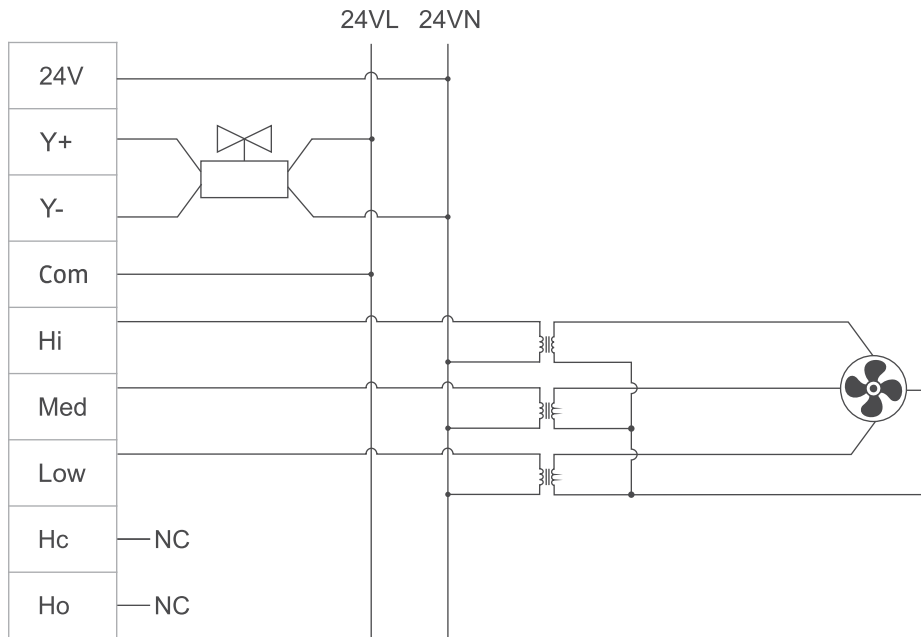


Isolation relay/transformer circuit



Connection diagrams

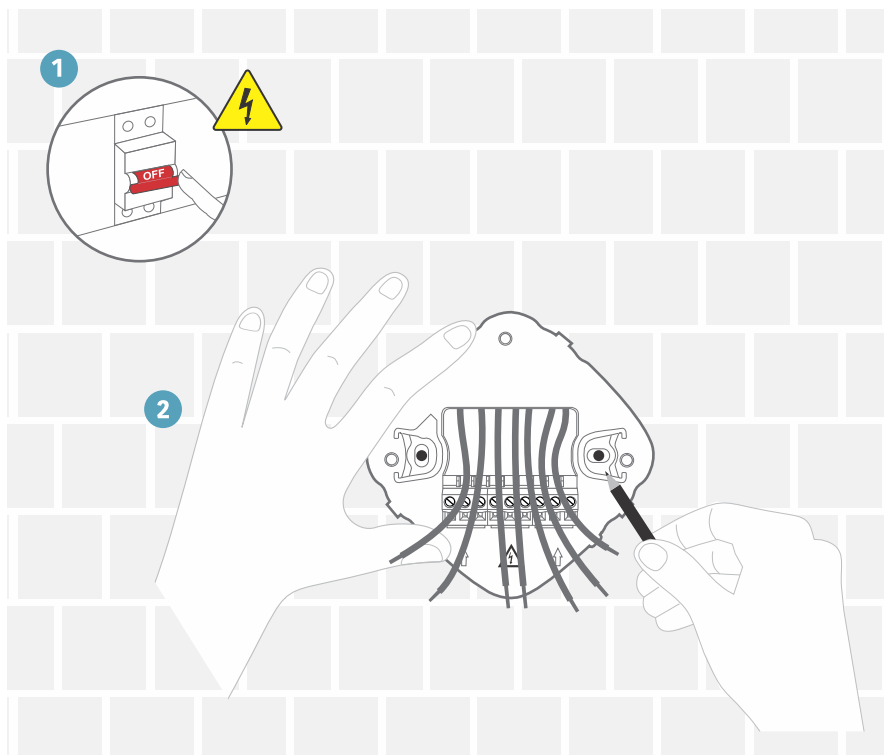
24 volt modulating valve 4 wire



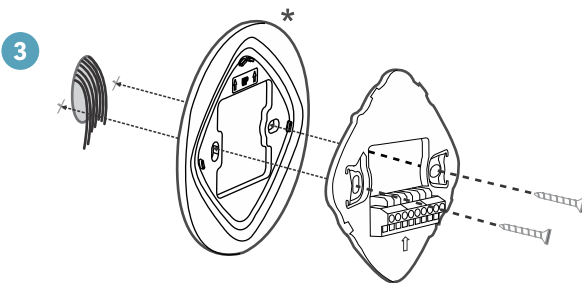
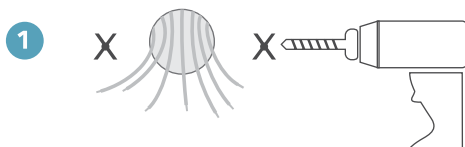
Isolation relay/transformer circuit



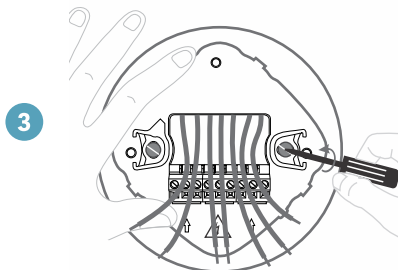
A2. Mark out the mounting position



