

User's Guide



CLIMASET[®]

Interactive Controllers

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4 CLIMASET® Enjoy using your Climaset® safely

Enjoy using your Climaset® safely

The instructions below have been prepared to help you enjoy using your Climaset® safely for many years. Please read it thoroughly before starting to use the device.

- Each air conditioning device should be protected by its own Miniature Circuit Breaker (MCB).
- Each thermostat is intended to control a single air conditioning unit. We do not recommend control of multiple units with a single thermostat.
- If you ever encounter device malfunction, switch the respective MCB off and contact your local customer service.
- Should you notice that your air conditioner is not protected by an MCB, ask your electrician to install one for you. You may find recommended MCB specifications in Appendix A.
- The MCB rating should be selected according to the required current for the

normal operation of your air conditioner. If higher ratings are used, protection is not assured.

- Your Climaset® also protects itself, as well as your air conditioner, with a fuse. In the case of a burnt fuse, please check for malfunction of your air conditioner and thermostat, incorrect wiring, or short circuit. It may also indicate that the thermostat cannot supply the current necessary for that type of air conditioner. In such a case, you may need to add a relay between the thermostat and the air conditioner. Refer to Appendix B.
- Always replace the fuse with one of the same type. Fuses have several specifications other than their current rating. Check Appendix E for the proper type of fuse. Contact your local customer service if an extra fuse is necessary.
- Never bridge the fuse with a wire or replace it with one of a higher rating.
- Before screwing the wires to the device terminals, use the wire ferrules supplied with the device. This will avoid the possibility of a short circuit. We recommend using AWG 16 (1.5 mm) cables.

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Enjoy using your Climaset® safely

- Never use detergent to clean the thermostat surface. It may leave undesirable marks on the surface of the thermostat, especially on the screen. Always use a soft, moist tissue to clean the device.
- Should liquid crystal leak from the screen, avoid all contact with the eyes, mouth, and skin.
- The device is not designed to work in places with condensing humidity.
- Strong electromagnetic fields, such as powerful radio transmissions, can distort the screen content or cause device malfunction.
- Never try to fix the device yourself. Replacement of the parts may affect the safe usage of the device. Always contact your local Climaset® service center for repairs.

Introducing your Climaset®

The SmartiTouch™ high-end Climaset® thermostat is an innovative product that combines ease-of-use of a color touch screen with the features and functionality of an advanced digital thermostat.

The distinctive color of the controls results in highly intuitive touch screen.

The solid design, along with the slimmest flush mount housing, fulfils the most demanding needs for luxury and simplicity in modern world architecture.

A 92x80mm frame dimension and a neat look make the Climaset® one of the best choices for modern switches and plugs of all the leading market brands.





The SmartiTouch™ automatic adjustment is a specially designed feature for those who may normally find digital thermostats hard to work. It allows all controls to be adjusted simultaneously at a single touch.

Indicators on the screen and adjustments

The figure on page 9 shows the display indicators. The following section describes in detail the role of each indicator on the screen and how to adjust these indicators.

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Indicators on the screen and adjustments

- 1 Room temperature: Indicates the existing room temperature.
- 2 Set to: Your desired room temperature. Touch  to decrease or  to increase the set temperature in 0.5°C steps. The minimum allowable set temperature is 16°C and the maximum is 31°C. Touching  or  for a while speeds up the decrease or increase of the set temperature.

NOTE The suitable set temperature for most people or environments is 25°C.

- 3 Power status: Indicates whether or not the air conditioner is operational, and shows one of the following:

 indicates the air conditioner is off. Touch  to turn on the air conditioner.

 means that the air conditioner operation is controlled by the thermostat. It may switch on or off occasionally depending on the difference between the room temperature and the set temperature. If you want to turn off the air conditioner, touch .

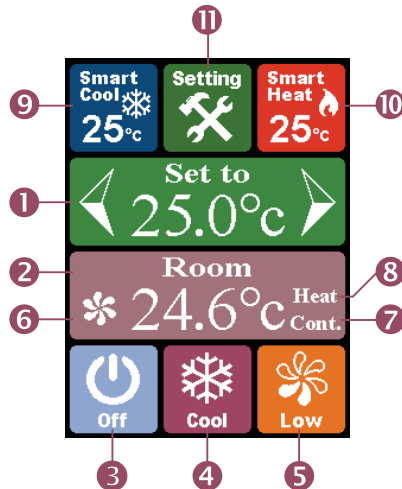
NOTE To save energy and prolong the lifetime of your air conditioner, we recommend that you set it in standby mode when it is not being used for a long period of time.



Indicators on the screen and adjustments

④ Operation mode: Touching this section allows you to change the operation modes. Commonly, the operation modes include cooling ❄️ or heating 🔥, but based on your air conditioner and thermostat models, they may also include automatic heat/cool changeover 🌸 or fan only 🌀 modes.

NOTE Automatic changeover mode means the device switches between heating and cooling automatically based on the room temperature and thermostat setting. This mode is available if the air conditioner, and accordingly the thermostat, supports it.

NOTE By Selecting the fan only mode 🌀, the air conditioner blows air continuously without heating or cooling. To stop the blowing, switch the device to standby mode.



5 Fan speed: Touching the fan speed indicator on the screen changes the fan speed from the lowest  to the highest  and finally to the automatic fan speed changeover mode **Auto** sequentially. You may switch back to the lowest fan speed by touching the **Auto** icon again.

NOTE The Automatic fan speed changeover mode means that the fan speed is proportional to the difference between the room temperature and the set temperature. So, a greater difference in temperature results in a higher fan speed, which in turn shortens the time needed to reach the desired temperature. As the room temperature approaches the set point, the fan speed drops, thereby saving a considerable amount of energy as well.

6 Air conditioner operation indicator: A rotating fan indicates that the air conditioner is running. Otherwise, a steady fan indicator means that the air conditioner has stopped either because the room temperature is sufficiently close to the set point or because the standby mode has been selected.

7 Continuous fan operation: Indicates that the fan is blowing the air continuously and will not automatically switch off. The thermostat controls the room temperature by switching on or off components other than the fan, such as the compressor or

electric valve. If continuous fan operation mode is enabled, a "Cont." sign appears on the screen.

NOTE Not all of the air conditioners are capable of operating in this mode. Accordingly, not all thermostat models are equipped with this option.



NOTE Refer to the settings screen in Appendix C for details on how to activate the continuous fan operation.


⑧ Heat/Cool activation indicator: If the thermostat controls components other than the fan, this indicates their status. When the thermostat commands the air conditioner for cooling or heating, a "Cool" or "Heat" sign appears on the screen respectively. With a double stage air conditioner, "Cool1" or "Heat1" appears for the first stage, and "Cool2" or "Heat2" for the second. If the thermostat directly controls a compressor, a restart delay is necessary to equalize the pressure on the compressor to prevent overload on its electro motor during startup. During restart delay, a "Recycle" sign appears on the screen.

NOTE You can adjust the recycle delay in minutes, as described in setting screen in appendix C.



