CLIMASET®
Prossimo™ Series

INSTRUCTION MANUAL

CLIMASET®

Interactive controllers

Contents

Enjoying 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 customer service.

• Should you notice that your air conditioner is not protected by an MCB, ask your electrician to add one for you. You may find proper 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. Using higher ratings, protection is not assured.

• Your Climaset® also protects itself as well as your air conditioner with a fuse. In 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 necessary current for the air conditioner. 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.

• 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 repair.

Introducing your Climaset®

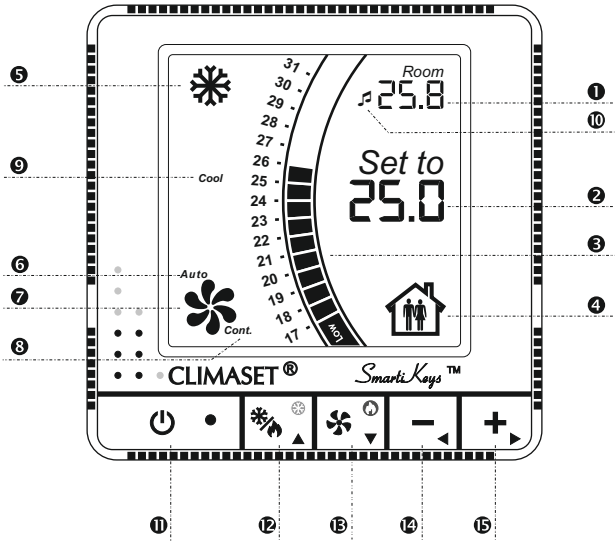
The Climaset® Prossimo™ series is the most compact, ultra-slim wall-mount thermostat ever designed. With its large screen and multi-function keys, it is a new frontier in functionality standards in the thermostat industry.
The Smartykeys™ one-touch automatic adjustment is easy to operate even for those who find it difficult to work with digital thermostats. Now, there is a single assigned key for the frequently used adjustments, such as fan speed, desired temperature, and heat/cool selection. Normally a code based system is used to adjust advanced settings in conventional thermostats. In contrary, Prossimo™ is enhanced with a brief description of each item in the "Extra settings" screen for ease of use.

Indicators on the screen and adjustments

The figure on the next page shows the display indicators and adjustments. The following section describes in detail the role of each indicator on the screen and how to manually adjust them.

❶ Room temperature: Indicates the existing room temperature.
❷ Set to: Your desired room temperature. Use the "+" key to increase or the"-" key to decrease the set temperature.

✍ The adjustment steps for setting the temperature is 0.5°C to satisfy the most discriminating demands.
✍ Pressing the "+" or "-" key for a while speeds up the increase or decrease of the set temperature.



❸ Temperature bar graph: The room temperature is shown graphically by the curved bar graph. It is updated every few seconds and remains unchanged until the next reading.

❹ Power status: This shows the power status of the device. It may display one of the following indicators:

8 Indicators on the screen and adjustments

The device is in standby mode. In this mode, the thermostat displays your setting along with the room temperature, but the air conditioner is not turned on until you switch back to the operational mode. This mode is useful if you do not use your air conditioner for a long period, such as in the spring or autumn, when you are on a trip, or in rooms that are used rarely.

The device is in operational mode. The air conditioner will be switched on or off automatically according to your settings.

Use the power key (⓫) to switch between operational and standby mode.

❺ Heating/cooling operation mode: This indicator specifies whether the device is operating in heating, cooling, or, if the device supports it, automatic heat/cool changeover or fan-only mode. Use the heat/cool changeover key (⓬) to switch between these modes.

✍ "Automatic heat/cool changeover mode" means the device may automatically change between heating or cooling based on the setting and the room temperature. This mode may not be supported by all air conditioners and accordingly may not be available in all thermostat models.

✍ The fan-only mode is useful if you need the air conditioner to just blow air without heating or cooling. In this mode, the thermostat does not switch the air conditioner off unless the power off key is pressed. This mode is not supported by all air conditioners and thermostat models and should be enabled in "Extra Settings" as described in Appendix C.

