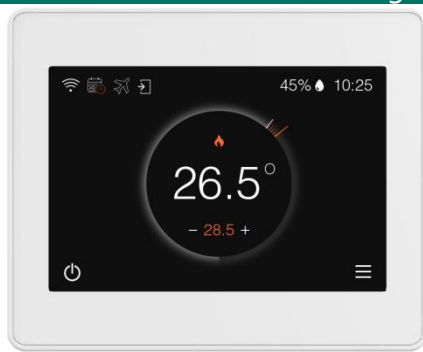


THERMOSTAT- B C 2 0 7 F-Heating



PRODUCT DESCRIPTION

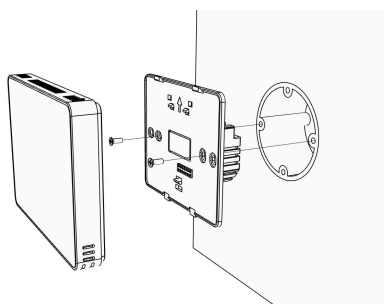
It features a glass panel touchscreen and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction.

For electric floor heating systems, the models offer precise control. They can handle up to 16A, making them perfect for electric heating systems; for the underfloor water heating system the model offer both dry contact or live output to control the boiler and radiators. For the heating and hotwater system HW model could deal with it .

MAIN FEATURE

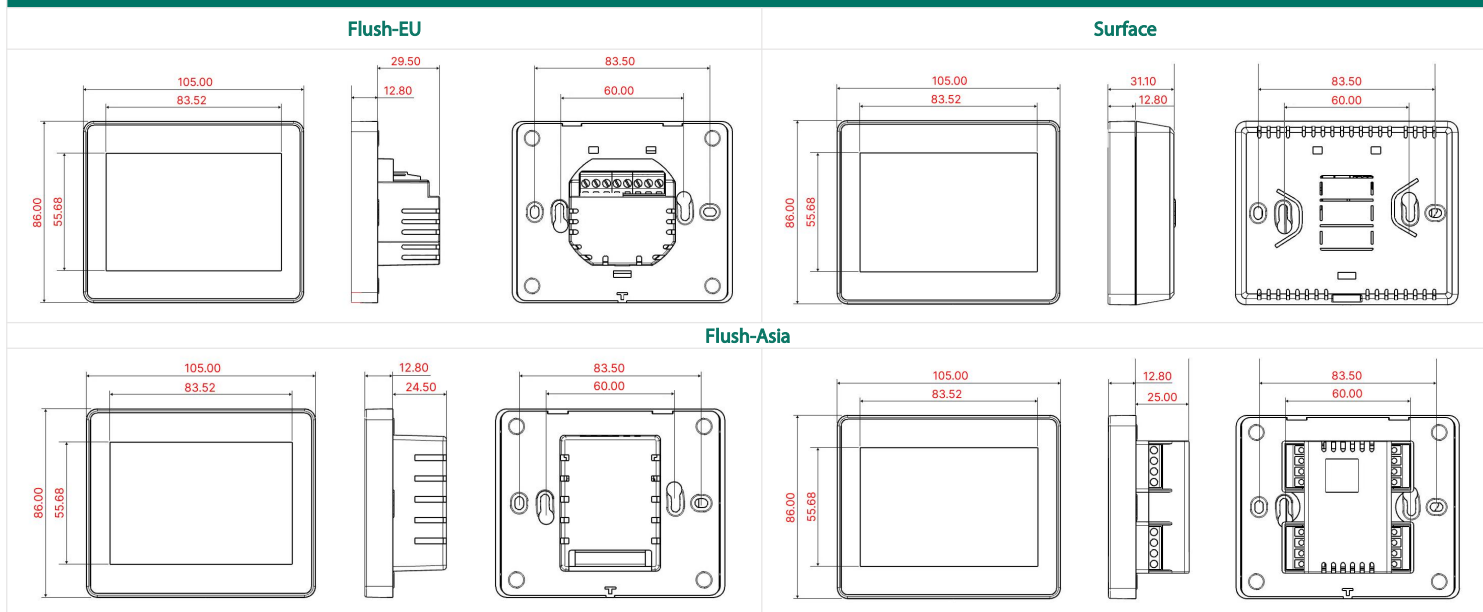
4.0" TFT real color touchscreen
Humidity sensor, Ambient light sensor
Wi-Fi connective(Optional)
SmartLife App(Optional)
SmartLife Zigbee(Optional)
LoRaWAN 868mhz/915mhz(Optional)
BACnet MSTP/IP(Optional)
Modbus 485 RTU,TCP(Optional)
BLE 5.0 (Optional)
Customized MQTT(Optional)
3A relay output for heating and hot water
7day,weekday/weekend,24hours schedule
History data tracking diagram(up to 4 weeks)
External probe and remote air sensor
Energy consumption statics
Defrost protection
Adaptive Heating
Open Window function
RF wireless(work with RF receiver or wiring centre)
C/F temperature display
12/24hours
Touch screen lockout

TYPICAL INSTALLATION

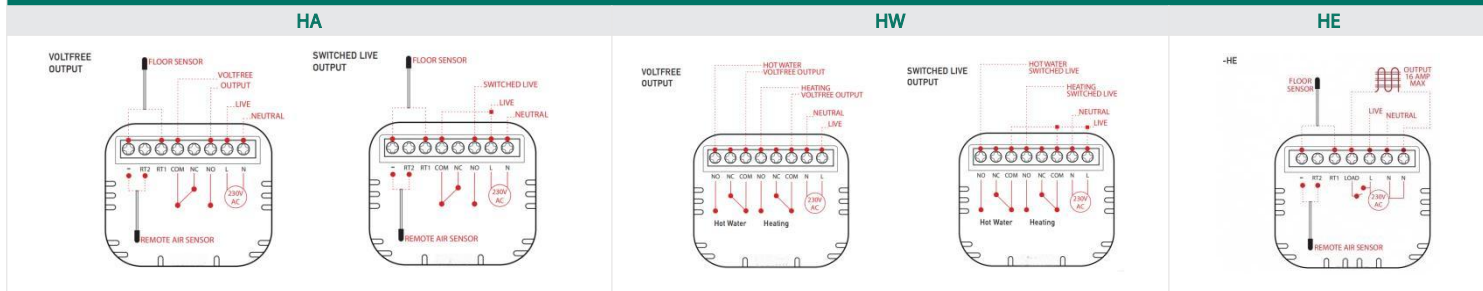


PURPOSE OF CONTROL	
Underfloor water heating	Water floor heating, radiator, boiler, 3A Max
Electric heating	16 amp Max
VOLTAGE	
Supply Voltage	DC12V, AC24V, AC110v, AC230v
TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Range	5 to 60°C, 41 to 122°F
Accuracy	± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/1°F
Displayed Temperature Resolution	0.1°C
External and remote air sensor	Both
HUMIDITY SENSOR	
Sensor	SHT40
Accuracy	1.8%RH
NETWORK INTERFACE -WIRED	
Hardware	2-Wire, RS-485
Software	BACnet® or Modbus
Baud Rate	4800,9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
NETWORK INTERFACE-WIRELESS	
Hardware	WiFi, 2.4G
Software	BACnet IP or Modbus TCP, MQTT, Http
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
Customized MQTT	Broker name or IP; Port; username; pass code; Subscribe/publish topic;
Data Encryption	TLS1.2 or AES
VISUAL INDICATION	
Display	3.5" full colour graphic LCD
User Interface	Capacitive Touchscreen
GENERAL	
Open window function logic	Enable/ disable ; Temperature,interval, duration could be set
PIR sensor	Enable/ disable ; Setback temperature , delay time could be set
Blue tooth communication	1. BLE GATT protocol 2. Modbus data list
BLE PIR sensor option	Communicate to blue tooth PIR sensor
Adaptive Heating	Enable/ disable ; Rate of change temperature could be set
Logo display	1. User could set logo in Boot/standby screen 2. Logo size could be standard or full screen
Firmware OTA update	Update firmware over the WiFi(LAN or WAN)
External sensor	1. Floor probe 2. Remote air sensor
Smart Schedule Type	7days,weekday/weekend,24hours
Schedule Per Day	Up to seven different 4- or 6-event program
Standby Power Consumption	≤0.5 w
Control temperature step	0.5° C (0.5° C,1.0° C,2.0° C,3.0° C option)
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Alexa	Yes
Google Home	Yes
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	24.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	Flush : 105.0 mm H x 86.0 mm W x 12.8 mm D Surface : 105.0 mm H x 86.0 mm W x 31.1 mm D

DIMENSIONS



WIRING DIAGRAM



ORDERING

BC207F-HA-230-W-TUYA-P-M-TCP-PIR-LO868

WORKING SYSTEM	POWER SUPPLY:	COLOUR:	INSTALLATION:	WIFI TYPE:	PROBE SENSOR:	WIRED COMMS:	WIRELESS COMMS:	MOTION SENSOR:	LORAWAN:
HA: Boiler/Radiator/UFH water heating	230 -230VAC;	W -White;	S -surface mounting;	Tuya -SmartLife;	P -with external sensor probe	M -wired Modbus ;	TCP -Modbus TCP;	PIR -with internal Radar PIR sensor ;	LO868 -868mhz;
HE: Electric heating	24 -24VAC;	B -Black;	F -Europe flush mounting;	WiFi -common	NCT10K/3950	BAC -wired BACnet MSTP	IP -BACnet IP	BLPIR -with external BLE PIR sensor	LO915 -915mhz;
HD(RF Wireless): Boiler/Radiator/UFH water	12 -12VDC;			None	None	None	None		LO923 -923mhz;
HW: Heating + HotWater								None	None

ACCESSORIES

WALL PLATE	PROBE SENSOR	BLE PIR SENSOR	STAND

THERMOSTAT- B C 1 0 7 F-HVAC



PRODUCT DESCRIPTION

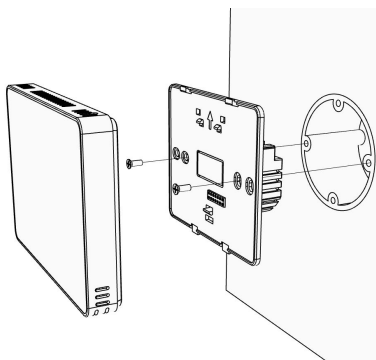
It features a glass panel touchscreen and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction.

Designed for modern homes, it is 230v powered, making it ideal for replacing existing mains-powered thermostats.