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Indicators on the screen and adjustments


⑨, ⑩ SmartiTouch™: This feature has been designed to simplify the use of the thermostat by allowing most essential settings to be adjusted simultaneously at a single touch. This shortcut helps you to set all thermostat parameters at once in order to operate in cooling or heating mode. To adjust the device for cooling, keep your finger on the  icon for 5 seconds. The device will respond with a long beep and then will switch to cooling mode. The set temperature will be changed to 25°C and the automatic fan speed changeover mode will be selected. Also, the device will switch itself on. These settings have been optimized to suit most people and environments. For heating, keep your finger on the  icon for 5 seconds. The device switches to heating mode by applying the same settings as above.



⑪ Setting: Some additional and advanced features have been grouped on the settings screen. These parameters have been designed to customize the operation of the thermostat precisely to be most compatible with your air conditioner and your requirements. We recommend that these parameters should be changed only by an expert. To display the “Settings” screen, keep your finger on the setting indicator  for 3 seconds.

Summary of steps for adjusting your thermostat

① Switch the device to operational mode if you are going to use your air conditioner. Alternatively, you can switch the thermostat to standby mode.  indicates that the device is in operational mode and  means that the device is in standby mode. Touching the indicator of the mode in use will activate the other mode.

② Select the desirable mode of operation of your air conditioner by touching section  of the screen. The options include cooling , heating , or, if your device supports it, automatic heat/cool changeover  and fan only  modes.

③ Select the suitable fan speed by touching section  of the screen. The options include from the lowest to the highest available fan speeds and also automatic fan speed changeover mode.

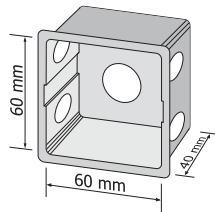
④ Touch  or  to adjust the set temperature. 25°C is suitable for most people and environments.

By using Climaset®, you can enjoy total comfort at home.

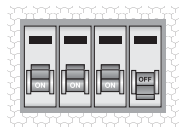
Installing your device in 7 easy steps

The instructions below have been prepared to assist you in installing your device. Please read the instructions thoroughly and carefully before installing it. Following all the steps as described guarantees your safety and the functionality and endurance of the thermostat and air conditioner.

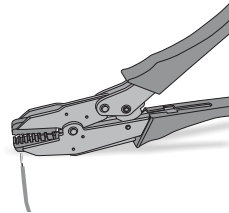
1 A recessed 60x60x40mm conduit box should be used to mount the device. When selecting a suitable conduit box, you should ensure that the entire inner space of the box is free of obstacles such as screw holders or other objects.



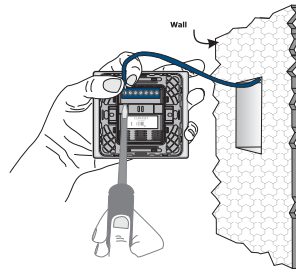
2 Turn off the respective circuit breaker. Do not try to install the device while the circuit breaker is switched on. Failure to turn off the breaker may not only put your safety at risk but may also shorten the life certain components within the device on account of any sparking that occurs while securing the wires in place.



3 Use a crimping tool to secure the wire ferrules supplied with the device on the wires. The best wire size is AWG16 (1.5mm diameter), but wires up to AWG12 (2.5mm diameter) can also be used. You may also solder the tips of the wires instead, if you prefer.



4 Wiring guide: The function of the wires and their respective position in the thermostat terminals vary based on the type of air conditioner and thermostat. The proper wiring of the device is essential to its functionality. Proper wiring techniques for several types of air conditioners and thermostats are described in Appendix B. The thermostat should be carefully matched with your air conditioner. Follow the wiring instructions as illustrated.

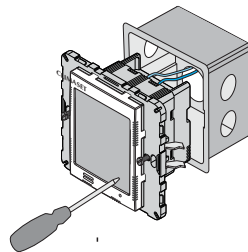


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Installing your device in 7 easy steps

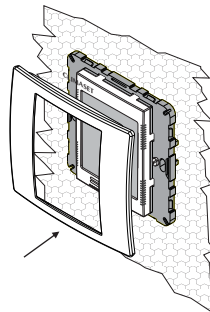
5 Securing the device

Push the device into the conduit box. Make sure that the wires are gathered properly inside the conduit box and that they do not push the device out. Use a screw driver as illustrated in the figure to secure the claws which makes the thermostat in its position secured.



6 Engaging the frame

Place the frame in its appropriate position as illustrated in the figure and push it gently toward the wall.



7 Turn on the circuit breaker. The device will be operational within a minute.

Appendix A. Miniature Circuit Breaker (MCB) selection guide

The following table is a guide to selecting the correct type of Miniature Circuit Breaker to protect your air conditioner and therefore your thermostat. The nominal rating of the appropriate circuit breaker has been estimated based on the air handling capacity of the air conditioner. If the specified type of circuit breaker in the air conditioner catalogue differs from what is specified here, it overrules the following table. The specified type of circuit breaker proposed by the air conditioner manufacturer should be used.

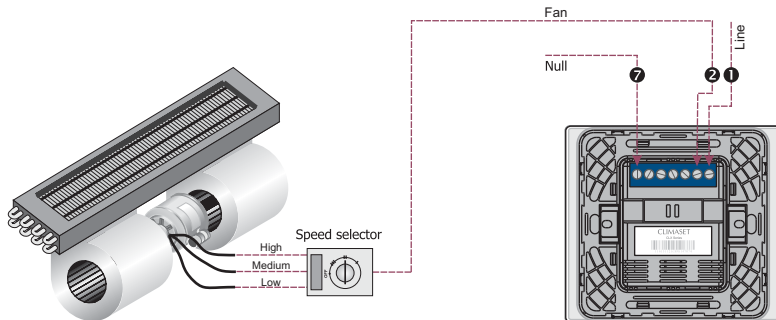
NOTE Always use "Type C" Miniature Circuit Breakers. "Type C" has been assigned for inductive loads, such as the load of an electro motor.

Air handling capacity (CFM)	Nominal rating
200	1
300	1
400	1
600	1
800	2
1000	2
1200	3
1400	3
1600	4
1800	4
2000	4

Appendix B. Thermostat selection guide and wiring diagrams

Thermostat model: 8100

Air conditioner type: Vertical room fan coil

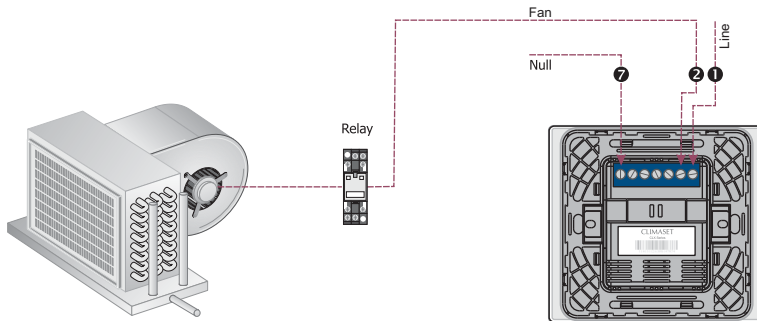


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan speed selector	Output	AC220V/24V 50Hz
3	Do not connect	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	Do not connect	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8100