✍Not adjusting this setting correctly will cause the malfunction of your air conditioner. Choose ✻ for cooling, 🔥 for heating, or, if your device supports it, ❄/🔥 for automatic heat/cool or ≋ for fan-only mode.

❻ Fan operation modes: The following fan operation modes are available:

- Normal fan operation mode: The air conditioner runs with the adjusted fan speed

whenever the thermostat restarts the air conditioner.

• Automatic fan speed changeover mode: The fan speed is proportional to the temperature difference between the room and the set point. As the room temperature approaches to the set point, the fan speed drops. You will benefit from the maximum capability of your air conditioner whenever it is required, in the hottest or coldest hours of the day, and you will enjoy quiet fan operation whenever possible throughout the rest of the day, and you will save a considerable amount of energy.

❼ Fan speed: This displays the adjusted fan speed. The number of blades is proportional to the determined fan speed.

✍ The icon displays the determined fan speed. The device may be on or off because of the difference between the room and the desired temperatures or the power status setting. A blinking fan icon means that the fan is actually running.

Use the fan speed key (⓭) to change the fan speed. If the fan speed is high and you press the fan speed key again, the automatic fan speed changeover mode will be selected and the thermostat determines the fan speed based on the temperature difference. A greater difference results in a higher fan speed, reducing the time needed to reach to the desired set point. Pressing the fan speed key (⓭) again exits the automatic fan speed changeover mode and returns to the normal mode. The minimum fan speed will be selected again accordingly.

❽ Continuous fan operation: If your air conditioner is capable of performing in continuous fan operation mode and your thermostat model supports this option, you may enable the continuous fan operation mode as described in Appendix C. In this mode, the fan never switches off, but the thermostat controls the room temperature by switching on/off components other than the fan, such as a compressor, an electric valve, etc. If this mode is selected, a "Cont." sign appears as shown in the figure.

❾ Heat/cool activation indicator: If the thermostat controls components other than

the fan, it indicates their status. "Heat" or "Cool" means that the thermostat commands heating or cooling. If two stages of heating and cooling are available for your air conditioner and thermostat, they may be displayed as "Cool1" or "Heat1" for the first stage and "Cool2" or "Heat2" for the second stage. Also, if the thermostat directly controls a compressor for heating as a heat pump or cooling, a 3-minute restart delay is recommended to equalize the pressure on the compressor to prevent overload on its electro motor during startup. During these period, a recycle delay warning is indicated on the screen.

⑩ Beep sound indicator: This indicates whether the key press beep is enabled or not. Press and hold the power key (⑪) for 5 seconds to turn it on or off.

✍ This has no effect on the confirmation beep sound for remote controller commands.

Smartikeys™: adjusting all settings with a single touch

Determine whether you need to adjust the thermostat for cooling or heating. To adjust the device for cooling, just press the key with the blue snowflake sign (⑫) for 5 seconds; to adjust it for heating, press the key with the red flame sign (⑬)for 5 seconds. The device will respond with a long beep. This means all the necessary settings have been made. You do not need to press any more keys. These default settings have been optimized for most people and environments.

✍ If the temperature difference is below 1°C, the device may not turn on immediately. This means that the current room condition is at a comfortable level. The device will switch on as the temperature difference increases.

Summary of steps to adjust your thermostat

① If you are not going to use the air conditioner for a while, switch the thermostat to standby mode. The display should indicate standby (⏻) (❹). Otherwise, if you are going to use your air conditioner, the operational mode indicator (⌂) should appear on the display. Use the power key (⓫) to switch between operational and standby modes.

② Use the heat/cool operation mode key to select heating or cooling. A flame indicator on the screen (❺) indicates that the device has been adjusted for heating, while a snowflake represents cooling. A combined heat/cool indicator, if available, shows that the device may automatically change between heating and cooling based on the set temperature and the room temperature. A blow sign indicates that the fan-only mode has been selected, and the air conditioner blows the air without heating or cooling the air. The last two modes may not be supported by all air conditioner types and accordingly may not be available in all thermostat models.