MAIN FEATURE

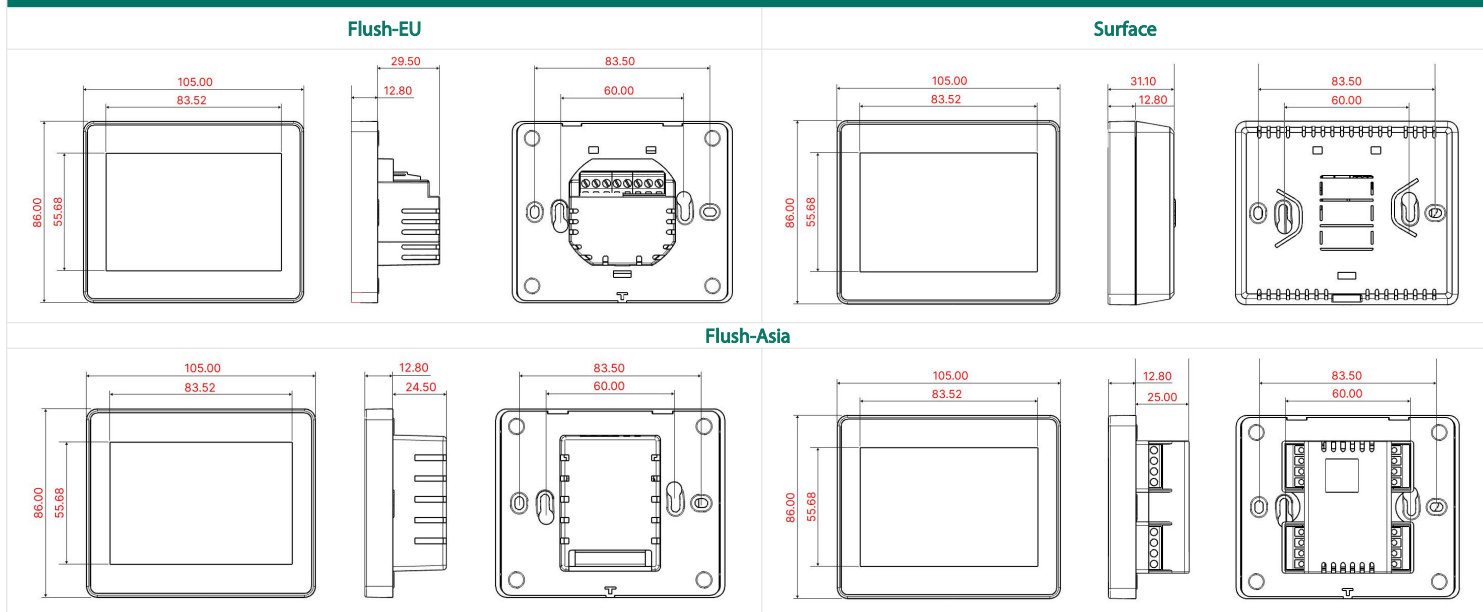
4.0" TFT real color touchscreen
Humidity sensor, Ambient light sensor
Wi-Fi connective(Optional)
SmartLife App(Optional)
SmartLife Zigbee(Optional)
LoRaWAN 868mhz/915mhz(Optional)
BACnet MSTP/IP(Optional)
Modbus 485 RTU,TCP(Optional)
BLE 5.0 (Optional)
Customized MQTT(Optional)
3 speed on/off,0-10VDC fan control
On/OFF,0-10VDC valve control
7day,weekday/weekend,24hours schedule
History data tracking diagram(up to 4 weeks)
3 inputs Keycard, Occupy,Window Open
External sensor(control AC or Fan)
Defrost protection
Auto season changeover
Multi language(9languages)
C/F temperature display
12/24hours
Touch screen lockout

TYPICAL INSTALLATION

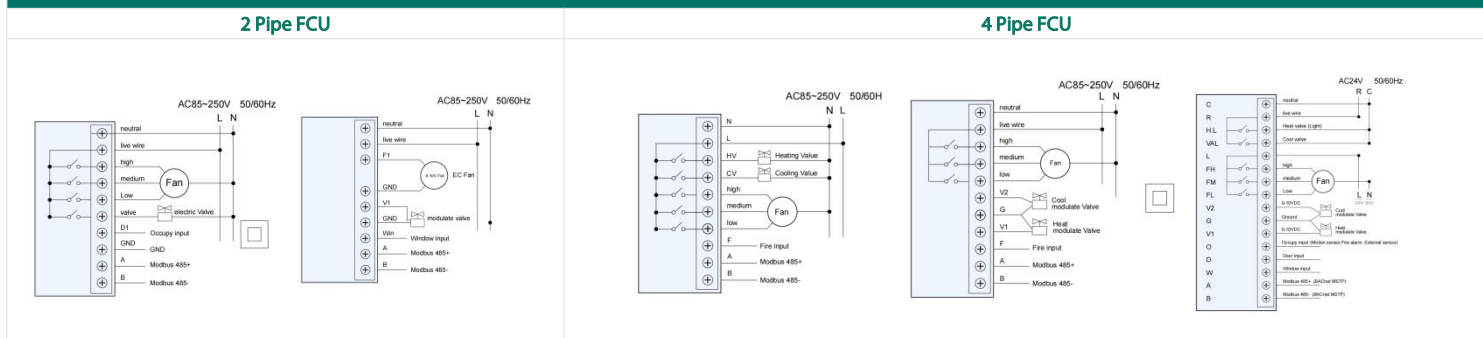


PURPOSE OF CONTROL	
2 Pipe fan coil system	3 speed or EC fan ; on/off or 0-10vdc valve;
2 Pipe fan coil + Heat system	3 speed or EC fan;on/off or 0-10vdc valve;5A heat output
4 Pipe fan coil system	3 speed or EC fan ; on/off or 0-10vdc valve;
DX AC system	2 stage cool, 1 stage heat, 3 speed fan.
Heat Pump system	Up to 3H-2C, Gas,Electric,Heat Pump,Fossil Fuel
VOLTAGE	
Supply Voltage	DC12V, AC24V, AC110v, AC230v
Fan Relay Rating	230VAC @5 Amp maximum per relay
Valve Output	230VAC @5 Amp maximum per relay
INTERNAL TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Range & Accuracy	5 to 60°C, 41 to 122°F;± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/1°F
EXTERNAL TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Function	Enable/Disable; Replacing internal sensor to control AC or Fan .
HUMIDITY SENSOR	
Sensor part number	SHT40
Accuracy	1.8%RH
NETWORK INTERFACE -WIRED	
Hardware	MS/TP, 2-Wire, RS-485
Software	BACnet® or Modbus
Baud Rate	4800,9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
NETWORK INTERFACE-WIRELESS	
Hardware	WiFi
Software	BACnet IP or Modbus TCP, MQTT, Http
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
Customized MQTT	Broker IP; Port; username; pass code; Subscribe/publish topic;
Data Encryption	TLS1.2 or AES
VISUAL INDICATION	
Display	4.0" full colour graphic LCD
User Interface	Capacitive Touchscreen
GENERAL	
Water pipe sensor logic	1. Exist in 2/4 pipe FCU system 2. Turn on/off fan as pipe sensor temperature set-point 3. User can set the water pipe set-point
Dehumidify	Enable/ disable ;The dehumidify setpoint could be set;
Auto season changeover	Enable/ disable ;Heating temp, Cooling temp settings ;
Control temperature step	0.5° C (0.5° C,1.0° C,2.0° C,3.0° C option)
PIR sensor	Enable/ disable ;Setback temperature , delay time settings ;
Work mode	1. Heat, Cool, Vent, Dehumidify, auto, Off 2. User can set which work mode is enabled/disabled
Blue tooth communication	BLE GATT protocol ;Modbus data list
BLE PIR sensor option	Communicate to blue tooth PIR sensor
Logo display	3. User could set logo in Boot/standby screen 4. Logo size could be standard or full screen
Firmware OTA update	Update firmware over the WiFi(LAN or WAN)
Input	Input1 : Key Card Input2 : Occupy, fire alarm, external sensor Input3 : Windows open
Smart Schedule Type	7days,weekday/weekend,24hours
Apple Alexa	Yes
Google Home	Yes
Standby Power Consumption	≤0.5 w
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	24.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	Flush : 105.0 mm H x 86.0 mm W x 12.8 mm D Surface : 105.0 mm H x 86.0 mm W x 31.1 mm D

DIMENSIONS



WIRING DIAGRAM



ORDERING

BC107F-2FCU-230-W-TUYA-KC-M-TCP-PIR-LO868

WORKING SYSTEM: 2FCU: 2 pipe Fan coil 4FCU: 4 pipe Fan coil	POWER SUPPLY: 230 -230VAC; 24 -24VAC; 12 -12VDC;	COLOUR: W -White; B -Black;	INSTALLATION: S -surface mounting; F -Europe flush mounting;	WIFI TYPE: Tuya -SmartLife WiFi -common WiFi None -	INPUT: P -external sensor KC -key card; OF -Occupancy/Fire; WO -WindowOpen None -	WIRED COMMS: M -wired Modbus ; BAC -wired BACnet MSTP None -	WIRELESS COMMS: TCP -Modbus TCP; IP -BACnet IP None -	MOTION SENSOR: PIR -with internal Radar PIR sensor ; BLPIR -with external BLE PIR sensor None -	LORAWAN: LO868 -868mhz; LO915 -915mhz; LO923 -923mhz; None -
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ACCESSORIES

WALL PLATE	PROBE SENSOR	BLE PIR SENSOR

THERMOSTAT- B C 2 0 7 -Heating



PRODUCT DESCRIPTION

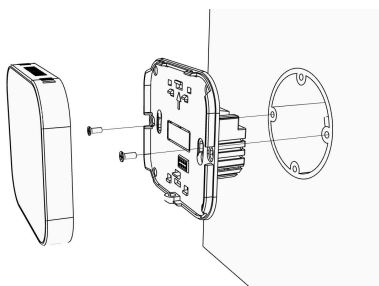
The B C 2 0 7 combines aesthetics with advanced functionality. It features a glass panel touchscreen and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction.

Designed for modern homes, the 2 0 7 is 230v powered, making it ideal for replacing existing mains-powered thermostats. For electric floor heating systems, the BC207-HE models offer precise control. They can handle up to 16A, making them perfect for electric heating systems; for the underfloor water heating system the B C 2 0 7 -HA model offer both dry contact or live output to control the boiler and radiators. For the heating and hotwater system B C 2 0 7 -HW model could deal with it .

MAIN FEATURE

- 3.5" TFT real color touchscreen
- Humidity sensor, Ambient light sensor
- Wi-Fi connective(Optional)
- SmartLife App(Optional)
- SmartLife Zigbee(Optional)
- LoRaWAN 868mhz/915mhz(Optional)
- BACnet MSTP/IP(Optional)
- Modbus 485 RTU,TCP(Optional)
- BLE 5.0 (Option)
- Customized MQTT(Optional)
- 3A relay output for heating and hot water
- 7day,weekday/weekend,24hours schedule
- History data tracking diagram(up to 4 weeks)
- External probe and remote air sensor
- Energy consumption statics
- Defrost protection
- Adaptive Heating
- Open Window function
- RF wireless(work with RF receiver or wiring centre)
- C/F temperature display
- 12/24hours
- Touch screen lockout

TYPICAL INSTALLATION



PURPOSE OF CONTROL	
Underfloor water heating	Water floor heating, radiator, boiler, 3A Max
Electric heating	16 amp Max
VOLTAGE	
Supply Voltage	DC12V, AC24V, AC110v, AC230v
TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Range	5 to 60°C, 41 to 122°F
Accuracy	± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/1°F
Displayed Temperature Resolution	0.1°C
External and remote air sensor	Both
HUMIDITY SENSOR	
Sensor	SHT40
Accuracy	1.8%RH
NETWORK INTERFACE -WIRED	
Hardware	2-Wire, RS-485
Software	BACnet® or Modbus
Baud Rate	4800,9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
NETWORK INTERFACE-WIRELESS	
Hardware	WiFi, 2.4G
Software	BACnet IP or Modbus TCP, MQTT, Http
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
Customized MQTT	Broker name or IP; Port; username; pass code; Subscribe/publish topic;
Data Encryption	TLS1.2 or AES
VISUAL INDICATION	
Display	3.5" full colour graphic LCD
User Interface	Capacitive Touchscreen
GENERAL	
Open window function logic	Enable/ disable ; Temperature, interval, duration could be set
PIR sensor	Enable/ disable ; Setback temperature , delay time could be set
Blue tooth communication	3. BLE GATT protocol 4. Modbus data list
BLE PIR sensor option	Communicate to blue tooth PIR sensor
Adaptive Heating	Enable/ disable ; Rate of change temperature could be set
Logo display	5. User could set logo in Boot/standby screen 6. Logo size could be standard or full screen
Firmware OTA update	Update firmware over the WiFi(LAN or WAN)
External sensor	3. Floor probe 4. Remote air sensor
Smart Schedule Type	7days,weekday/weekend,24hours
Schedule Per Day	Up to seven different 4- or 6-event program
Standby Power Consumption	≤0.5 w
Control temperature step	0.5° C (0.5° C, 1.0° C, 2.0° C, 3.0° C option)
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Alexa	Yes
Google Home	Yes
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	24.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	Flush : 96.0 mm H x 86.0 mm W x 13.8 mm D Surface : 96.0 mm H x 86.0 mm W x 32.5 mm D

DIMENSIONS

Flush-EU	Surface	Flush-Asia	Table

WIRING DIAGRAM

The diagrams illustrate the wiring for three models: HA, HW, and HE. Each model has two main output configurations: Voltage Free Output and Switched Live Output.