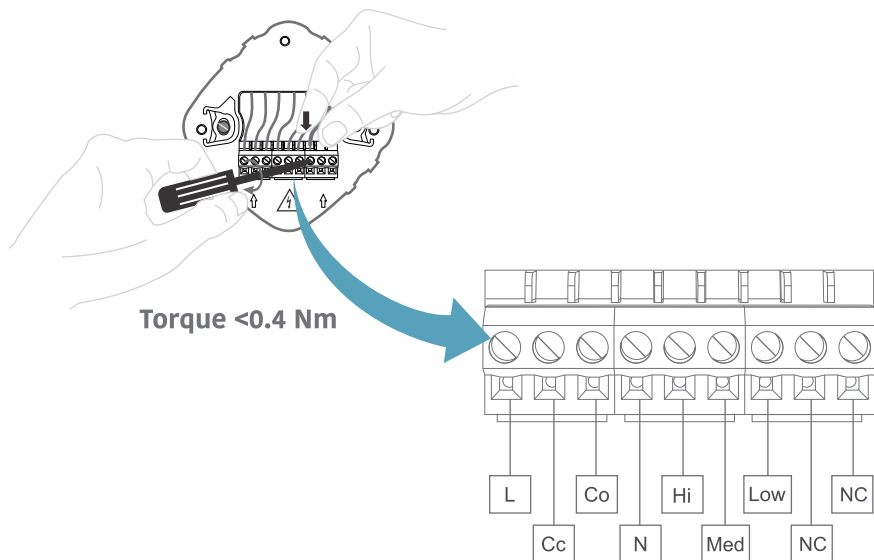
A3. Drill the holes and secure the mounting plate



* The wall mounting plate is optional.



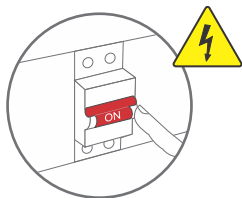
A4. Make connections



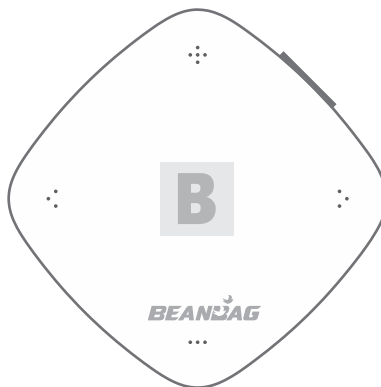
Note: These pin descriptors may vary with the variant. For the actual description, refer the mounting plate/product package.