Air conditioner type: Single-speed ducted fan coil

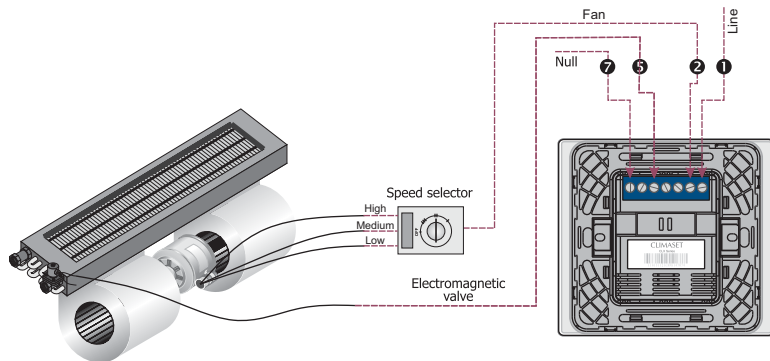


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan relay	Output	AC220V/24V 50Hz
3	Do not connect	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	Do not connect	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8110A

Air conditioner type: Two-pipe vertical room fan coil with electromagnetic valve

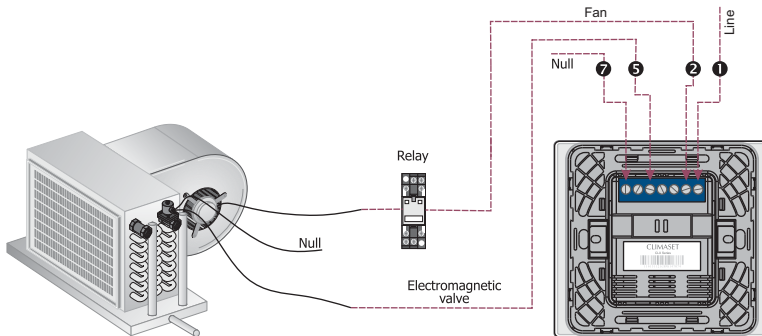


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan speed selector	Output	AC220V/24V 50Hz
3	Do not connect	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To electromagnetic valve	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8110A

Air conditioner type: Single-speed, two-pipe ducted fan coil with electromagnetic valve

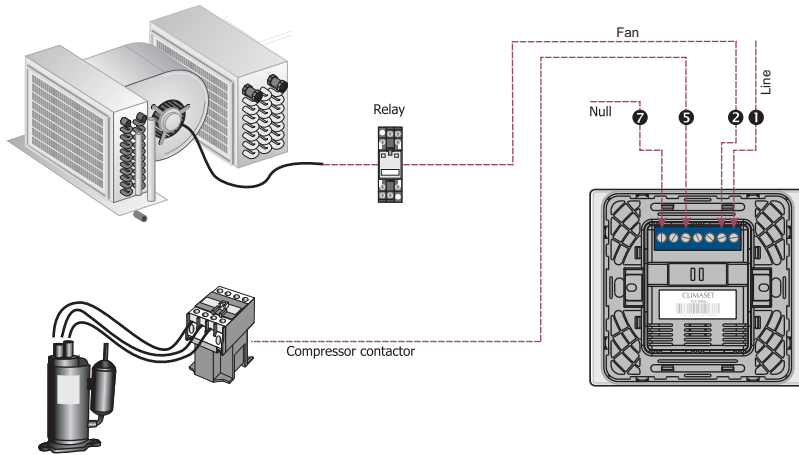


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan speed selector	Output	AC220V/24V 50Hz
3	Do not connect	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To electromagnetic valve	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8110B

Air conditioner type: Single-speed ducted split equipped with hot water coil for heating

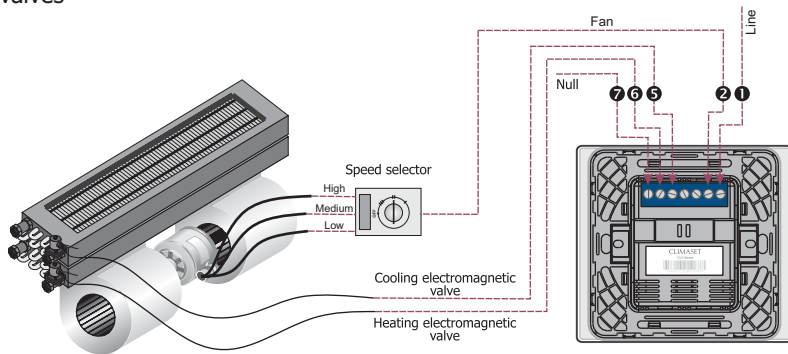


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan relay	Output	AC220V/24V 50Hz
3	Do not connect	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To compressor contactor	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8111A

Air conditioner type: Four-pipe vertical room fan coil with two electromagnetic valves

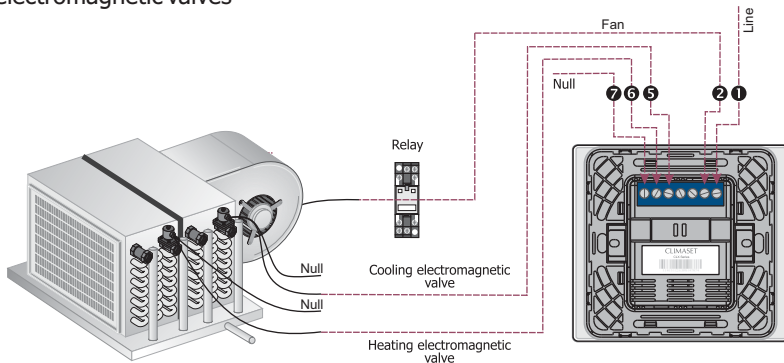


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan speed selector	Output	AC220V/24V 50Hz
3	Do not connect	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To cooling electromagnetic valve	Output	AC220V/24V 50Hz
6	To heating electromagnetic valve	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8111A

Air conditioner type: Single-speed, four pipe ducted fan coil with two electromagnetic valves

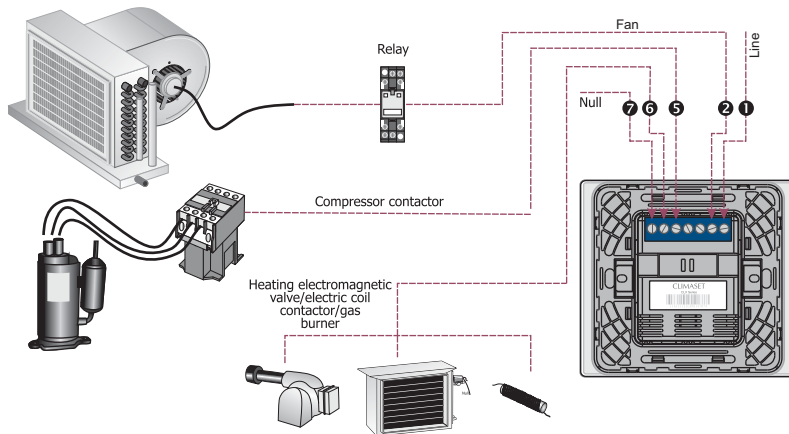


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan relay	Output	AC220V/24V 50Hz
3	Do not connect	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To cooling electromagnetic valve	Output	AC220V/24V 50Hz
6	To heating electromagnetic valve	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8111A