- HA Model:**
 - Voltage Free Output:** The terminal block has pins RT, RT1, COM, NC, NO, and N. The 230V AC supply is connected to RT and RT1. The output is connected to the NO pin.
 - MC6-HA Switched Live Output:** The terminal block has pins RT, RT1, COM, NC, NO, and N. The 230V AC supply is connected to RT and RT1. The output is connected to the NO pin.
- HW Model:**
 - Voltage Free Output:** The terminal block has pins NO, NC, COM, NO, NC, COM, N, and L. The 230V AC supply is connected to NO and NC. The output is connected to the COM pin.
 - Switched Live Output:** The terminal block has pins NO, NC, COM, NO, NC, COM, N, and L. The 230V AC supply is connected to NO and NC. The output is connected to the COM pin.
- HE Model:**
 - Voltage Free Output:** The terminal block has pins RT, RT1, COM, NO, NC, COM, N, and L. The 230V AC supply is connected to RT and RT1. The output is connected to the NO pin.
 - Switched Live Output:** The terminal block has pins RT, RT1, COM, NO, NC, COM, N, and L. The 230V AC supply is connected to RT and RT1. The output is connected to the NO pin.

ORDERING

BC207-HA-230-W-TUYA-P-M-TCP-PIR-LO868

WORKING SYSTEM	POWER SUPPLY:	COLOUR	INSTALLATION:	WIFI TYPE:	PROBE SENSOR:	WIRED COMMS:	WIRELESS COMMS:	MOTION SENSOR:	LORAWAN:
HA: Boiler/Radiator/UHF water heating HE: Electric heating HD(RF Wireless): Boiler/Radiator/UHF water HW: Heating + HotWater	230 -230VAC; 24 -24VAC; 12 -12VDC;	W- White; B- Black;	S- surface mounting; F- Europe flush mounting;	Tuya- SmartLife; WiFi- common WiFi None-	P- with external sensor probe NCT10K/3950 None-	M- wired Modbus ; BAC- wired BACnet MSTP None-	TCP- Modbus TCP; IP- BACnet IP None-	PIR- with internal Radar PIR sensor ; BLPIR- with external BLE PIR sensor None-	LO868- 868mhz; LO915- 915mhz; LO923- 923mhz; None-

ACCESSORIES

WALL PLATE	PROBE SENSOR	BLE PIR SENSOR	STAND
			

THERMOSTAT- B C 1 0 7 -HVAC



PRODUCT DESCRIPTION

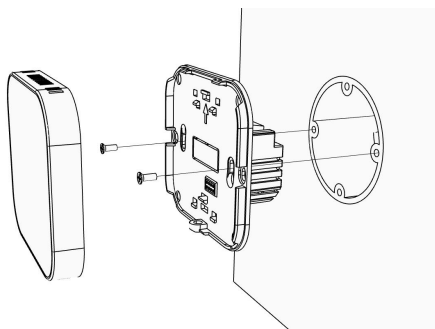
The B C 1 0 7 combines aesthetics with advanced functionality. It features a glass panel touchscreen and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction.

Designed for modern homes, the B C 1 0 7 is 230v powered, making it ideal for replacing existing mains-powered thermostats.

MAIN FEATURE

3.5" TFT real color touchscreen
 Humidity sensor, Ambient light sensor
 Wi-Fi connective(Optional)
 SmartLife App(Optional)
 SmartLife Zigbee(Optional)
 LoRaWAN 868mhz/915mhz(Optional)
 BACnet MSTP/IP(Optional)
 Modbus 485 RTU,TCP(Optional)
 BLE 5.0 (Optional)
 Customized MQTT(Optional)
 3 speed on/off,0-10VDC fan control
 On/OFF,0-10VDC valve control
 7day,weekday/weekend,24hours schedule
 History data tracking diagram(up to 4 weeks)
 3 inputs Keycard, Occupy,Window Open
 External sensor(control AC or Fan)
 Defrost protection
 Auto season changeover
 Multi language(9languages)
 C/F temperature display
 12/24hours
 Touch screen lockout

TYPICAL INSTALLATION



PURPOSE OF CONTROL	
2 Pipe fan coil system	3 speed or EC fan ; on/off or 0-10vdc valve;
2 Pipe fan coil + Heat system	3 speed or EC fan;on/off or 0-10vdc valve;5A heat output
4 Pipe fan coil system	3 speed or EC fan ; on/off or 0-10vdc valve;
DX AC system	2 stage cool, 1 stage heat, 3 speed fan.
Heat Pump system	Up to 3H-2C, Gas,Electric,Heat Pump,Fossil Fuel
VOLTAGE	
Supply Voltage	DC12V, AC24V, AC110v, AC230v
Fan Relay Rating	230VAC @5 Amp maximum per relay
Valve Output	230VAC @5 Amp maximum per relay
INTERNAL TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Range & Accuracy	5 to 60°C, 41 to 122°F,± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/1°F
EXTERNAL TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Function	Enable/Disable; Repalcing internal sensor to control AC or Fan .
HUMIDITY SENSOR	
Sensor part number	SHT40
Accuracy	1.8%RH
NETWORK INTERFACE -WIRED	
Hardware	MS/TP, 2-Wire, RS-485
Software	BACnet® or Modbus
Baud Rate	4800,9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
NETWORK INTERFACE-WIRELESS	
Hardware	WiFi
Software	BACnet IP or Modbus TCP, MQTT, Http
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
Customized MQTT	Broker IP; Port; username; pass code; Subscribe/publish topic;
Data Encryption	TLS1.2 or AES
VISUAL INDICATION	
Display	3.5" full colour graphic LCD
User Interface	Capacitive Touchscreen
GENERAL	
Water pipe sensor logic	4. Exist in 2 pipe FCU system 5. Turn on/off fan as pipe sensor temperature set-point 6. User can set the water pipe set-point
Dehumidify	Enable/ disable ;The dehumidify setpoint could be set;
Auto season changeover	Enable/ disable ;Heating temp, Cooling temp settings ;
Control temperature step	0.5° C (0.5° C,1.0° C,2.0° C,3.0° C option)
PIR sensor	Enable/ disable ;Setback temperature , delay time settings ;
Work mode	3. Heat, Cool, Vent, Dehumidify, auto, Off 4. User can set which work mode is enabled/disabled
Blue tooth communication	BLE GATT protocol ;Modbus data list
BLE PIR sensor option	Communicate to blue tooth PIR sensor
Logo display	7. User could set logo in Boot/standby screen 8. Logo size could be standard or full screen
Firmware OTA update	Update firmware over the WiFi(LAN or WAN)
Input	Input1 : Key Card Input2 : Occupy, fire alarm, external sensor Input3 : Windows open
Smart Schedule Type	7days,weekday/weekend,24hours
Apple Alexa	Yes
Google Home	Yes
Standby Power Consumption	≤0.5 w
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	24.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	Flush type: 96.0 mm H x 86.0 mm W x 13.8 mm D Surface type: 96.0 mm H x 86.0 mm W x 32.5 mm D

DIMENSIONS

Flush-EU	Surface	Flush-Asia

WIRING DIAGRAM

2/4 Pipe FCU	DX	Heat Pump

ORDERING

BC107-2FCU-230-W-TUYA-KC-M-TCP-PIR-LO868

WORKING SYSTEM: 2FCU: 2 pipe Fan coil 4FCU: 4 pipe Fan coil DX: Direct expansion AC U: Heat pump AC	POWER SUPPLY: 230 -230VAC; 24 -24VAC; 12 -12VDC;	COLOR: W -White; B -Black;	INSTALLATION: S -surface mounting; F -Europe flush mounting;	WIFI TYPE: Tuya -SmartLife WiFi -common WiFi None	INPUT: P -external sensor KC -key card; OF -Occupancy/Fire; WO -WindowOpen None	WIRED COMMS: M -wired Modbus ; BAC -wired BACnet MSTP None	WIRELESS COMMS: TCP -Modbus TCP; IP -BACnet IP None	MOTION SENSOR: PIR -with internal Radar PIR sensor ; BLPIR -with external BLE PIR sensor None	LORAWAN: LO868 - 868mhz; LO915 - 915mhz; LO923 - 923mhz; None
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ACCESSORIES

WALL PLATE	PROBE SENSOR	BLE PIR SENSOR

THERMOSTAT- B C 5 0 7 F-HP



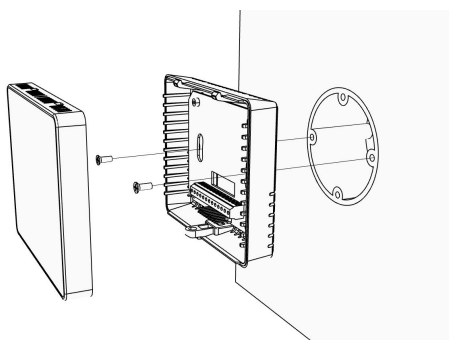
PRODUCT DESCRIPTION

The B C 5 0 7 F-HP combines aesthetics with advanced functionality. It features a glass panel touchscreen and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction. Designed for modern homes, the Falcon-HP is 24v powered, making it ideal for replacing existing mains-powered thermostats.

MAIN FEATURE

4.0" TFT real color touchscreen
Up to 3H/2C, Gas / Electric / Heat Pump / Fossil Fuel /Conventional system
Humidity sensor, Ambient light sensor
Wi-Fi connective(Optional)
SmartLife App(Optional)
LoRaWAN 868mhz/915mhz(Optional)
BACnet MSTP/IP(Optional)
Modbus 485 RTU,TCP(Optional)
BLE 5.0 (Optional)
Customized MQTT(Optional)
7day,weekday/weekend,24hours schedule
History data tracking diagram(up to 4 weeks)
External sensor
Defrost protection
Auto season changeover
Multi language(9languages)
C/F temperature display
12/24hours
Touch screen lockout

TYPICAL INSTALLATION



PURPOSE OF CONTROL

Heat Pump system	Up to 3H/2C, Gas / Electric / Heat Pump / Fossil Fuel /Conventional system
------------------	--

VOLTAGE

Supply Voltage	AC24V, 110VAC
Relay Rating	1 Amp maximum per relay

INTERNAL TEMPERATURE SENSOR

Type	NTC 10K, B = 3950
Range & Accuracy	5 to 60°C, 41 to 122°F, ± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/1°F

EXTERNAL TEMPERATURE SENSOR

Type	NTC 10K, B = 3950
Function	Enable/Disable; Replacing internal sensor

HUMIDITY SENSOR

Sensor part number	SHT40
Accuracy	1.8%RH

NETWORK INTERFACE -WIRED

Hardware	MS/TP, 2-Wire, RS-485
Software	BACnet® or Modbus
Baud Rate	4800,9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127

NETWORK INTERFACE-WIRELESS

Hardware	WiFi
Software	BACnet IP or Modbus TCP, MQTT, Http
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
Customized MQTT	Broker IP; Port; username; pass code; Subscribe/publish topic;
Data Encryption	TLS1.2 or AES

VISUAL INDICATION

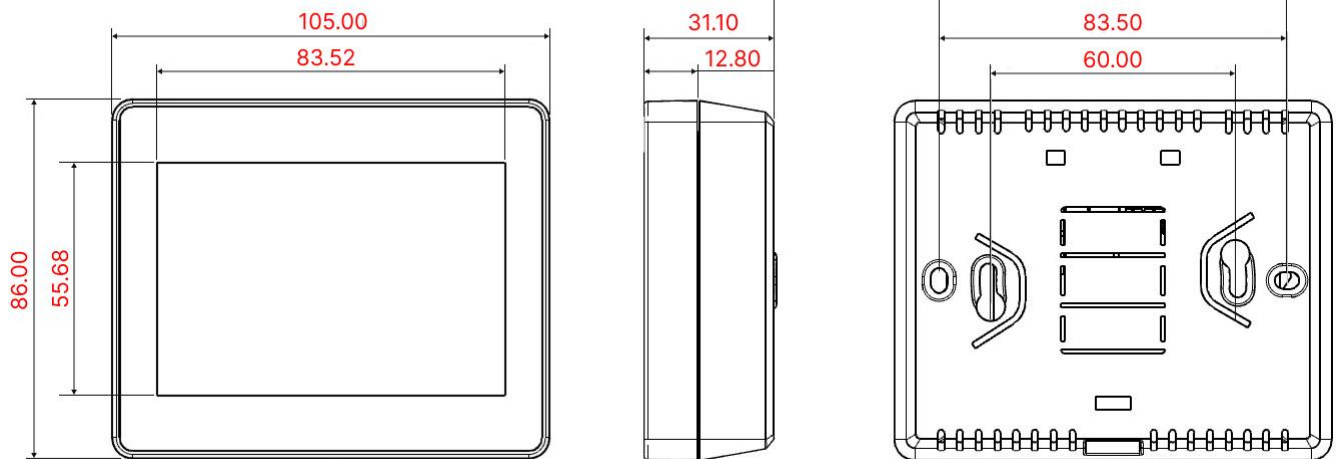
Display	4.0" full colour graphic LCD
User Interface	Capacitive Touchscreen