A6. Power On the thermostat and check the display

1



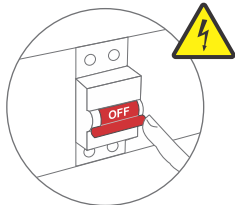
2



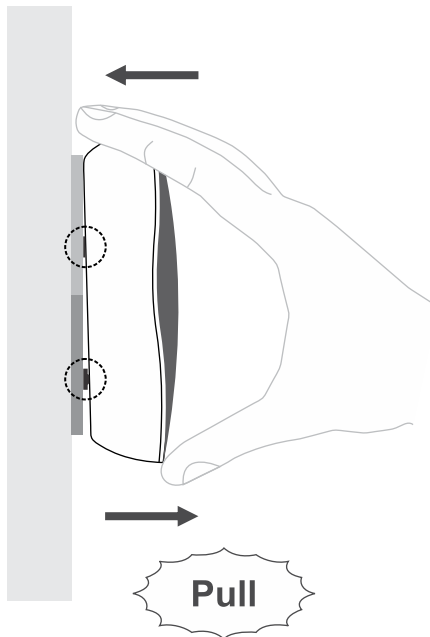
AC and thermostat must be on the same supply source

Demounting the thermostat

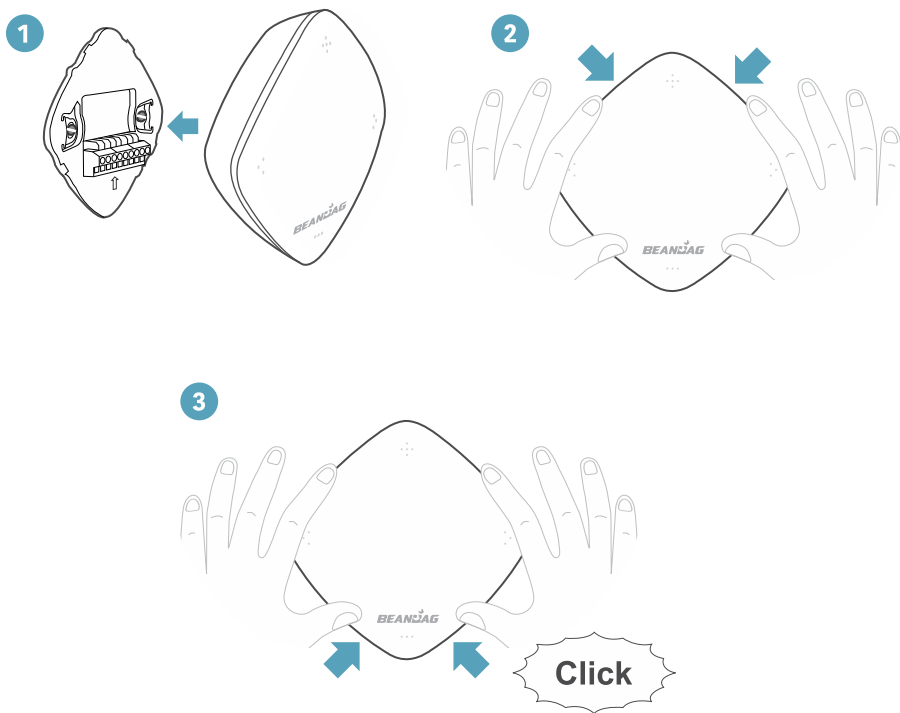
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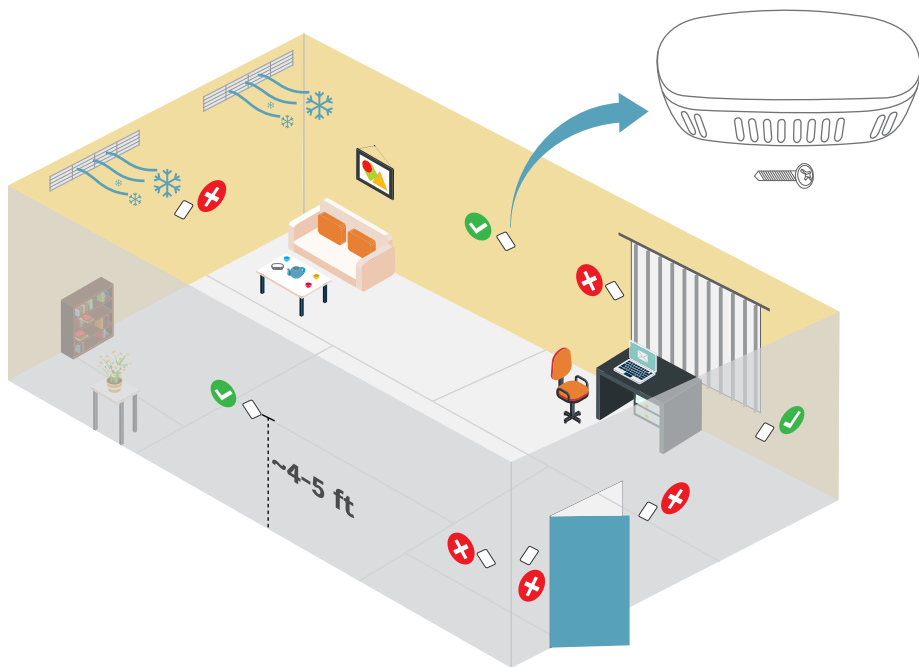
2