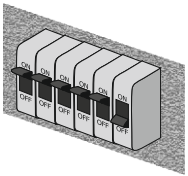
③ Adjust your desired fan speed using the fan speed key (⓭). If the highest fan speed is selected and the fan speed key (⓭) is pressed again, the device enters the automatic fan speed changeover mode, which determines the most desirable fan speed automatically. To select the fan speed manually again, press the fan speed key. The device will exit this mode and the lowest fan speed will be selected.

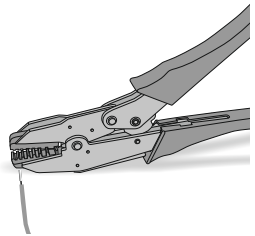
④ Use the "+" (⓯) Or "-" (⓮) key to increase or decrease the set temperature. 25°C is normally suitable for most people and environments.

Enjoy using your Climaset®.

Installing the device easily

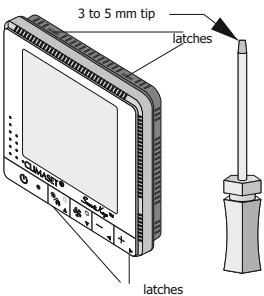
The instructions below have been prepared to assist you in the installation of the device. Please read the instructions thoroughly and carefully before installing the device. Following all the steps as described guarantees your safety and the functionality and endurance of the thermostat and air conditioner.



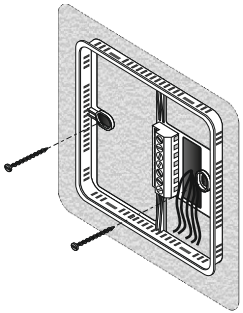


① Turn off the respective circuit breaker. Do not try to install the device while the circuit breaker is on. It may not only put your safety at risk but also the sparks produced while securing the wires may shorten the life of some components within the device.

② Use a crimping tool to secure the wire ferrules supplied with the device on the wires to prepare them to be screwed into the terminals. The best wire size is AWG16 (1.5 mm diameter), but wires up to AWG12 (2.5 mm diameter) can also be used in the thermostat terminals.

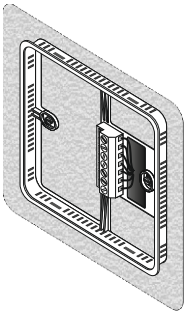


③ Release the back wall mounting plate. There are four latches, as illustrated in the figure, two at the top and two at the bottom of the thermostat. Use a screwdriver with a tip between 3 and 5 mm to gently release them. After releasing each of the latches, pull the respective device corner a little to keep the latch from snapping in again. Pull the device straight out from the back mounting plate after releasing all four latches.

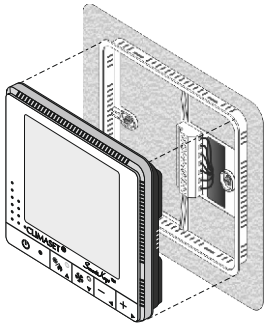


④ Position the mounting plate on the wall. Use a pencil to mark the mounting holes. Remove the plate from the wall and drill 3/16" holes in the wall. Tap anchors into the drilled holes. Reposition the plate and loosely insert two mounting screws in the holes. Level the plate for appearance. Tighten the mounting screws.

✍ You may also use it over a standard 60x60x40 mm conduit box. The screw holes match the holes of the conduit box and cover the box completely.



⑤ Wiring techniques: The function of the wires and their respective positions in the thermostat terminals vary based on type of air conditioner and thermostat. The proper wiring of the device is essential in its functionality. You may find proper wiring diagrams for several types of air conditioners and thermostats in Appendix B. Please match the thermostat carefully with your air conditioner and follow the wiring instructions as illustrated.