GENERAL

Control temperature step	0.5° C (0.5° C, 1.0° C, 2.0° C, 3.0° C option)
PIR sensor	Enable/ disable ; Setback temperature , delay time settings ;
Work mode	5. Heat, Cool, Auto, Off 6. User can set which work mode is enabled/disabled
Blue tooth communication	BLE GATT protocol ;Modbus data list
BLE PIR sensor option	Communicate to blue tooth PIR sensor
Logo display	9. User could set logo in Boot/standby screen 10. Logo size could be standard or full screen
Firmware OTA update	Update firmware over the WiFi(LAN or WAN)
Input	Input1 Occupy; Input2 : External sensor
Smart Schedule Type	7days,weekday/weekend,24hours
Apple Alexa	Yes
Google Home	Yes
Standby Power Consumption	≤0.5 w
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	24.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	105.0 mm H x 86.0 mm W x 31.1 mm D

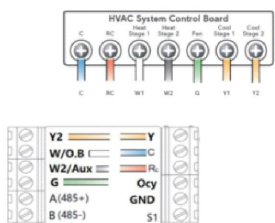
DIMENSIONS

Surface mounting

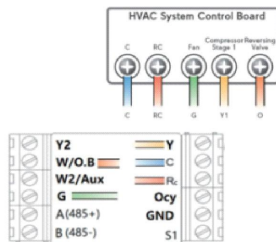


WIRING DIAGRAM

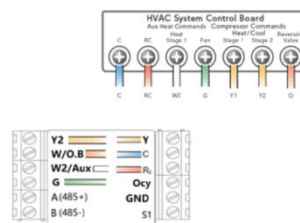
Dual-Stage Heat and Dual Stage AC



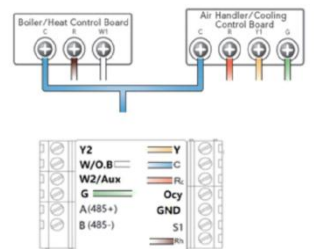
Heat Pump



Dual-Stage Heat Pump with Auxiliary Heat



Traditional AC with dual transformers



ORDERING

BC507F-HP-W-TUYA-LO915

COLOUR:

W-White;

B-Black;

WIFI TYPE:

Tuya-SmartLife

WIFI-common WiFi, MQTT

None-

LORAWAN:

LO868- 868mhz;

LO915- 915mhz;

LO923- 923mhz;

None-

ACCESSORIES

WALL PLATE



PROBE SENSOR



BLE PIR SENSOR



THERMOSTAT- B C 5 0 7



PRODUCT DESCRIPTION

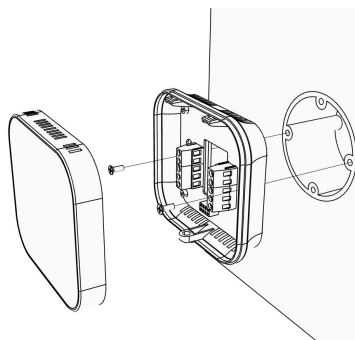
The B C 5 0 7 combines aesthetics with advanced functionality. It features a glass panel touchscreen and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction.

Designed for modern homes, the B C 5 0 7 is 24v powered, making it ideal for replacing existing mains-powered thermostats.

MAIN FEATURE

- 3.5" TFT real color touchscreen
- Up to 3H/2C, Gas / Electric / Heat Pump / Fossil Fuel /Conventional system
- Humidity sensor, Ambient light sensor
- Wi-Fi connective(Optional)
- SmartLife App(Optional)
- LoRaWAN 868mhz/915mhz(Optional)
- BACnet MSTP/IP(Optional)
- Modbus 485 RTU,TCP(Optional)
- BLE 5.0 (Optional)
- Customized MQTT(Optional)
- 7day,weekday/weekend,24hours schedule
- History data tracking diagram(up to 4 weeks)
- External sensor
- Defrost protection
- Auto season changeover
- Multi language(9languages)
- C/F temperature display
- 12/24hours
- Touch screen lockout

TYPICAL INSTALLATION

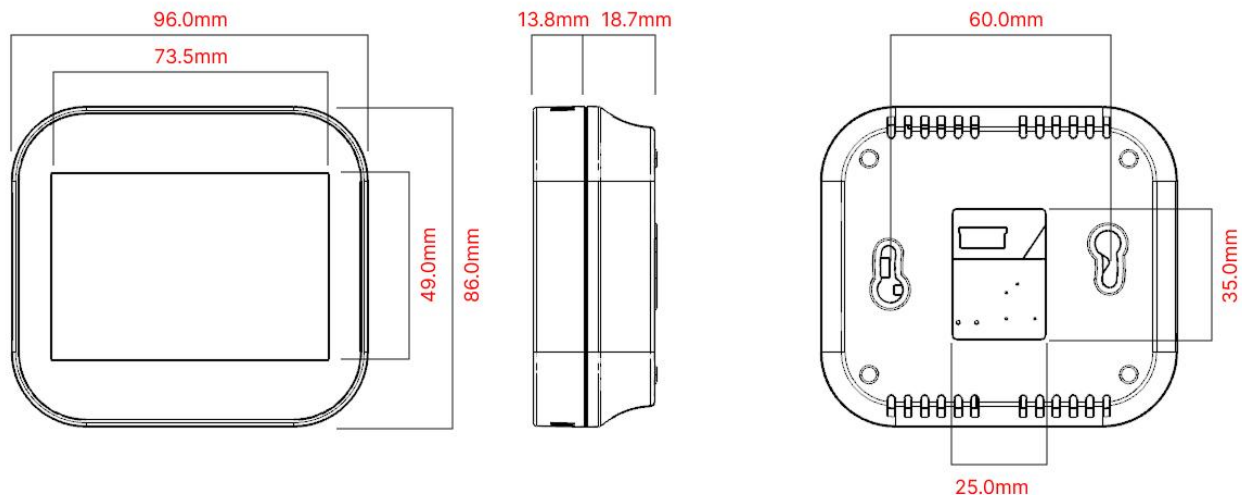


PURPOSE OF CONTROL

Heat Pump system	Up to 3H/2C, Gas / Electric / Heat Pump / Fossil Fuel /Conventional system
VOLTAGE	
Supply Voltage	AC24V, AC110v
Relay Rating	1 Amp maximum per relay
INTERNAL TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Range & Accuracy	5 to 60°C, 41 to 122°F,± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/1°F
EXTERNAL TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Function	Enable/Disable; Replacing internal sensor
HUMIDITY SENSOR	
Sensor part number	SHT40
Accuracy	1.8%RH
NETWORK INTERFACE -WIRED	
Hardware	MS/TP, 2-Wire, RS-485
Software	BACnet® or Modbus
Baud Rate	4800,9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
NETWORK INTERFACE-WIRELESS	
Hardware	WiFi
Software	BACnet IP or Modbus TCP, MQTT, Http
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
Customized MQTT	Broker IP; Port; username; pass code; Subscribe/publish topic;
Data Encryption	TLS1.2 or AES
VISUAL INDICATION	
Display	3.5" full colour graphic LCD
User Interface	Capacitive Touchscreen
GENERAL	
Control temperature step	0.5° C (0.5° C, 1.0° C, 2.0° C, 3.0° C option)
PIR sensor	Enable/ disable ; Setback temperature , delay time settings ;
Work mode	7. Heat, Cool, Auto, Off 8. User can set which work mode is enabled/disabled
Blue tooth communication	BLE GATT protocol ;Modbus data list
BLE PIR sensor option	Communicate to blue tooth PIR sensor
Logo display	11. User could set logo in Boot/standby screen 12. Logo size could be standard or full screen
Firmware OTA update	Update firmware over the WiFi(LAN or WAN)
Input	Input1 Occupy; Input2 : External sensor
Smart Schedule Type	7days,weekday/weekend,24hours
Apple Alexa	Yes
Google Home	Yes
Standby Power Consumption	≤0.5 w
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	32.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	96.0 mm H x 86.0 mm W x 32.5 mm D

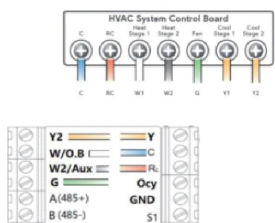
DIMENSIONS

Surface mounting

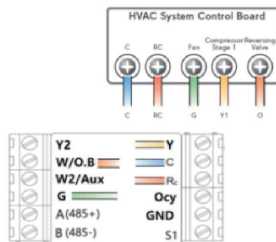


WIRING DIAGRAM

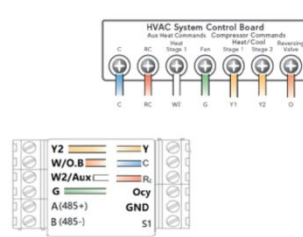
Dual-Stage Heat and Dual Stage AC



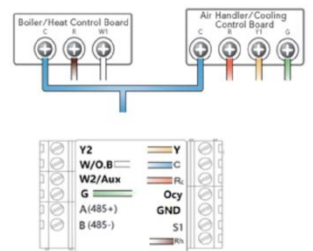
Heat Pump



Dual-Stage Heat Pump with Auxiliary Heat



Traditional AC with dual transformers



ORDERING

BC507-W-TUYA-LO915

COLOUR:

W-White;

B-Black;

WIFI TYPE:

Tuya-SmartLife

WIFI-common WiFi, MQTT

None-

LORAWAN:

LO868- 868mhz;

LO915- 915mhz;

LO923- 923mhz;

None-

ACCESSORIES

WALL PLATE



PROBE SENSOR



BLE PIR SENSOR



THERMOSTAT- B C35-Heating



PRODUCT DESCRIPTION

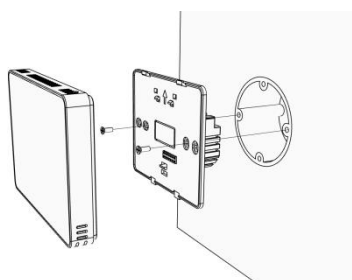
The B C35 combines aesthetics with advanced functionality. It features a glass panel touchscreen and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction.

Designed for modern homes, the B C35 is 230v powered, making it ideal for replacing existing mains-powered thermostats. For electric floor heating systems, the B C35-HE models offer precise control. They can handle up to 16A, making them perfect for electric heating systems; for the underfloor water heating system the B C35-HA model offer both dry contact or live output to control the boiler and radiators. For the heating and hotwater system B C35-HW model could deal with it .