A5. Mount the thermostat



B Beanbag External Temperature Sensor 110



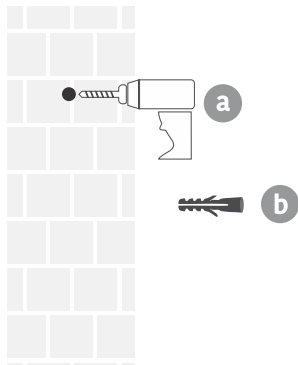
Note: Identify appropriate mounting location for the external temperature sensor

Technical specifications

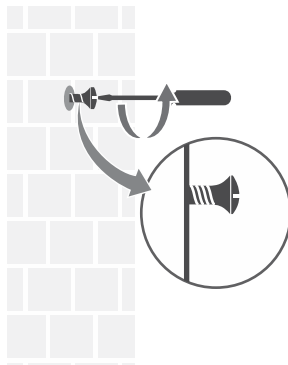
Size (mm)	72(H) x 72(W) x 20(D)
Battery	Two AAA size batteries (included) Up to 5-year battery life
Weight	58 grams approx
Comms. type	BLE
Comms. range	Up to 10 meters from the Thermostat (Range can vary depending on your home's construction, wireless interference and other factors)
Operating temperature	0° to 50°C
Compliance	<ul style="list-style-type: none">• EN 301 489 -1 (Radio EMC)• EN 301 489 -17 (Radio EMC broad band data transmission)• RoHS Directive• EN 300 328 - 2.4 GHz wideband