⑥ Mounting the unit: Hold the thermostat face parallel to the wall surface. Do not incline the thermostat face. Match the needles on the back of the thermostat with the holes on the terminals of the mounting plate. push the thermostat gently over the needles until the latches snap closed.

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

Application of dimmers

D46® dimmers enhance single speed ducted-split or ducted-fan coils with asynchronous electro motors by dividing their fan speed to 6 adjustable fan levels.

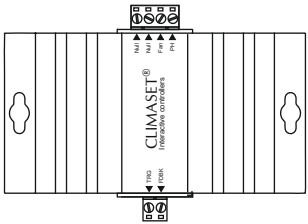
✍ Refer to appendix B and appendix C for compatible thermostats with D46® dimmer, and its wiring diagram.

✍ Refer to appendix D, programs P21 to P61 for adjustment of fan speed parameters.

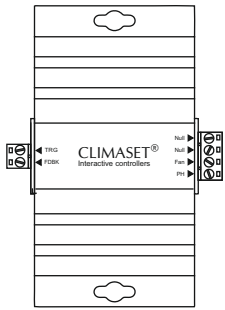
✍ Refer to appendix G for specifications of D46® dimmer.

Dimmer installation guide

It is preferred to install D46 dimmers, so that the fins aligned vertically. It facilitates air flow through the fins, results in a cooler dimmer capable of handling more currents.



Best installation position



Poor installation position

Appendix A. Miniature circuit breaker (MCB) selection guide

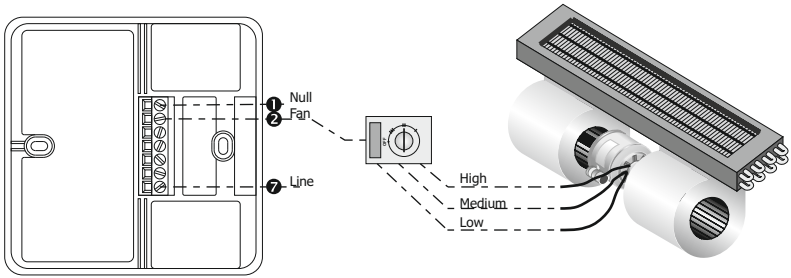
The following table provides a guideline to select the proper type of miniature circuit breaker to protect your air conditioner and therefore your thermostat. The nominal rating of the proper circuit breaker has been estimated based on the air handling capacity of the air conditioner. If the specified type of circuit breaker in the air conditioner catalogue differs from what is specified here, it overrules the following table and the specified type of circuit breaker proposed by the air conditioner manufacturer should be used.

✍ 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 (A)
200	1
300	1
400	1
600	1
800	2
1000	2
1200	3
1400	3
1600	4
1800	4
2000	4

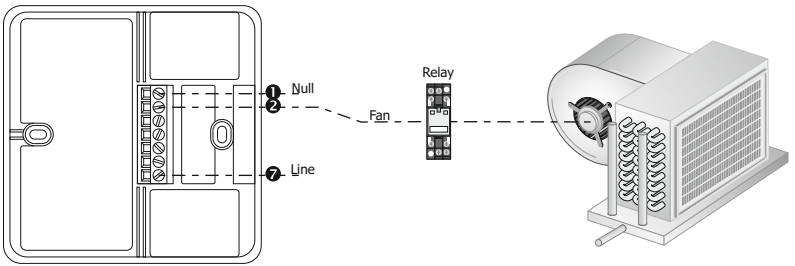
Appendix B. Thermostat selection guide and wiring diagrams

Air conditioner type: Vertical room fan coil
Appropriate thermostat: **Prossimo 4100**