Air conditioner type: Single-speed ducted split or packaged air conditioner unit equipped with hot water coil with electromagnetic valve / electric coil / gas burner for heating

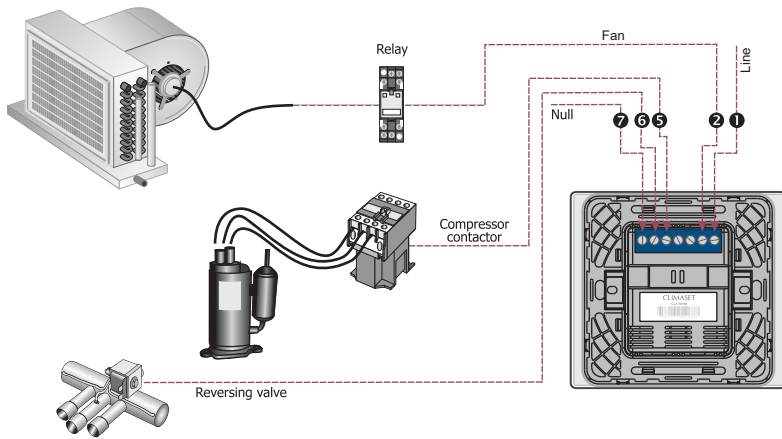


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan relay	Output	AC220V/24V 50Hz
3	Do not connect	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To compressor contactor	Output	AC220V/24V 50Hz
6	To valve/electric coil relay/gas burner	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8111B

Air conditioner type: Single-speed ducted split or packaged air conditioner unit with reversing valve for heating

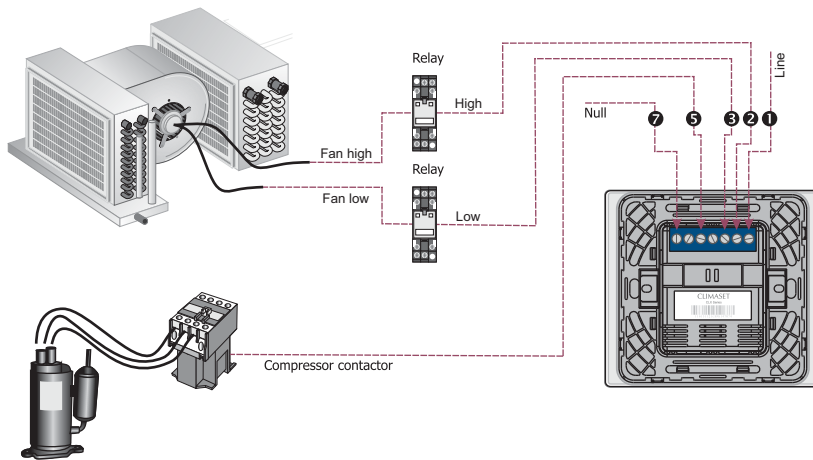


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan relay	Output	AC220V/24V 50Hz
3	Do not connect	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To compressor contactor	Output	AC220V/24V 50Hz
6	To reversing valve	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8210B

Air conditioner type: Two-speed ducted split or packaged air conditioner unit with hot water coil for heating

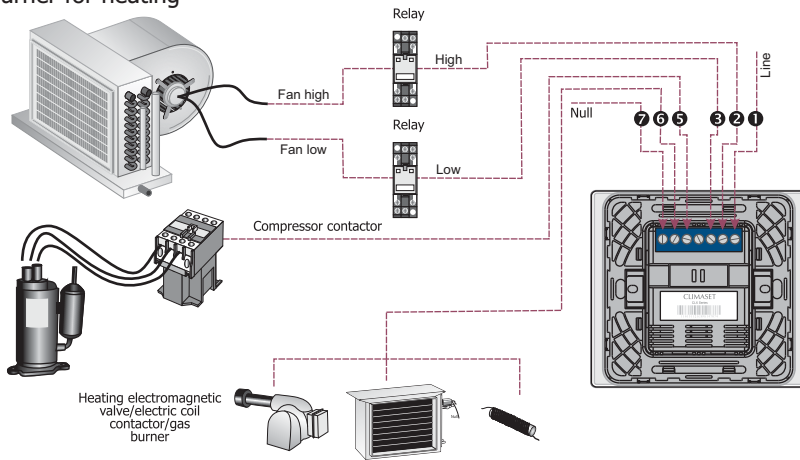


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan low relay	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To compressor contactor	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8211A

Air conditioner type: Two-speed ducted split or packaged air conditioner unit equipped with hot water coil with electromagnetic valve / electric coil / gas burner for heating

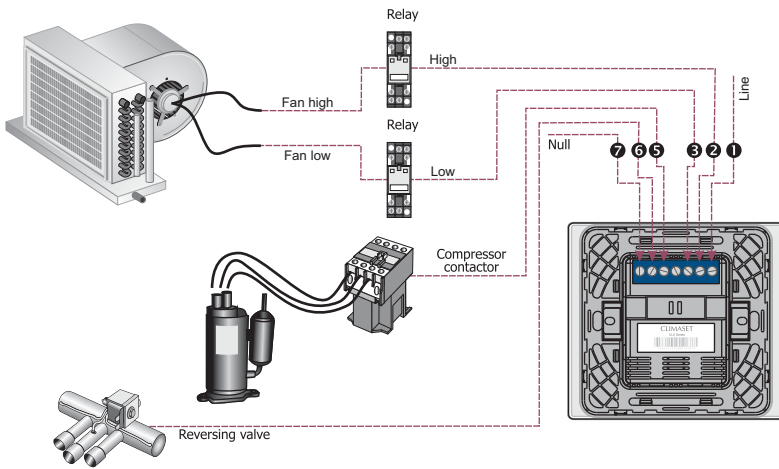


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan low relay	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To compressor contactor	Output	AC220V/24V 50Hz
6	To valve/electric coil relay/gas burner	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8211B

Air conditioner type: Two-speed ducted split or packaged air conditioner unit with reversing valve for heating

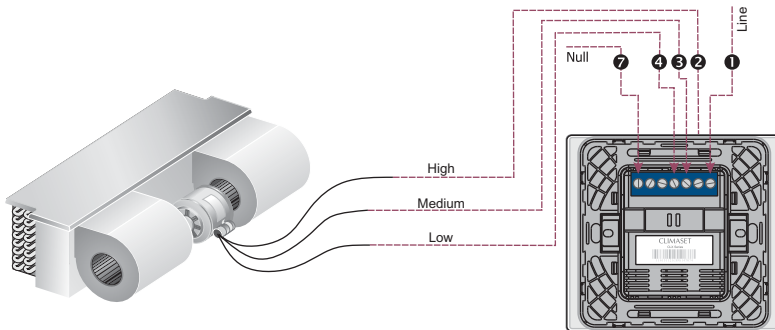


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan low relay	Output	AC220V/24V 50Hz
4	Do not connect	Output	AC220V/24V 50Hz
5	To compressor contactor	Output	AC220V/24V 50Hz
6	To reversing valve	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8300