Mount and Power On

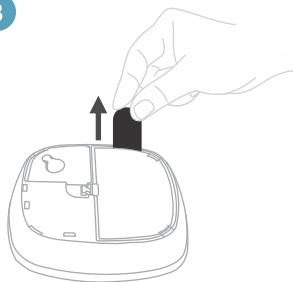
1



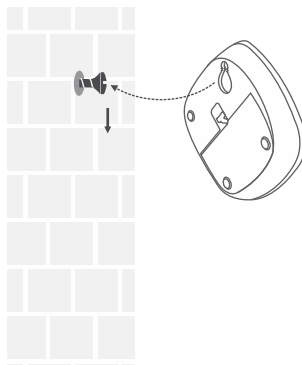
2



3



4





3G/4G



Commissioning

Download the Beanbag Cool mobile application



Commissioning Do's and Don'ts

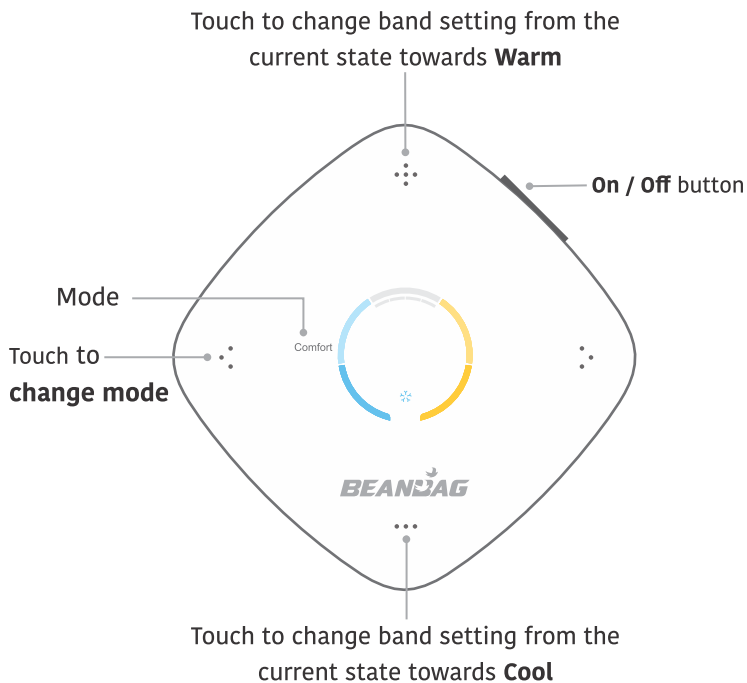
Sign in to the app and follow the instructions to complete the commissioning process. However, please keep in mind the following, before/during the commissioning process:

Before commissioning:

1. Ensure the device to be commissioned is on the same Wi-Fi network as that of the mobile.
2. Ensure that your Wi-Fi is turned ON and your cellular data is turned OFF.
3. Keep the Wi-Fi SSID password ready for commissioning.

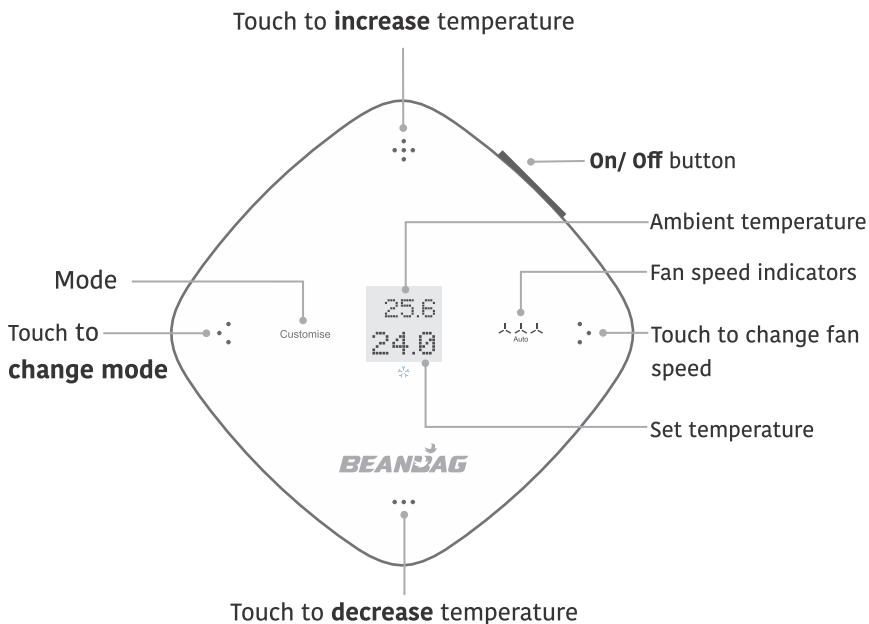
Display after commissioning: Mode 1 - Comfort