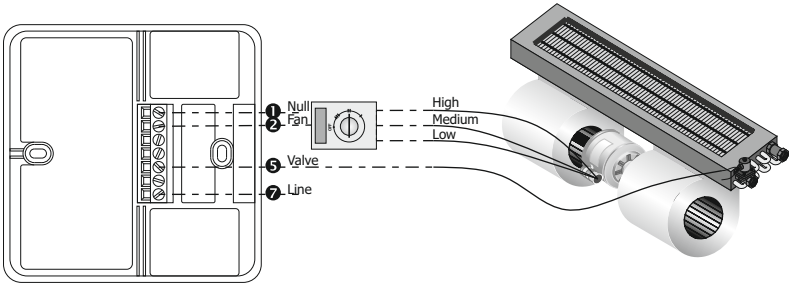
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	To fan speed selector	Output	AC 220V / 24V 50Hz
3	Do not connect	-	-
4	Do not connect	-	-
5	Do not connect	-	-
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Single-speed ducted fan coil
Appropriate thermostat: **Prossimo 4100**



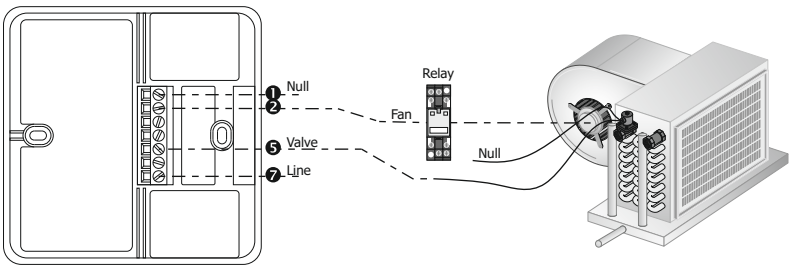
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	To fan speed selector	Output	AC 220V / 24V 50Hz
3	Do not connect	-	-
4	Do not connect	-	-
5	Do not connect	-	-
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Two-pipe vertical room fan coil with on/off valve
Appropriate thermostat: **Prossimo 4110A**



Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	To fan speed selector	Output	AC 220V / 24V 50Hz
3	Do not connect	-	-
4	Do not connect	-	-
5	To valve	Output	AC 220V / 24V 50Hz
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

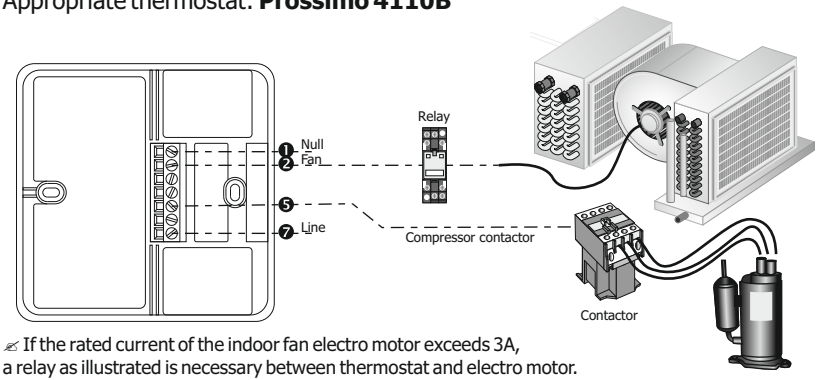
Air conditioner type: Single-speed, two-pipe ducted fan coil with on/off valve
Appropriate thermostat: **Prossimo 4110A**



Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	To fan speed selector	Output	AC 220V / 24V 50Hz
3	Do not connect	-	-
4	Do not connect	-	-
5	To valve	Output	AC 220V / 24V 50Hz
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

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

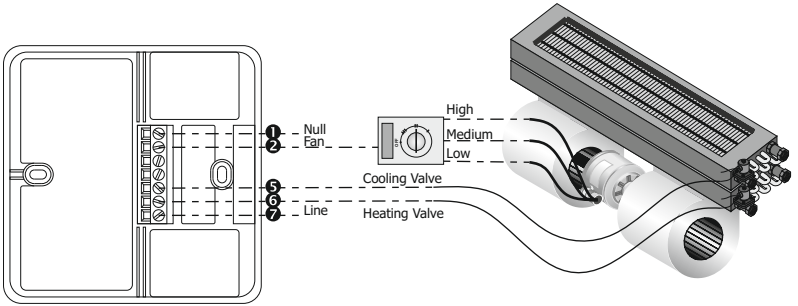
Appropriate thermostat: **Prossimo 4110B**



✍ If the rated current of the indoor fan electro motor exceeds 3A, a relay as illustrated is necessary between thermostat and electro motor.