Air conditioner type: Three-speed horizontal room fan coil

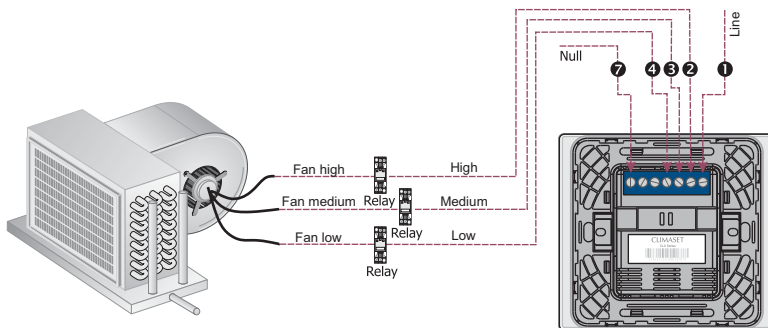


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high	Output	AC220V/24V 50Hz
3	To fan medium	Output	AC220V/24V 50Hz
4	To fan low	Output	AC220V/24V 50Hz
5	Do not connect	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8300

Air conditioner type: Three-speed ducted fan coil

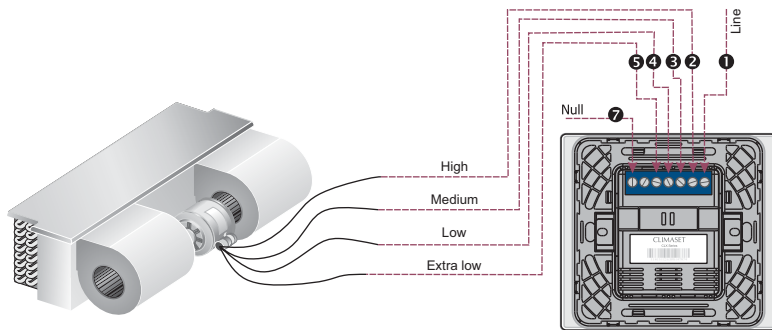


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan medium relay	Output	AC220V/24V 50Hz
4	To fan low relay	Output	AC220V/24V 50Hz
5	Do not connect	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8400

Air conditioner type: Four-speed, horizontal room fan coil.

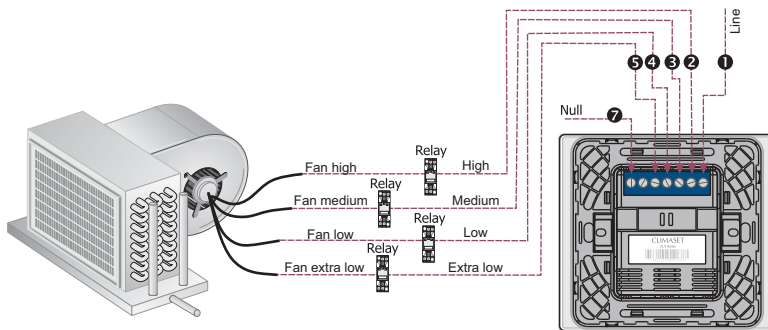


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high	Output	AC220V/24V 50Hz
3	To Fan medium	Output	AC220V/24V 50Hz
4	To fan low	Output	AC220V/24V 50Hz
5	To fan extra low	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8400

Air conditioner type: Four-speed ducted fan coil

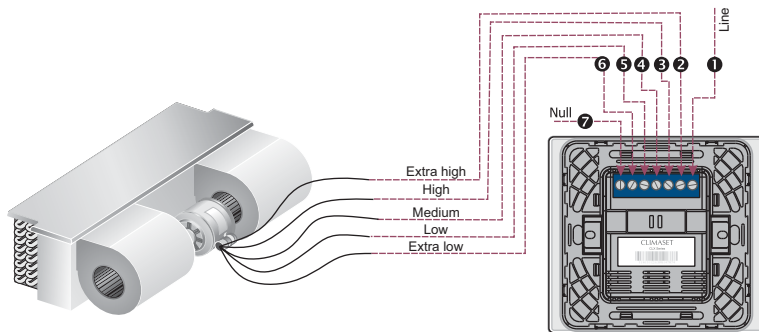


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan medium relay	Output	AC220V/24V 50Hz
4	To fan low relay	Output	AC220V/24V 50Hz
5	To fan extra low relay	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8500

Air conditioner type: Five-speed, horizontal room fan coil

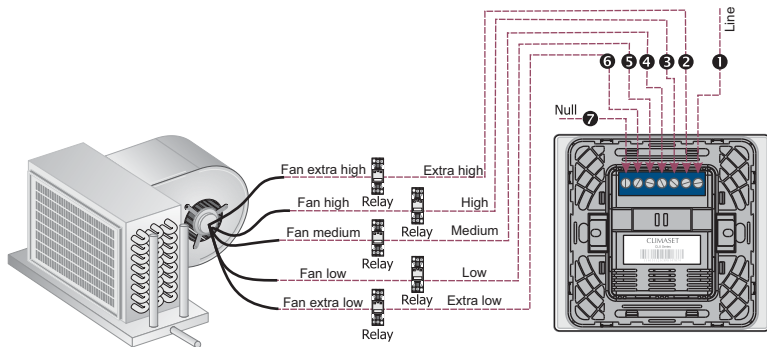


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan extra high	Output	AC220V/24V 50Hz
3	To fan high	Output	AC220V/24V 50Hz
4	To fan medium	Output	AC220V/24V 50Hz
5	To fan low	Output	AC220V/24V 50Hz
6	To fan extra low	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8500

Air conditioner type: Five-speed ducted fan coil

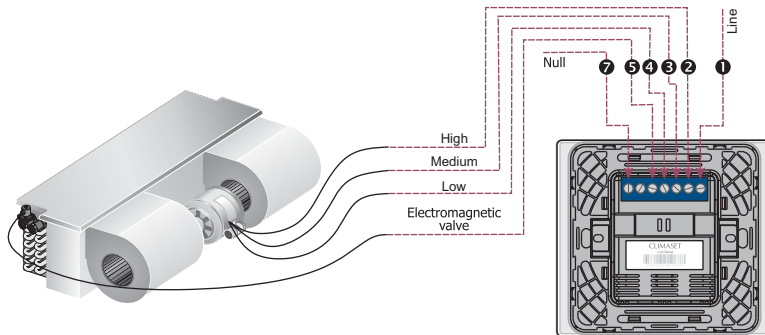


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan extra high relay	Output	AC220V/24V 50Hz
3	To fan high relay	Output	AC220V/24V 50Hz
4	To fan medium relay	Output	AC220V/24V 50Hz
5	To fan low relay	Output	AC220V/24V 50Hz
6	To fan extra low relay	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8310A