MAIN FEATURE

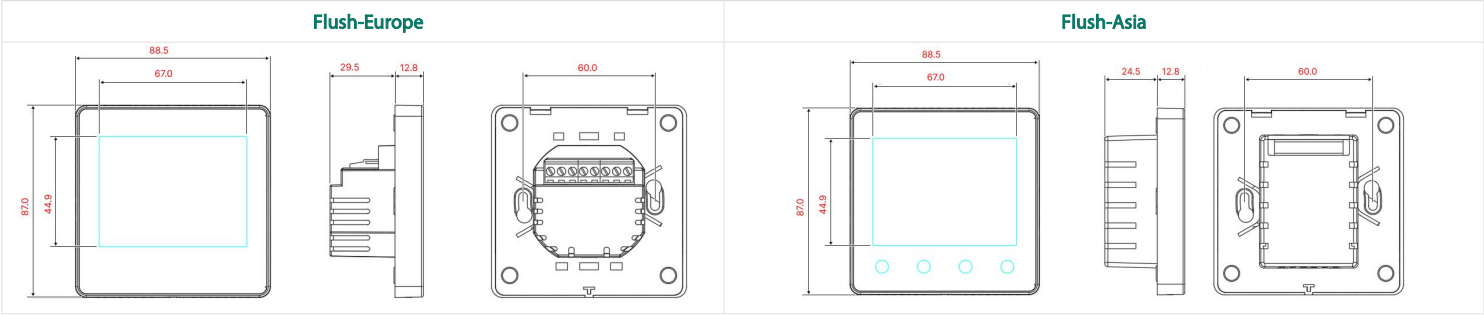
- 3.2" TFT real color touchscreen
- Humidity sensor, Ambient light sensor
- Wi-Fi connective(Optional)
- SmartLife App(Optional)
- SmartLife Zigbee(Optional)
- LoRaWAN 868mhz/915mhz(Optional)
- BACnet MSTP/IP(Optional)
- Modbus 485 RTU,TCP(Optional)
- Customized MQTT(Optional)
- 3A relay output for heating
- 7day,weekday/weekend,24hours schedule
- History data tracking diagram(up to 4 weeks)
- External probe and remote air sensor
- Energy consumption statics
- Defrost protection
- Adaptive Heating
- Open Window function
- C/F temperature display
- 12/24hours
- Touch screen lockout

TYPICAL INSTALLATION

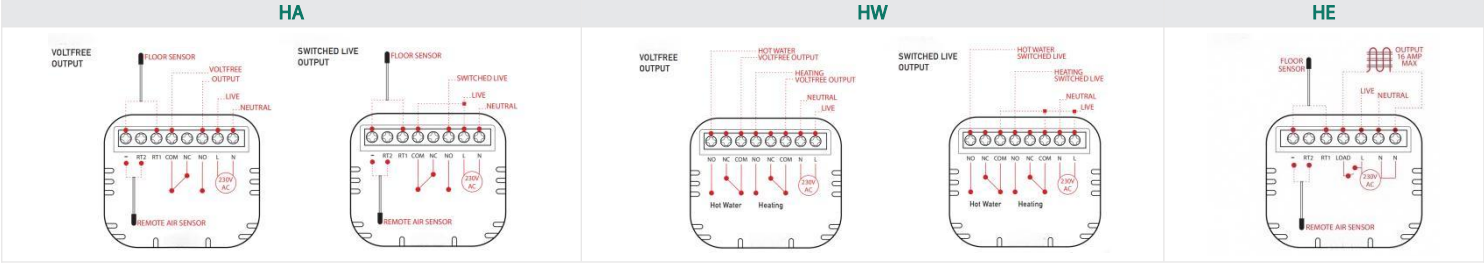


PURPOSE OF CONTROL	
Underfloor water heating	Water floor heating, radiator, boiler, 3A Max
Electric heating	16 amp Max
VOLTAGE	
Supply Voltage	DC12V, AC24V, AC110v, AC230v
TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Range	5 to 60°C, 41 to 122°F
Accuracy	± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/1°F
Displayed Temperature Resolution	0.1°C
External and remote air sensor	Both
HUMIDITY SENSOR	
Sensor	SHT40
Accuracy	1.8%RH
NETWORK INTERFACE -WIRED	
Hardware	2-Wire, RS-485
Software	BACnet® or Modbus
Baud Rate	4800,9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
NETWORK INTERFACE-WIRELESS	
Hardware	WiFi, 2.4G
Software	BACnet IP or Modbus TCP, MQTT, Http
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
Customized MQTT	Broker name or IP; Port; username; pass code; Subscribe/publish topic;
Data Encryption	TLS1.2 or AES
VISUAL INDICATION	
Display	3.2" full colour graphic LCD
User Interface	Capacitive Touchscreen
GENERAL	
Open window function logic	Enable/ disable ; Temperature, interval, duration could be set
Adaptive Heating	Enable/ disable ; Rate of change temperature could be set
Logo display	13. User could set logo in Boot/standby screen 14. Logo size could be standard or full screen
Firmware OTA update	Update firmware over the WiFi(LAN or WAN)
External sensor	5. Floor probe 6. Remote air sensor
Smart Schedule Type	7days,weekday/weekend,24hours
Schedule Per Day	Up to seven different 4- or 6-event program
Standby Power Consumption	≤0.5 w
Control temperature step	0.5° C (0.5° C, 1.0° C, 2.0° C, 3.0° C option)
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Alexa	Yes
Google Home	Yes
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	24.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	Flush : 88.5 mm H x 87.0 mm W x 12.8 mm D
Warranty	5 years

DIMENSIONS



WIRING DIAGRAM



ORDERING

BC35-HA-230-W-TUYA-P-M-TCP-PIR-LO868

WORKING SYSTEM HA: Boiler/Radiator/U FH water heating HE: Electric heating HD(RF Wireless): Boiler/ Radiator/U FH water HW: Heating + HotWater	POWER SUPPLY: 230 -230VAC; 24 -24VAC; 12 -12VDC;	COLOUR W -White; B -Black;	INSTALLATION: S -surface mounting; F -Europe flush mounting;	WIFI TYPE: Tuya -SmartLife; WIFI -common WiFi None -	PROBE SENSOR: P -with external sensor probe NCT10K/3950 None -	WIRED COMMS: M -wired Modbus ; BAC -wired BACnet MSTP None -	WIRELESS COMMS: TCP -Modbus TCP; IP -BACnet IP None -	MOTION SENSOR: PIR -with internal Radar PIR sensor ; BLPIR -with external BLE PIR sensor None -	LORAWAN: LO868 - 868mhz; LO915 - 915mhz; LO923 - 923mhz; None -
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ACCESSORIES

WALL PLATE	PROBE SENSOR	STAND

THERMOSTAT- B C35-HVAC



PRODUCT DESCRIPTION

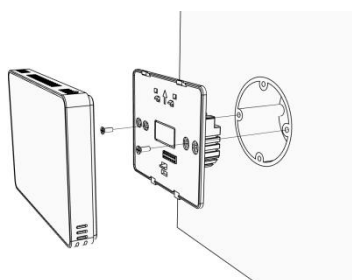
The B C35 combines aesthetics with advanced functionality. It features a glass panel touchscreen and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction.

Designed for modern homes, the B C35 is 230v powered, making it ideal for replacing existing mains-powered thermostats.

MAIN FEATURE

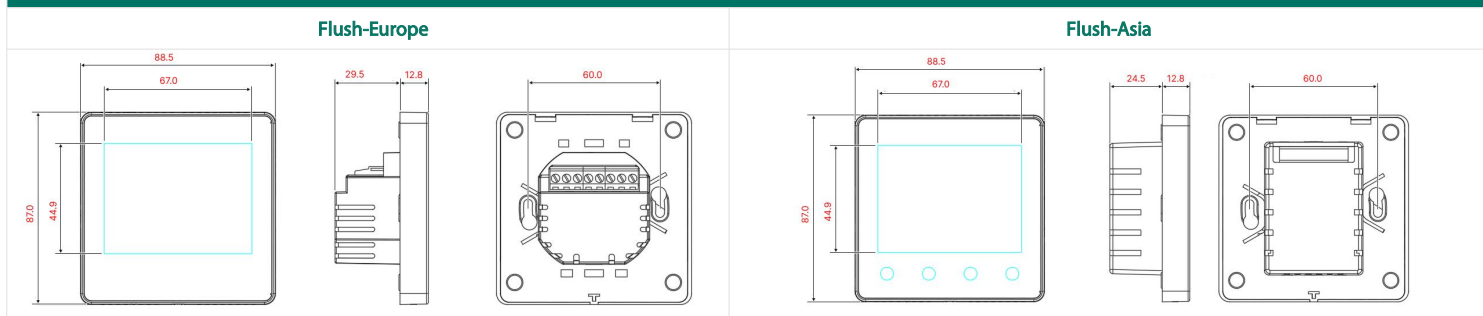
- 3.2" TFT real color touchscreen
- Humidity sensor, Ambient light sensor
- Wi-Fi connective(Optional)
- SmartLife App(Optional)
- SmartLife Zigbee(Optional)
- LoRaWAN 868mhz/915mhz(Optional)
- BACnet MSTP/IP(Optional)
- Modbus 485 RTU,TCP(Optional)
- Customized MQTT(Optional)
- 3 speed on/off,0-10VDC fan control
- On/OFF,0-10VDC valve control
- 7day,weekday/weekend,24hours schedule
- History data tracking diagram(up to 4 weeks)
- 3 inputs Keycard, Occupy,Window Open
- External sensor(control AC or Fan)
- Defrost protection
- Auto season changeover
- Multi language(9languages)
- C/F temperature display
- 12/24hours
- Touch screen lockout

TYPICAL INSTALLATION

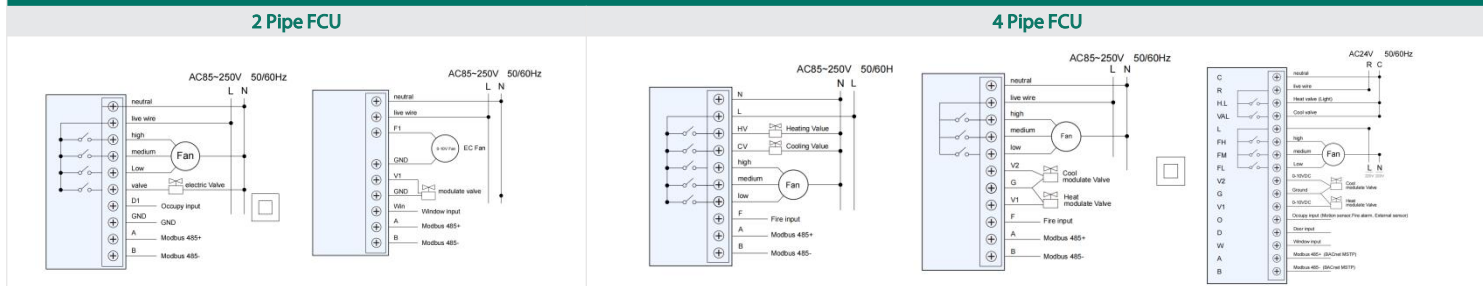


PURPOSE OF CONTROL	
Underfloor water heating	Water floor heating, radiator, boiler, 3A Max
Electric heating	16 amp Max
VOLTAGE	
Supply Voltage	DC12V, AC24V, AC110v, AC230v
TEMPERATURE SENSOR	
Type	NTC 10K, B = 3950
Range	5 to 60°C, 41 to 122°F
Accuracy	± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/1°F
Displayed Temperature Resolution	0.1°C
External and remote air sensor	Both
HUMIDITY SENSOR	
Sensor	SHT40
Accuracy	1.8%RH
NETWORK INTERFACE -WIRED	
Hardware	2-Wire, RS-485
Software	BACnet® or Modbus
Baud Rate	4800,9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
NETWORK INTERFACE-WIRELESS	
Hardware	WiFi, 2.4G
Software	BACnet IP or Modbus TCP, MQTT, Http
Address Range	BACnet®: 0 - 127, Modbus: 1 - 127
Customized MQTT	Broker name or IP; Port; username; pass code; Subscribe/publish topic;
Data Encryption	TLS1.2 or AES
VISUAL INDICATION	
Display	3.2" full colour graphic LCD
User Interface	Capacitive Touchscreen
GENERAL	
Water pipe sensor logic	7. Exist in 2/4 pipe FCU system 8. Turn on/off fan as pipe sensor temperature set-point 9. User can set the water pipe set-point
Dehumidify	Enable/ disable ;The dehumidify setpoint could be set;
Control temperature step	0.5° C (0.5° C,1.0° C,2.0° C,3.0° C option)
Work mode	9. Heat, Cool, Vent, Dehumidify, auto, Off 10. User can set which work mode is enabled/disabled
Logo display	User could set logo in Boot/standby screen
Firmware OTA update	Update firmware over the WiFi(LAN or WAN)
Input	Input1 : Key Card Input2 : Occupy, fire alarm, external sensor Input3 : Windows open
Smart Schedule Type	7days,weekday/weekend,24hours
Apple Alexa	Yes
Google Home	Yes
Standby Power Consumption	≤0.5 w
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	24.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	Flush : 88.5 mm H x 87.0 mm W x 12.8 mm D

DIMENSIONS



WIRING DIAGRAM



ORDERING

BC35-2FCU-230-W-TUYA-KC-M-TCP-PIR-LO868

WORKING SYSTEM: 2FCU: 2 pipe Fan coil 4FCU: 4 pipe Fan coil	POWER SUPPLY: 230 -230VAC; 24 -24VAC; 12 -12VDC;	COLOUR: W -White; B -Black;	INSTALLATION: S -surface mounting; F -Europe flush mounting;	WIFI TYPE: Tuya -SmartLife WIFI -common WiFi None -	INPUT: P -external sensor KC -key card; OF -Occupancy/Fire; WO -WindowOpen None -	WIRED COMMS: M -wired Modbus ; BAC -wired BACnet MSTP None -	WIRELESS COMMS: TCP -Modbus TCP; IP -BACnet IP None -	MOTION SENSOR: PIR -with external PIR sensor ; BLPIR -with external BLE PIR sensor None -	LORAWAN: LO868 - 868mhz; LO915 - 915mhz; LO923 - 923mhz; None -
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ACCESSORIES

WALL PLATE	PROBE SENSOR

THERMOSTAT-BC204-HEAT



PRODUCT DESCRIPTION

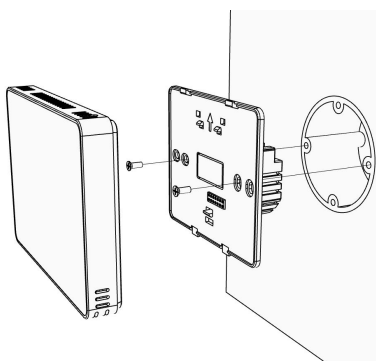
The B C 2 0 4 combines aesthetics with advanced functionality. It features a glass panel touchskeye and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction.