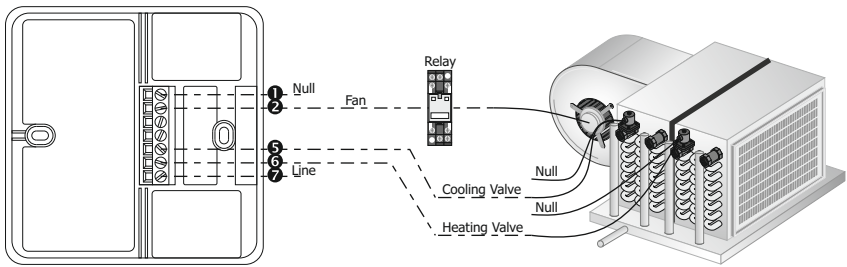
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	To fan speed selector	Output	AC 220V / 24V 50Hz
3	Do not connect	-	-
4	Do not connect	-	-
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Four-pipe vertical room fan coil with two on/off valves
Appropriate thermostat: **Prossimo 4111A**



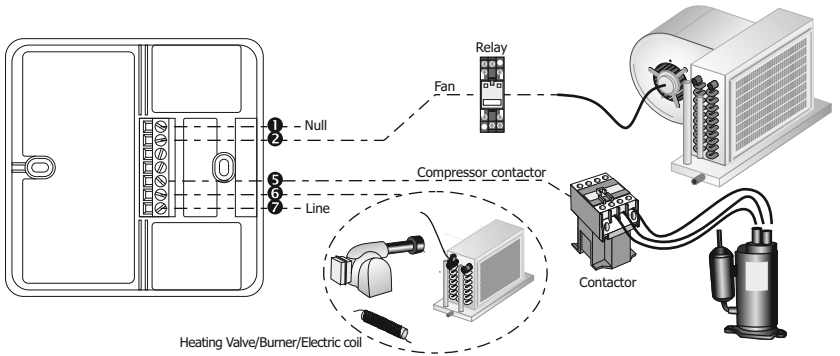
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	To fan speed selector	Output	AC 220V / 24V 50Hz
3	Do not connect	-	-
4	Do not connect	-	-
5	To cooling valve	Output	AC 220V / 24V 50Hz
6	To heating valve	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Four-pipe, single-speed, ducted fan coil with two on/off valves
Appropriate thermostat: **Prossimo 4111A**



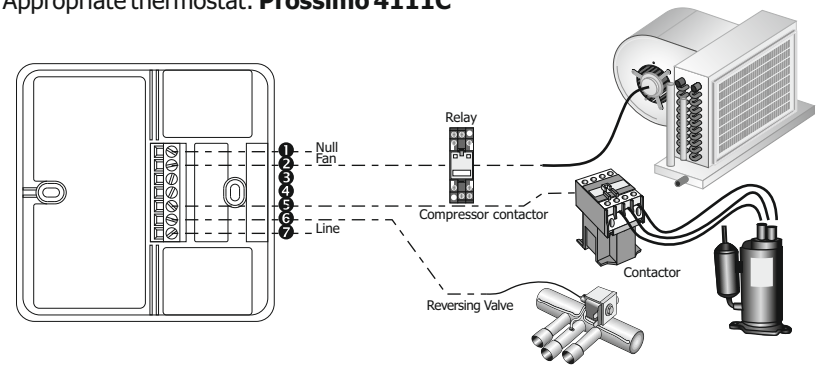
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	To fan speed selector	Output	AC 220V / 24V 50Hz
3	Do not connect	-	-
4	Do not connect	-	-
5	To cooling valve	Output	AC 220V / 24V 50Hz
6	To heating valve	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Single-speed ducted split or packaged air conditioner unit equipped with hot water coil with valve/ electric coil / gas burner for heating
Appropriate Thermostat: **Prossimo 4111B**