Air conditioner type: Three-speed, two-pipe horizontal room fan coil with electromagnetic valve

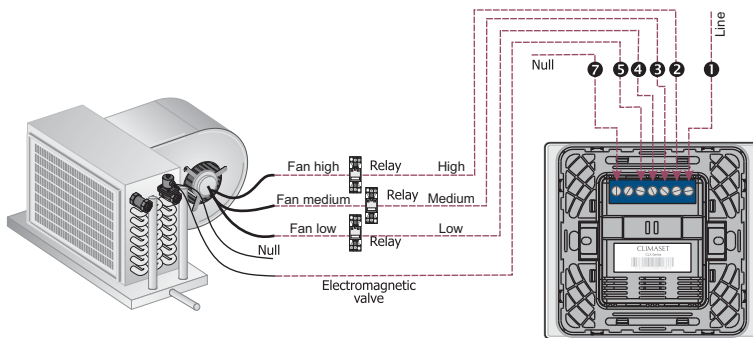


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high	Output	AC220V/24V 50Hz
3	To fan medium	Output	AC220V/24V 50Hz
4	To fan low	Output	AC220V/24V 50Hz
5	To electromagnetic valve	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8310A

Air conditioner type: Three-speed, two-pipe ducted fan coil with electromagnetic valve

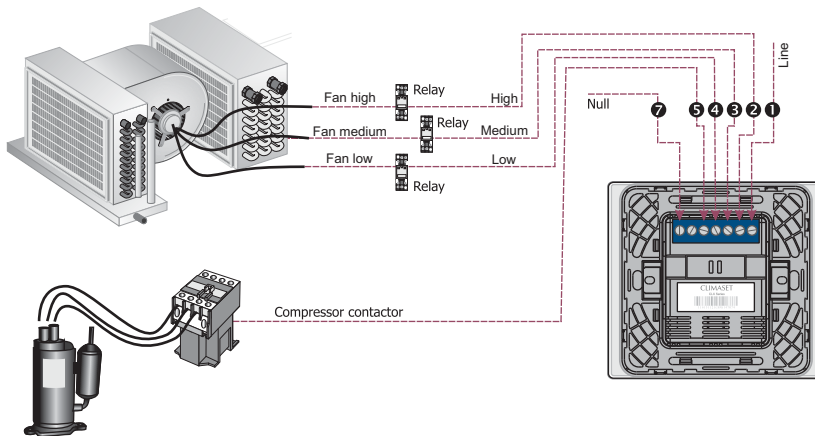


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan medium relay	Output	AC220V/24V 50Hz
4	To fan low relay	Output	AC220V/24V 50Hz
5	To electromagnetic valve	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8310B

Air conditioner type: Three-speed ducted split or packaged air conditioner equipped with hot water coil for heating

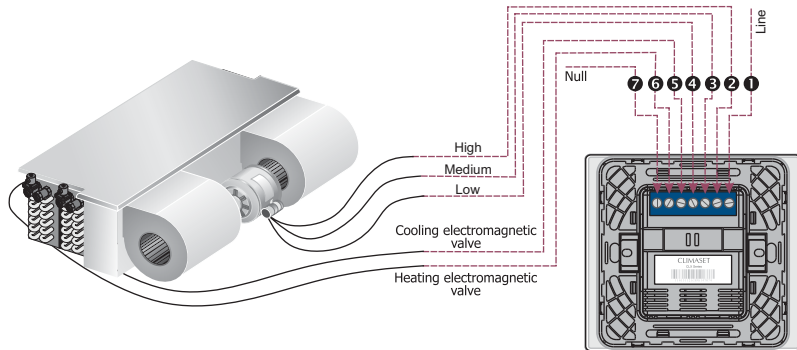


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan medium relay	Output	AC220V/24V 50Hz
4	To fan low relay	Output	AC220V/24V 50Hz
5	To compressor connector	Output	AC220V/24V 50Hz
6	Do not connect	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8311A

Air conditioner type: Three-speed, four-pipe horizontal room fan coil with electromagnetic valve

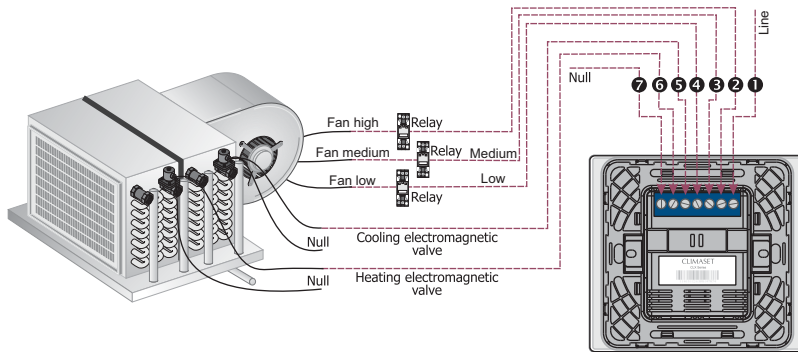


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high	Output	AC220V/24V 50Hz
3	To fan medium	Output	AC220V/24V 50Hz
4	To fan low	Output	AC220V/24V 50Hz
5	To cooling electromagnetic valve	Output	AC220V/24V 50Hz
6	To heating electromagnetic valve	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8311A

Air conditioner type: Three-speed, four-pipe ducted fan coil with electromagnetic valve

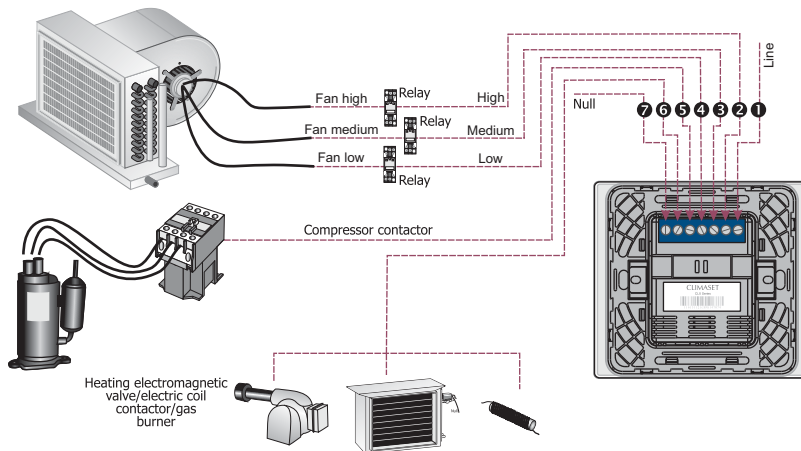


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan medium relay	Output	AC220V/24V 50Hz
4	To fan low relay	Output	AC220V/24V 50Hz
5	To cooling electromagnetic valve	Output	AC220V/24V 50Hz
6	To heating electromagnetic valve	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8311A

Air conditioner type: Three-speed ducted split or packaged air conditioner unit equipped with hot water coil with electromagnetic valve / electric coil / gas burner for heating