Designed for modern homes, the BC204 is 230v powered, making it ideal for replacing existing mains-powered thermostats.

MAIN FEATURE

- 3.2" LCD
- touch key
- 2.4g Wi-Fi connective
- SmartLife App(Optional)
- 3amp water heating,boiler control
- 16amp electric heating control
- 7day,weekday/weekend,24hours schedule
- Floor probe (external sensor)
- Floor max temperature protection
- Open window function
- Adaptive heating function
- Defrost protection
- C/F temperature display
- 12/24hours
- Touch keys lockout

TYPICAL INSTALLATION



ACCESSORIES

WALL PLATE



PROBE SENSOR



PURPOSE OF CONTROL

Underfloor water heating Water floor heating, radiator, boiler, 3amp current Max

Electric heating 16 amp current Max

VOLTAGE

Supply Voltage DC12V, AC24V, AC110v, AC230v

Heat Output 230VAC @16 Amp maximum per relay

INTERNAL TEMPERATURE SENSOR

Type NTC 10K, B = 3950

Range 5 to 60°C, 41 to 122°F

Accuracy ± 0.5°C, ± 1°F (Typical)

Resolution 0.1°C/1°F

EXTERNAL TEMPERATURE SENSOR

Type NTC 10K, B = 3950

Function Enable/Disable;
Replacing internal sensor or floor probe

GENERAL

Open window function logic Enable/ disable ;
Temperature, interval, duration could be set

Adaptive Heating Enable/ disable ; Rate of change temperature could be set

External sensor Floor probe , Remote air sensor

Smart Schedule Type 7days,weekday/weekend,24hours

Schedule Per Day Up to seven different 4- or 6-event program

Standby Power Consumption ≤0.5 w

Control temperature step 0.5° C (0.5° C,1.0° C,2.0° C,3.0° C option)

WiFi IEEE 802.11 b/g/n - 2.4ghz

Alexa Yes

Google Home Yes

Security WPA/WPA2

Operating Temperature -10° c- 55° c

Build-In Depth 24.5mm

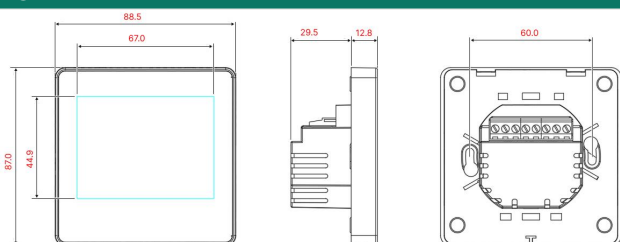
Weight ≤200 g

Enclosure Rating IP 20

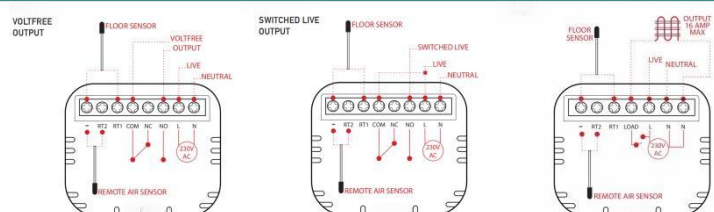
Enclosure Material PC + ABS plastic

Dimensions (W/H/D) Flush : 88.5 mm H x 87.0 mm W x 12.8 mm D

DIMENSION



WIRING DIAGRAM



ORDERING

BC204-HA-230-W-TUYA-P

SYSTEM: Water: HA Electric: HE	POWER SUPPLY: 230 -230VAC; 24 -24VAC;	COLOUR: W-White; B-Black;	WIFI TYPE: Tuya-SmartLife None-	INPUT: P-external sensor None
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THERMOSTAT-BC104-HVAC



PRODUCT DESCRIPTION

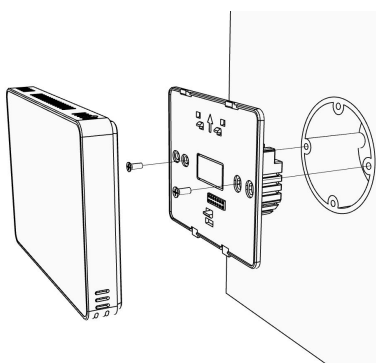
The BC104 combines aesthetics with advanced functionality. It features a glass panel touchskeye and an always on dimmable color display. With its vibrant, intuitive interface, it enhances user interaction.

Designed for modern homes, the BC104 is 230v powered, making it ideal for replacing existing mains-powered thermostats.

MAIN FEATURE

- 3.2" LCD
- touch key
- Wi-Fi connective(Optional)
- SmartLife App(Optional) (Option)
- 3 speed on/off,0-10VDC fan control
- On/OFF,0-10VDC valve control
- 7day,weekday/weekend,24hours schedule
- History data tracking diagram(up to 4 weeks)
- Fire alarm input
- External sensor(control AC or Fan)
- Defrost protection
- C/F temperature display
- 12/24hours
- Touch keys lockout

TYPICAL INSTALLATION



ACCESSORIES

WALL PLATE



PROBE SENSOR



PURPOSE OF CONTROL

2 Pipe fan coil system	3 speed or EC fan ; on/off or 0-10vdc valve;
4 Pipe fan coil system	3 speed or EC fan ; on/off or 0-10vdc valve;
Fan valve system	3 speed fan

VOLTAGE

Supply Voltage	DC12V, AC24V, AC110v, AC230v
Fan Relay Rating	230VAC @5 Amp maximum per relay
Valve Output	230VAC @5 Amp maximum per relay

INTERNAL TEMPERATURE SENSOR

Type	NTC 10K, B = 3950
Range & Accuracy	5 to 60°C, 41 to 122°F± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/1°F

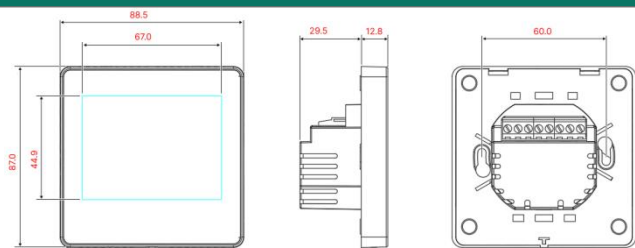
EXTERNAL TEMPERATURE SENSOR

Type	NTC 10K, B = 3950
Function	Enable/Disable; Replacing internal sensor to control AC or Fan .

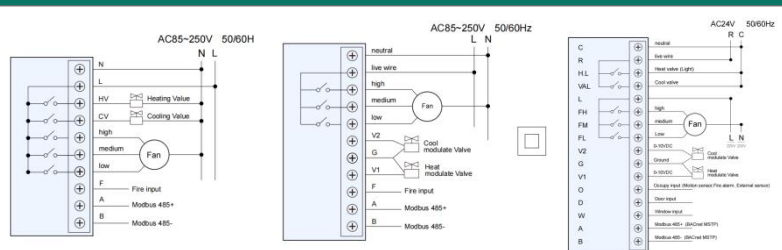
GENERAL

Water pipe sensor logic	10. Exist in 2/4 pipe FCU system 11. Turn on/off fan as pipe sensor temperature set-point 12. User can set the water pipe set-point
Control temperature step	0.5° C (0.5° C,1.0° C,2.0° C,3.0° C option)
Work mode	11. Heat, Cool, Vent, auto
Input	fire alarm or external sensor
Smart Schedule Type	7days,weekday/weekend,24hours
Apple Alexa	Yes
Google Home	Yes
Standby Power Consumption	≤0.5 w
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	24.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	Flush : 88.5 mm H x 87.0 mm W x 12.8 mm D

DIMENSION



WIRING DIAGRAM



ORDERING

BC104-2FCU-230-W-TUYA-P

SYSTEM: 2FCU: 2 pipe Fan coil 4FCU: 4 pipe Fan coil	POWER SUPPLY: 230 ~230VAC; 24 ~24VAC;	COLOUR: W-White; B-Black;	WIFI TYPE: Tuya-SmartLife None-	INPUT: P-external sensor FA-Fire alarm
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RC02-WIRELESS RECEIVER



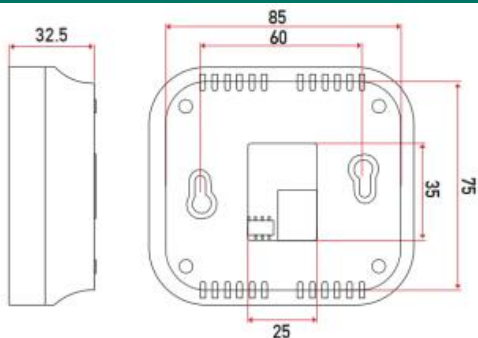
PRODUCT DESCRIPTION

- HD wireless thermostat, operating at a stable RF frequency of 868 MHz for reliable and interference-resistant signal transmission. It receives control commands wirelessly and converts them into switching signals to accurately regulate heating equipment. To meet diverse installation requirements, RC01/02 is available in both single-channel and dual-channel versions. The single-channel model is suitable for basic temperature control systems, while the dual-channel version supports more complex setups with multiple devices. Featuring simple pairing, compact size, and stable performance, it ensures smooth communication between the 207-HD thermostat and the controlled unit. Ideal for residential and light commercial use, this receiver offers convenient wiring-free installation, flexible configuration, and consistent temperature control.