Display and key functions



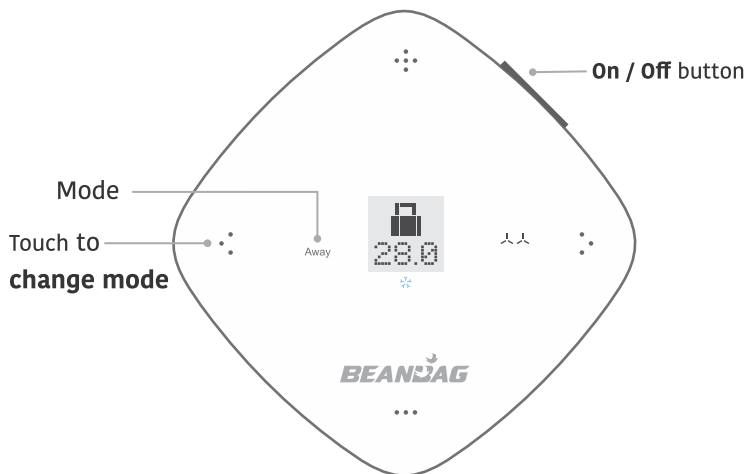
Display after commissioning: Mode 2 - Customise

Display and key functions

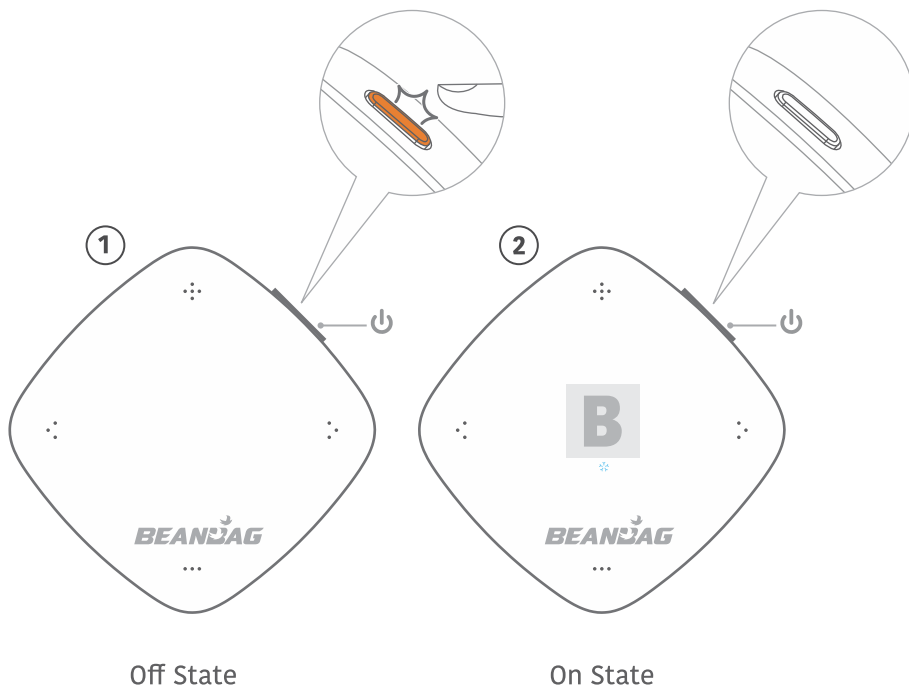


Display after commissioning: Mode 3 - Away

Display and key functions



Turn On/Off the FCU locally

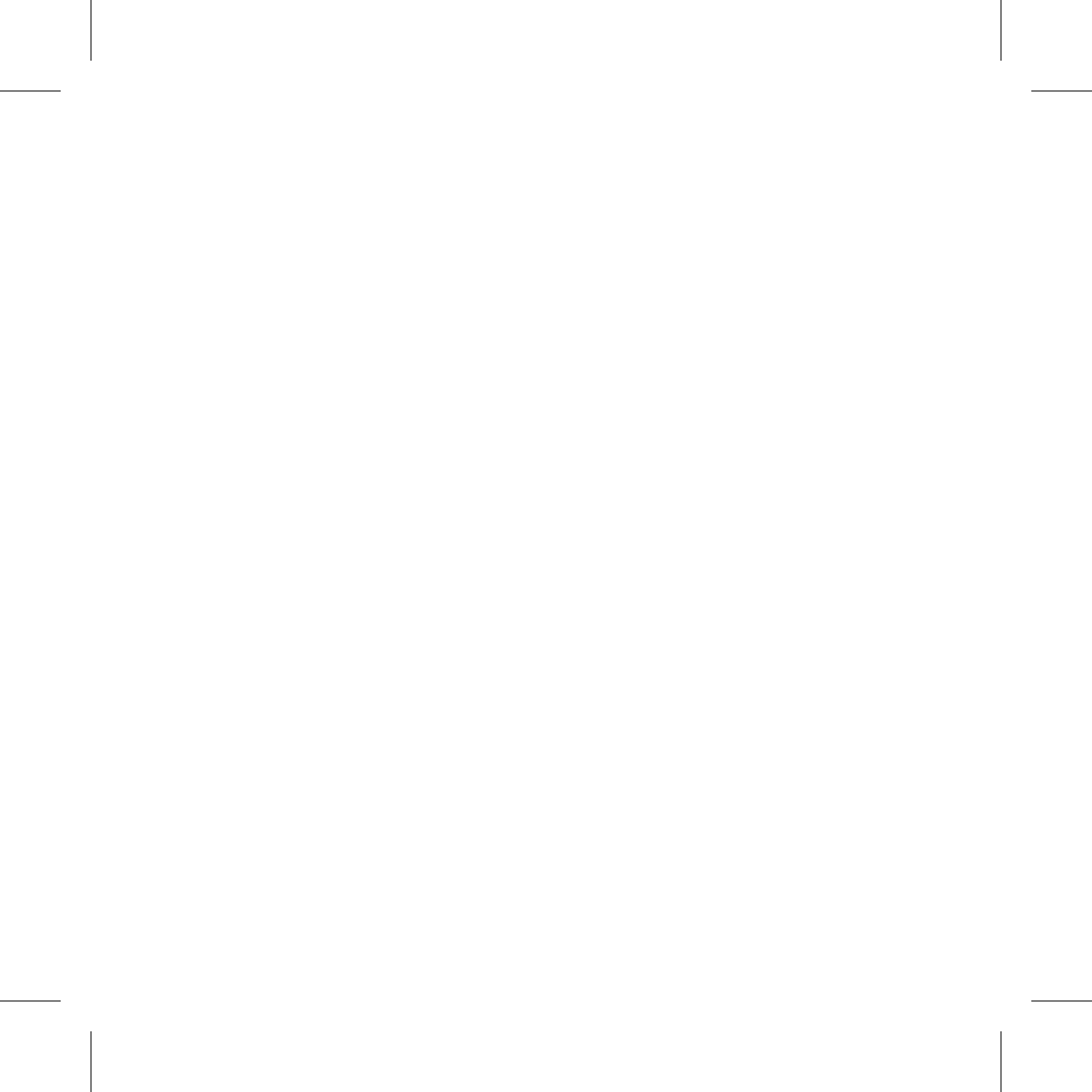


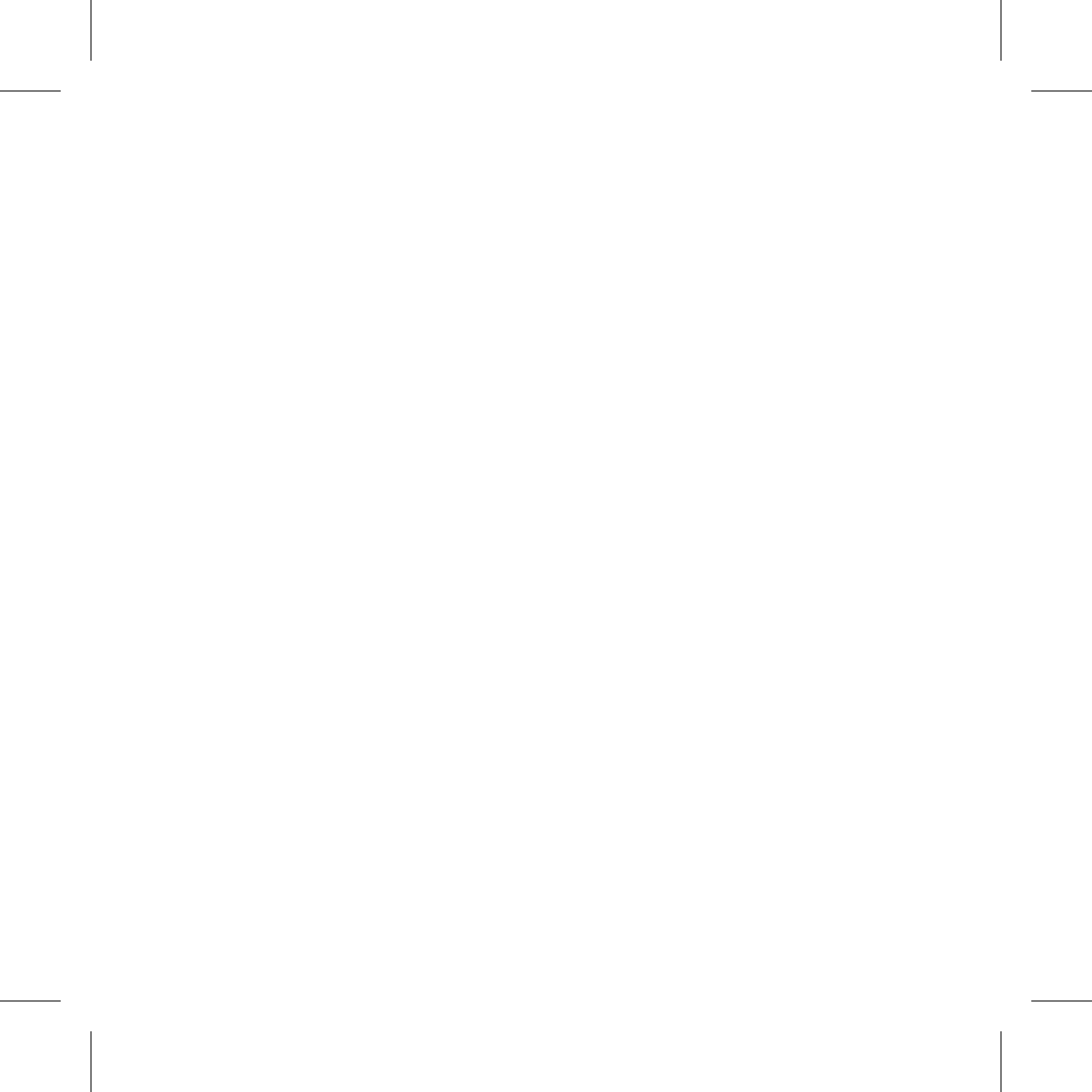
Note: In the uncommissioned state, if the device is suitably connected and powered ON, the Beanbag Cool logo will come on and the power LED will be turned OFF.

Beanbag product variants

Variants	Description
BT5000-000	Beanbag thermostat 500, split/window AC, 230V AC, Wi-Fi, BLE
BT5100-000	Beanbag thermostat 600, FCU, 230V AC, wall mount, Wi-Fi, BLE, On/Off valve, with external BLE sensor
BT5100-010	Beanbag thermostat 600, FCU, 230V AC, wall mount, Wi-Fi, BLE, On/Off valve, energy saver key tag input, with BLE external sensor
BT5100-100	Beanbag thermostat 630, FCU, 24V AC, wall mount, Wi-Fi, BLE, 0-10V modulating valve, with external BLE sensor
Additional	Description
BS1000-000	Beanbag External Temperature Sensor 110, AAA battery powered, BLE
BLLD40-177	Wall plate (optional)

Notes







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BGX701-175

BGX701-175-R02