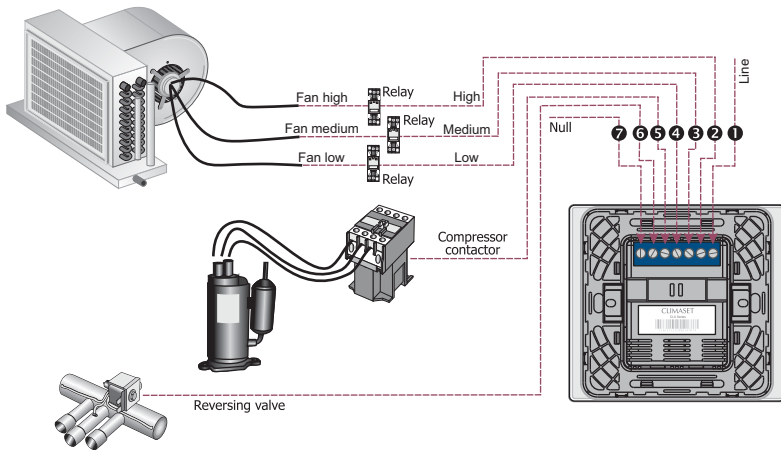


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan medium relay	Output	AC220V/24V 50Hz
4	To fan low relay	Output	AC220V/24V 50Hz
5	To compressor contactor	Output	AC220V/24V 50Hz
6	To valve/electric coil relay/gas burner	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8311B

Air conditioner type: Three-speed ducted split or packaged air conditioner unit with reversing valve for heating

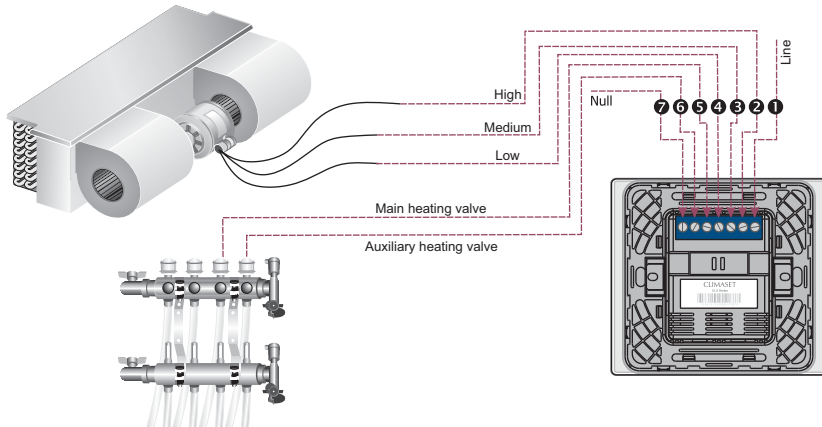


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan high relay	Output	AC220V/24V 50Hz
3	To fan medium relay	Output	AC220V/24V 50Hz
4	To fan low relay	Output	AC220V/24V 50Hz
5	To compressor contactor	Output	AC220V/24V 50Hz
6	To reversing valve	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8302

Air conditioner type: Three-speed horizontal room fan coil and two-stage radiant floor heating

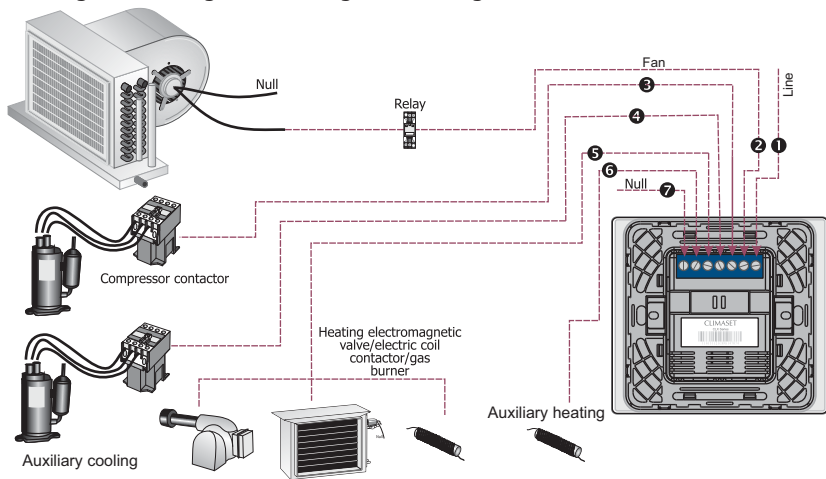


Terminals description table

Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	Fan high	Output	AC220V/24V 50Hz
3	Fan medium	Output	AC220V/24V 50Hz
4	Fan low	Output	AC220V/24V 50Hz
5	To main heating valve	Output	AC220V/24V 50Hz
6	To auxiliary heating valve	Output	AC220V/24V 50Hz
7	Null	Input	Null

Thermostat model: 8122

Air conditioner type: Single-speed packaged air conditioner unit with maximum two stages of cooling and two stages of heating



Terminals description table

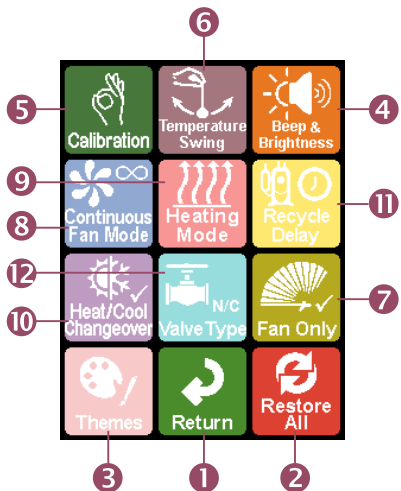
Terminal Number	Description	Input/Output	Electrical Characteristics
1	Line	Input	AC220V/24V 50Hz
2	To fan relay	Output	AC220V/24V 50Hz
3	To primary compressor contactor	Output	AC220V/24V 50Hz
4	To auxiliary compressor conductor	Output	AC220V/24V 50Hz
5	To primary heating(valve/electric coil/gas burner)	Output	AC220V/24V 50Hz
6	To valve/electric coil relay/gas burner	Output	AC220V/24V 50Hz
7	Null	Input	Null

Appendix C. Settings screen

Settings comprises a group of advanced additional features used to customize the operation of your thermostat precisely to be most compatible with your air conditioner and your requirements. Most of these settings should only be determined by an expert.

NOTE Available setting options vary based on air conditioner capabilities. Accordingly, not all of the settings described later may be available for your thermostat. Some may be applied to other thermostat models, suitable for other air conditioner types.

To enter each of the settings on the screen, touch the respective icon. A new screen appears and you may change the selected parameters as you wish. At the bottom of

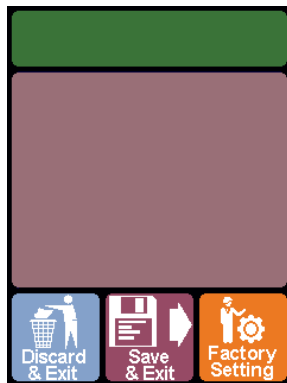


each setting there are three icons, which are common among all settings, as described below:

I. Save & Exit: Save the changes you made to the parameters and exit to the main settings screen again.

ii. Discard & Exit: Discard all the changes you made and restore the previous state of the selected parameter.