MAIN FEATURE

AC230 power supply
Works with 207-HD
RF Wireless: 868,mHz
1/2 channels outputs
Boiler/ valve/electric heating

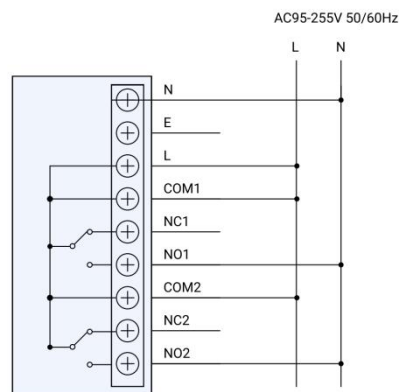
DIMENSIONS



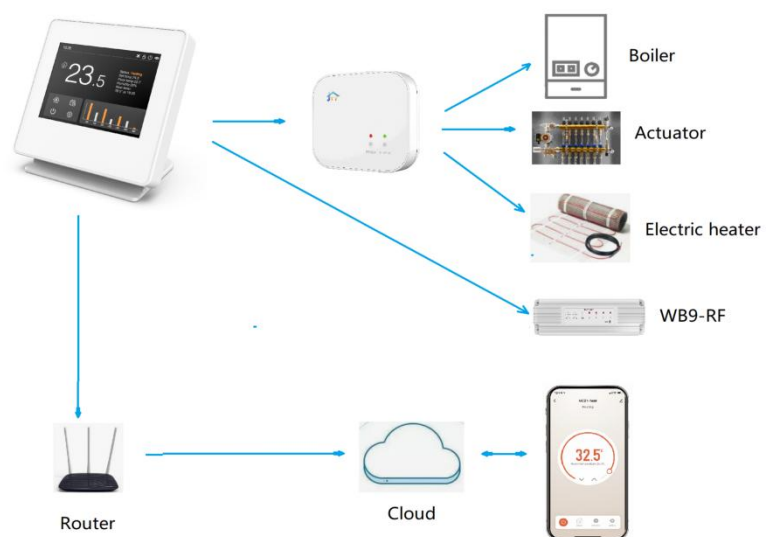
SPECIFICATION

Purpose Of Control	Underfloor heating system
Supply Voltage	230 VAC 50/60 HZ
Communications	Wireless RF 868mHz
Output relay	5A/16A
Operating Temperature	1° c- 85° C
Dimensions (W/H/D)	96 * 86 * 32.5 (mm)
Standby Power Consumption	≤0.5 w
WiFi	IEEE 802.11 b/g/n - 2.4ghz
Security	WPA/WPA2
Operating Temperature	-10° c- 55° c
Build-In Depth	24.5mm
Weight	≤200 g
Enclosure Rating	IP 20
Enclosure Material	PC + ABS plastic
Dimensions (W/H/D)	Flush : 88.5 mm H x 87.0 mm W x 12.8 mm D

WIRING DIAGRAM



SYSTEM DIAGRAM



WB9-RF-WIRELESS CENTRE



PRODUCT DESCRIPTION

The WB9-RF is an 9 Zone wireless wiring centre for use with 230v thermostats ,works with 207-HD, the outline dimension is 32cm x 14cm x 5.5cm .the WB9-RF can be used to control any actuator or valve which requires a 230v AC signal to open. For mid position valves and those requiring a closing signal, a changeover relay is required. At the same time the WB9-RF offers the ability to operate a boiler or other heat source through a volt free output. Additional outputs designed for use with under-floor heating systems are also included as standard. These are the pump and valve outputs which would normally operate a manifold pump or a manifold valve.

There is a Hot Water input and output in WB10, when the HW-HD calls in the hot water output will be energized , all the other output has no relation to this HW input .

PRODUCT DETAILS

Mains Supply

Power supply into the WB10, which should be fused at 5 amps, these connections are;

L = Live or phase 230v AC 50/60Hz E = Earth N = Neutral

Boiler

This is the main call for heat for the system, there are 3 connections;

C = common

NO = normally open

NC = normally closed

H/W

This output is used to control a hot water cylinder thermostat

C = common

NO = normally open

Zones 1- Zone 9

Zones outputs are clearly marked

L = live out to actuator or valve

N = neutral to actuator or valve

There are two connections live (L) and neutral (N), both terminals marked L are the same and both terminals marked N are the same. Each zone output is numbered, Zone 1 will respond to radio signals from the thermostat paired to zone 1, Zone 2 output will respond to thermostat numbered 2 etc.

Pump

Used for an underfloor heating manifold pump. Connections are clearly marked

L = live or phase 230v ac 50/60Hz

N = Neutral

E = Earth

Fuses

WB9-RF is protected by 2 fuses

Fuse 1. 5amp, 20mm anti-surge fuse, this fuse supplies and protects the internal electronics.

Fuse 2. 5amp, 20mm anti-surge fuse, this fuse supplies power to all 230v outputs from the board it protects the zone, pump and valve outputs.

SPECIFICATION

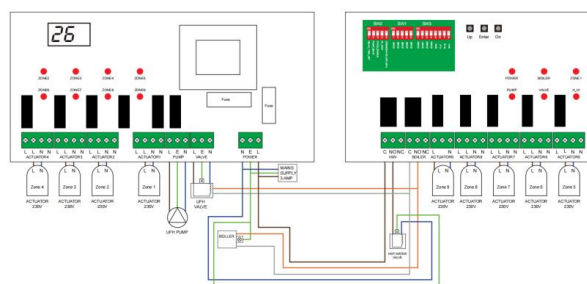
Number of heating zones	9
Number of Hot Water Zones	1
LED Indication	Yes
DIN Rail Mounting	Yes
Supply	230v AC 50Hz
Relay Load Max	3 Amp Resistive
Total Load Max	5 Amp Resistive
IP Protection	IP20
Installed Dimensions (L,H,D)	320 x 140 x 55mm
Weight	890g
Warranty	5 years

WIRING DIAGRAM

Wiring Diagram UH9-RF

Wiring Key

Neutral	Blue
Earth	Green/Yellow
Live	Brown
End Switch	Grey
Heat Enable	Orange



WB10-10ZONES WIRING CENTRE



PRODUCT DESCRIPTION

The WB10 is a 10 Zone wiring centre work with 230v thermostats .the WB10 can be used to control any actuator or valve which requires a 230v AC signal to open. For mid position valves and those requiring a closing signal, a changeover relay is required. At the same time the WB10 offers the ability to operate a boiler or other heat source through a volt free output. Additional outputs designed for use with under-floor heating systems are also included as standard. These are the pump and valve outputs which would normally operate a manifold pump or a manifold valve.

Zone 10 can be used as an isolated radiator zone by using the UFH/RAD switch.

If the switch is set to RAD;

When zone 10 calls for heat this will provide an output to a radiator zone valve and the boiler, but WILL NOT enable the underfloor heating pump/valve output.

If the switch is set to UFH;

When Zone 10 calls for heat, this will act as an underfloor heating zone, by enabling the actuator, boiler and pump/valve outputs.

Any output which is not needed can be ignored.

There is a Hot Water input and output in WB10, when the HW calls(volt free signal) in the hot water output will be energized , all the other output has no relation to this HW input .

SPECIFICATION

Number of heating zones	9
Number of Hot Water Zone	1
LED Indication	Yes
DIN Rail Mounting	Yes
Supply	230v AC 50Hz
Relay Load Max	3 Amp Resistive
Total Load Max	5 Amp Resistive
IP Protection	IP20
Installed Dimensions (L,H,D)	320 x 140 x 55mm
Weight	890g

PRODUCT DETAILS

Power supply info

the WB10, which should be fused at 10 amps, these connections are;
L = Live or phase 230v AC 50/60Hz, E = Earth, N = Neutral

Heat Enable

This is the main call for heat for the system, there are 3 connections;

LS = Live Supply E = Earth LR = Live Return

UFH Valve

Used for an underfloor heating manifold valve.

Zones 1...10 (Inputs)

Zone inputs are clearly marked at the top of the circuit board;

L = Live supply to thermostat.

E = Earth

N = Neutral supply to thermostat.

S/L = 230v switch live from thermostat, this activates the corresponding zone output.

Zones 1...10 (Outputs)

Zones outputs are clearly marked

L = live out to actuator or valve

N = neutral to actuator or valve

There are two connections live (L) and neutral (N), both terminals marked L are the same and both terminals marked N are the same.

Each zone output corresponds to the thermostat wired in at the top of the pcb.

UFH Pump

Used for an underfloor heating manifold pump, connections are;

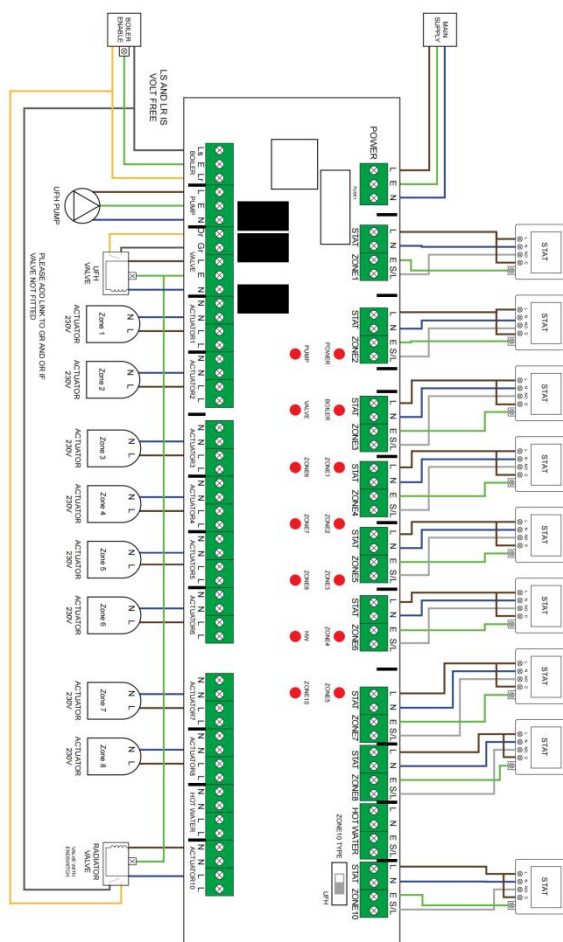
L = Live, E = Earth, N = Neutral

When an under-floor heating zone sends a call for heat to the WB10, the live & neutral output will supply 230v to the manifold pump .

Fuses

10amp, 30mm anti-surge fuse, this fuse supplies power to all 230v outputs from the board it protects the zone, pump/valve outputs.

WIRING DIAGRAM



INDOOR AIR QUALITY-CH3-PRO



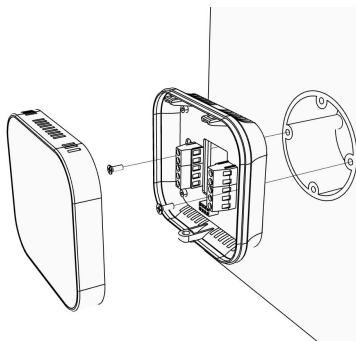
PRODUCT DESCRIPTION

The **CH3-Pro** will monitor up to 3 parameters that includes Carbon Dioxide Humidity & Temperature and provides either a Modbus signal for connection to a building automation system. a full-colour capacitive touch screen LCD that's user configurable, a configurable alarm set-point, all this housed in a new modern, quick mount enclosure.

MAIN FEATURE

Power supply: DC5V;110-230VAC/24VAC
Wi-Fi connective (2.4G) (Option)
LoRaWAN (Option)
BACnet MS/TP ,IP (Option)
Modbus RTU/TCP (Option)
USB data export(.txt)
3.5" TFT color display, 480*320 resolution
Capacitive touch
NDIR CO2 sensor, 15 years life time
External CO/RH/Temp sensor(Optional)
With CO2, Temp, Humidity calibration
Data record interval time- 1,5,15,30,60 mins
History data qty - 7000 records
7 days CO2 history data diagram
7 days temperature history data diagram
7 days humidity history data diagram
With humidity sensor (+/- 3%)
With ambient light sensor
CO2 high, low alert message reminder and buzzer
Auto ON/OFF via ambient light
C/F temperature display
Children touch-lock
Auto change daylight savings (DST)
Multi language(Optional)
Night light option(Auto On/Off with ambient sensor)
Auto backlight dim with ambient light sensor

TYPICAL INSTALLATION



CARBON DIOXIDE (CO2)

Type	non-dispersive infrared (Field Replaceable)
Accuracy	± (30ppm + 3% of measured value)
Range	0 - 10000 ppm
Auto-Cal	Selectable On (ASC) or Off (FRC)
Calibration	Field calibration capable with calibration kit
Sensor Life Expectancy	> 15 years

RELATIVE HUMIDITY (RH)

Type	Thermostat polymer-based capacitance sensor chip
Range	0 -100% RH
Accuracy	±1.5% RH
Resolution	0.1% RH
Calibration	+/- 10% Offset

TEMPERATURE (TEMP)

Type	NTC 10K
Range	0 to 60°C, 32 to 140°F
Accuracy	± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/°F
Calibration	-5 to 5°C Offset, Resolution = 0.1°C ;

LIGHT SENSOR

Ambient light value	0-500
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NETWORK INTERFACE-Wired

Hardware	MS/TP, 2-Wire, RS-485
Software	Modbus
Baud Rate	9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 255

NETWORK INTERFACE-Wireless

Hardware	WiFi
Software	Modbus TCP, MQTT, Http
Address Range	Modbus: 1 - 64

CUSTOMIZED MQTT, Http

Hardware	WiFi 2.4g/5g
Protocol	MQTT, Http

VISUAL INDICATION

Display	4.0"full colour graphic LCD
User Interface	Capacitive Touchscreen
Display Parameters	Temperature, CO2 and Humidity
Status Bars	Green/Yellow/Red - Selectable On/Of