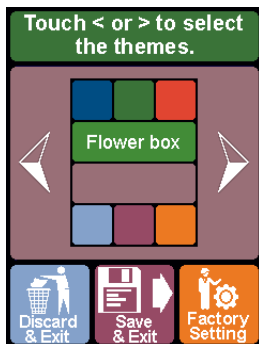
iii. Factory setting: Restore the specified setting to the default value set by the factory.



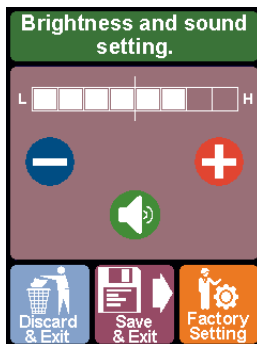
Icons on the “Setting” screen:

① Return: Touch this icon to return to the main thermostat screen again.

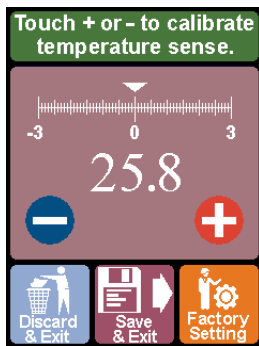
② Restore all: Restore all the settings to their initial factory preset values.



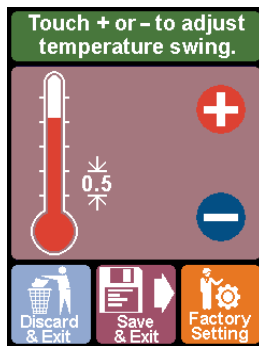
3 Themes: To best match your taste and decor, several color themes are available. Touch ◀ or ▶ to choose the desirable theme.



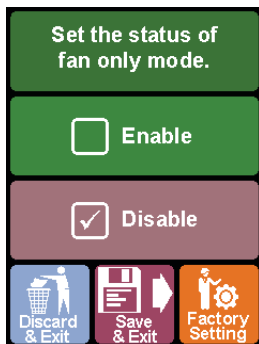
4 Beep and Brightness: Touch '-' to dim down or '+' to brighten up the screen light. Also, you may touch the speaker sign to mute or unmute the touch beep. This has no effect on the confirmation beep sound for the remote controller.



5 Calibration: Actual room temperature differs from point to point. Sensed temperature is precisely calibrated in the factory. To match the sensing with some specific point in the room, re-calibrate the thermostat by touching the “+” or “-” icon.



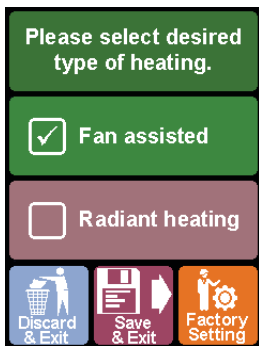
6 Temperature swing: Allowable room temperature fluctuation from the set point, when the thermostat is in operational mode. Touch “+” or “-” to set the temperature swing between 0.5°C and 1.5°C in 0.1°C steps.



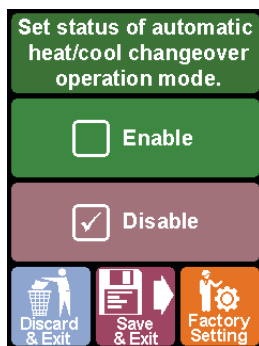
7 Fan only: Enabling this option appends the "Fan only" mode to the operation modes of your thermostat on the main screen, as described on page 9. During this mode the air conditioner acts as a blower without heating or cooling the air.



8 Continuous fan status: Enabling this option for heating or cooling causes the fan never to switch off during Cooling or Heating mode, if available; instead it merely blows the air when the cooling or heating is no longer necessary.



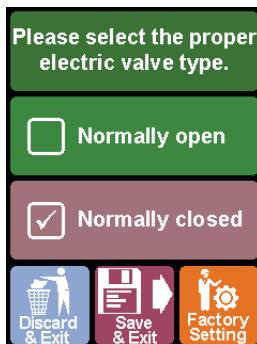
⑨ Heating mode: If a fan assisted heating system such as fan coil has been combined with radiant heating such as underfloor heating, you may select either of these methods or both of them for heating.



⑩ Heat/Cool changeover: This appends "Heat/Cool changeover" to operation mode. When selected, thermostat switches between heating or cooling whenever necessary. Not all air conditioners are capable of operating in this mode. Refer to page 9.



⑪ Recycle delay: Successive restarts can damage the electro motor of a compressor owing to overload. A restart delay, about 3 minutes, is necessary to equalize the pressure. Touch “-” or “+” to set the compressor restart delay in minutes.



⑫ Valve type: Choose the type of actuator on the electromagnetic valves, if they are present. The available options are normally closed or normally open.

Appendix D. Troubleshooting

Issue	Action
The display has vanished	Check whether the circuit breaker is on and whether the fuse inside the thermostat has blown. In any of these cases, we recommend that your air conditioner and your wiring should be checked by a technician.
The air conditioner does not start	<ol style="list-style-type: none">1. Check whether the power icon represents the operational mode.2. Check whether you have selected the heating or cooling mode appropriately.3. Check whether the temperature difference is above the temperature swing, which by default is 0.5 °C. Check "Temperature swing" on the "Settings" screen to make sure.
The air conditioner is always running	<ol style="list-style-type: none">1. Check whether you have selected the heating or cooling mode appropriately.2. Check if your desired temperature is too low or too high. The optimum temperature is about 25 °C.3. It is possible that your air conditioner capacity is not sufficient for your application or that its performance worsened owing some technical problems.
Burnt fuse	Ask a professional to check the wiring. Always replace the fuse with the one with the same ampere rating and the same I ² t.

If the problem is not listed here or is not resolved, contact your local customer service.

Appendix E. Technical specifications

Thermostat specifications	Temperature sensitivity	0.1 °C
	Backlight	White
	Display length	50 mm / 2.0 inches
	Display width	38 mm / 1.5 inches
	Width	76 mm / 3.0 inches
	Length	76 mm / 3.0 inches
	Height	45 mm / 1.8 inches
Frame dimensions	Maximum unconcealed thickness	12 mm / 0.5 inch
	Width	82 mm / 3.2 inches
	Length	90 mm / 3.5 inches
Conduit box dimensions	Height	8 mm / 0.3 inch
	Width	60 mm / 2.4 inches
	Length	60 mm / 2.4 inches
Operating condition	Height	40 mm / 1.6 inches
	Temperature	0 °C to 70 °C
Fuse specifications	Humidity	5% to 90% non-condensing
	Current rating	3.15 A or 5.0 A
Remote controller	Nominal melting I ² t	80 A ² /S
	Max. effective distance	8 m
	Max. viewing angle	30 °