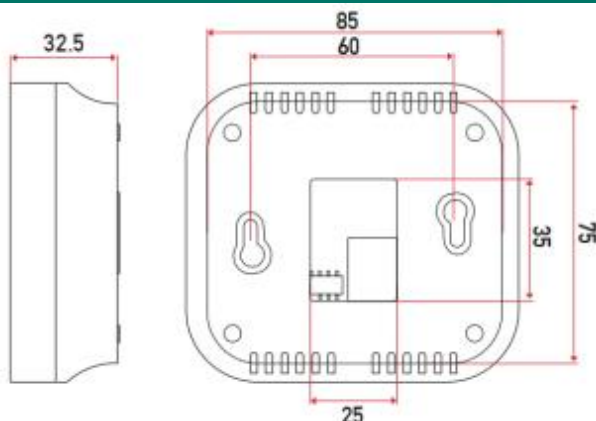
ENCLOSURE

Material	White PC/ABS, UL94-V0, UV Protected
Connection	Wall plate with screw terminal blocks
Dimensions	96.0 mm(H) x 86.0 mm(W) x 32.5 mm(D)

GENERAL

Power Supply	5VDC ,24 Vac/Vdc, 50/60 Hz
Consumption	Maximum 150mA @ 12Vdc, 1.8W
Wiring Termination	Backplate mounted terminal block (14 to 22 AWG)
Operating Conditions	0 to 60°C (32 to 140°F), 0 to 95 %RH non-condensing
Sensor Coverage	100 m2 (1000 ft2) typical

DIMENSIONS



INDOOR AIR QUALITY-IAQ60/61



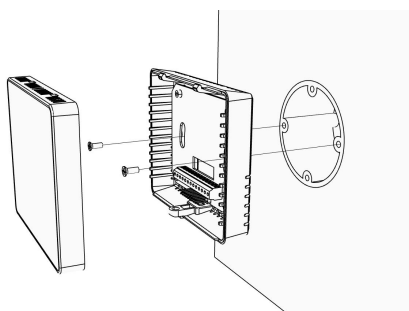
PRODUCT DESCRIPTION

The **IAQ60/61** will monitor up to 6 parameters that include Particulate Matter (PM1, PM2.5, & PM10), Volatile Organic Compounds, Carbon Dioxide Humidity & Temperature and provide either a BACnet® or Modbus signal for connection to a building automation system. a full-colour capacitive touch screen LCD that's user configurable, a configurable alarm relay output. , a configurable alarm 0-10vdc output, an input for temperature or alert, All this housed in a new modern, quick mount enclosure.

MAIN FEATURE

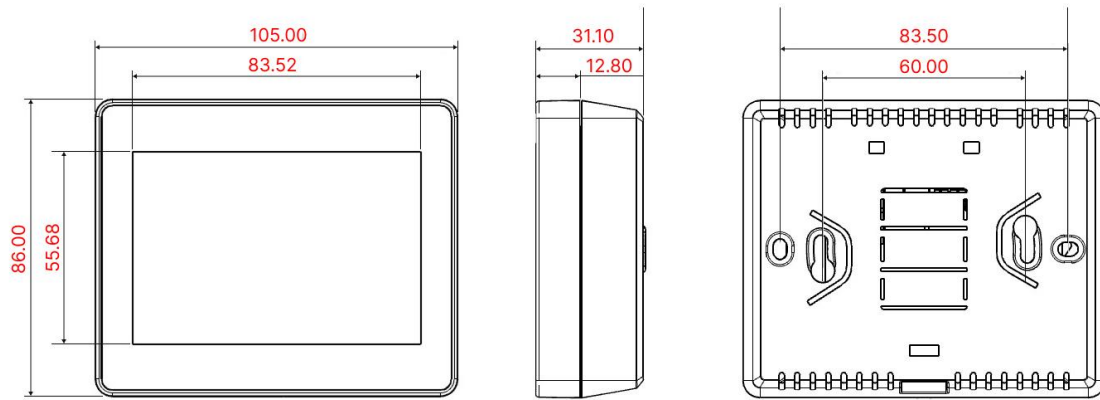
Power supply:AC24V/DC12/DC24v
Wi-Fi connective (2.4G/5G)
SmartLife platform (Option)
MQTT (Option)
LoRaWAN (Option)
BACnet® MSTP/IP(Option)
Modbus RTU/TCP (Option)
2xrelays for Alert Output(Option)
2x0-10VDC Alert output (Option)
1xDI/AI input for temperature or alert (Option)
4.0" TFT color display, 480*320 resolution
Capacitive touch
NDIR CO2 sensor, 15 years life time
Data record interval time- 1,5,15,30,60 mins
History data qty - 7000 records
7 days CO2 history data diagram
7 days temperature history data diagram
7 days humidity history data diagram
With humidity sensor (+/- 3%)
With ambient light sensor
CO2 high, low alert message reminder and speaker
Auto ON/OFF via ambient light
C/F temperature display
Auto change daylight savings (DST)

TYPICAL INSTALLATION

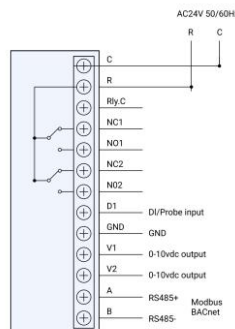
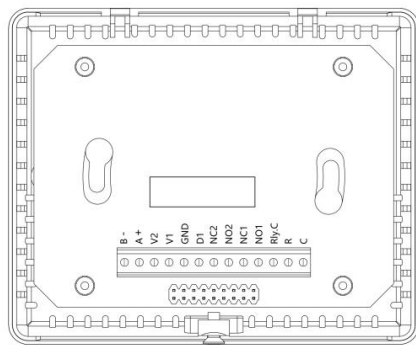


PARTICULATE MATTER (PM)	
Type	Laser Scatter Method
Particulate Size	PM1.0, PM2.5 and PM10
Mass Concentration Range	0 - 500 ug/m3
Mass Concentration Resolution	1 (ug/m3)
Accuracy PM1.0 and PM2.5	±10 ug/m3 , ±10%M.V. (100 – 1000 ug/m3)
Accuracy and PM10	±25 ug/m3 (0 – 100 ug/m3), ±25%M.V. (100 – 1000 ug/m3)
Sensor Life Expectancy	> 10 years
CARBON DIOXIDE (CO2)	
Type	non-dispersive infrared (Field Replaceable)
Accuracy	± (30ppm + 3% of measured value)
Range	0 - 10000 ppm
Auto-Cal	Selectable On (ASC) or Off (FRC)
Calibration	Field calibration capable with calibration kit
Sensor Life Expectancy	> 15 years
VOLATILE ORGANIC COMPOUNDS (VOC)	
Type	MOX metal oxide semiconductor (Field Replaceable)
Range	VOC Index (0 - 500)
Resolution	1 (VOCi, PPB, ug/m3)
RELATIVE HUMIDITY (RH)	
Type	Thermostat polymer-based capacitance sensor chip
Range	0 -100% RH
Accuracy	±1.5% RH
Resolution	0.1% RH
Calibration	+/- 10% Offset
TEMPERATURE (TEMP)	
Type	NTC 10K
Range	0 to 60°C, 32 to 140°F
Accuracy	± 0.5°C, ± 1°F (Typical)
Resolution	0.1°C/°F
Calibration	-5 to 5°C Offset, Resolution = 0.1°C ;
LIGHT SENSOR	
Ambient light value	0-5000
NETWORK INTERFACE-Wired	
Hardware	RS485, 2-Wire, RS-485
Software	BACnet® or Modbus
Baud Rate	9600, 19200, 38400, 57600, 76800, or 115200
Address Range	BACnet®: 0 - 127, Modbus: 1 - 255
NETWORK INTERFACE-Wireless	
Hardware	WiFi
Software	BACnet IP or Modbus TCP, MQTT, Http
Address Range	BACnet®: 0 - 127, Modbus: 1 - 64
CUSTOMIZED MQTT, Http	
Hardware	WiFi 2.4g/5g
Protocol	MQTT, Http
Encryption	AES
Customized Subscribe Topic	Yes
Customized Publish Topic	Yes
RELAY	
Contact Rating	Form A, 1A max 24Vac/dc
Switching Power	60W, 62.5VA
Set point/ Hysteresis /Delay	Selectable based on selected sensor
Relay Set points (Selectable)	PM Mass Concentration: 50 - 900 ug/ m3; VOC: 0 - 500 VOC Index; CO2: 400 - 9000 ppm; Humidity: 0 - 99%; Temperature: 0 - 60°C / 32 - 140°F
Relay Configuration	Via BACnet®/Modbus
VISUAL INDICATION	
Display	4.0"full colour graphic LCD
User Interface	Capacitive Touchscreen
Display Parameters	Temperature, CO2 and Humidity - Standard VOC, PM, Air pressure
Status Bars	Green/Yellow/Red - Selectable On/Of
ENCLOSURE	
Material	White PC/ABS, UL94-V0, UV Protected
Connection	Wall plate with screw terminal blocks
Dimensions	105.0 mm H x 86.0 mm W x 31.1 mm D
GENERAL	
Power Supply	12-28 Vac/Vdc, 50/60 Hz
Consumption	Maximum 150mA @ 12Vdc, 1.8W
Wiring Termination	Backplate mounted terminal block (14 to 22 AWG)
Operating Conditions	0 to 60°C (32 to 140°F), 0 to 95 %RH non-condensing
Sensor Coverage	100 m2 (1000 ft2) typical

DIMENSIONS



WIRING INFORMATION



TERMINAL	FUNCTION	PART NUMBER	
C	Common	IAQ60	IAQ61
R	+24Vdc/ac	IAQ60	IAQ61
Rly.C	Relay Common	IAQ60	
NO1	Relay1 Output - Normally Open	IAQ60	
NC1	Relay1 Output - Normally Close	IAQ60	
NO2	Relay2 Output - Normally Open	IAQ60	
NC2	Relay2 Output - Normally Close	IAQ60	
D1	Digital input or external temperature sensor input (NTC 10K, B3950)	IAQ60	
GND	Ground	IAQ60	
V1	Modulate output1 - 0-10vdc	IAQ60	
V2	Modulate output2 - 0-10vdc	IAQ60	
A+	485 +	IAQ60	IAQ61
B-	485 -	IAQ60	IAQ61

ORDERING

PRODUCT	IAQ60 IAQ61	- full gas sensor : PM, CO2, VOC, Air pressure - CO2
NETWORK	WiFi Tuya	- 2.4G/5G WiFi - Smart Life App
COLOUR	White Black	- White colour - Black colour
WIRED COMMUNICATION	Modbus BACnet	- 2 wired Modbus RTU - 2 wired BACnet MS/TP
WIRELESS COMMUNICATION	MTCP BACIP MQTT HTTP	- Modbus TCP over WiFi - BACnet IP over WiFi - Customized MQTT - Customized Http
OUTPUT	R1 R2 M1 M2	- 1 relay output - 2 relay outputs - 1 modulate output (0-10VDC) - 2 modulate outputs (0-10VDC)
PROBE SENSOR	P	- With a NTC 10k 3950 external sensor - None

NOTE: Only WIFI has wireless communication

PART NUMBER

IAQ60-WIFI-WHITE-485-MQTT-R2-M2-P
 1) **IAQ60**-CO2, humidity, temperature, PM, VOC, Air
 2) **WIFI** - 2.4G/5G WiFi, with BACnet IP or Modbus TCP
 3) **White** - White colour
 4) **485** - wired BACnet MSTP/Modbus RTU
 5) **MQTT** - MQTT communication
 6) **R2** - 2 relay outputs
 7) **M2** - 2 * 0-10vdc outputs
 8) **P** - With an external sensor input



IAQ61-WIFI-WHITE-485-MQTT
 1) **IAQ61** - CO2, humidity, temperature sensor
 2) **WIFI** - 2.4G/5G WiFi, with BACnet IP or Modbus TCP
 3) **White** - White colour
 4) **485**-wired BACnet MSTP/Modbus RTU
 5) **MQTT** - MQTT communication
 6) **R2** - 2 relay outputs
 7) **M2** - 2 * 0-10vdc outputs
 8) **P** - With an external sensor input