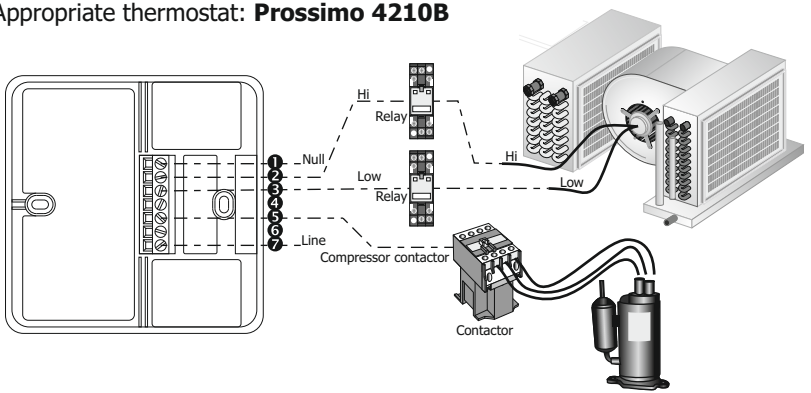
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	To fan speed selector	Output	AC 220V / 24V 50Hz
3	Do not connect	-	-
4	Do not connect	-	-
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	To valve/electric coil relay/gas burner controller	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Single-speed ducted split or packaged air conditioner unit with reversing valve for heating
Appropriate thermostat: **Prossimo 4111C**



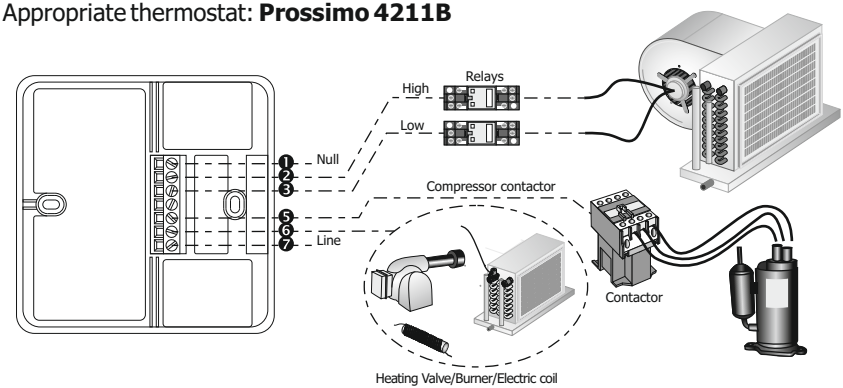
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	To fan speed selector	Output	AC 220V / 24V 50Hz
3	Do not connect	-	-
4	Do not connect	-	-
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	To reversing valve	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: 2-speed ducted split or packaged air conditioner equipped with hot water coil for heating
Appropriate thermostat: **Prossimo 4210B**



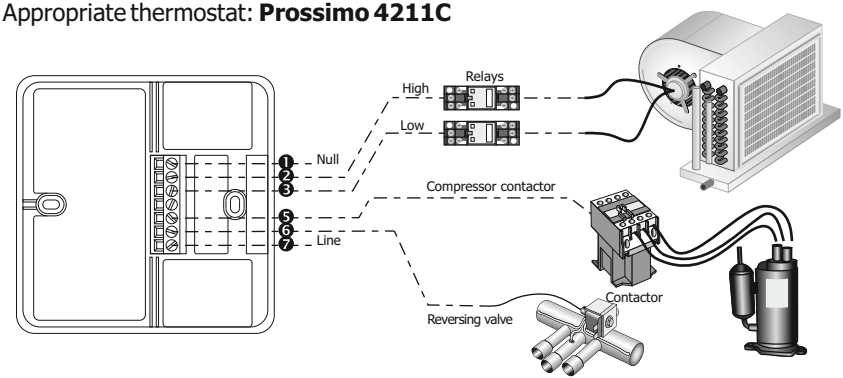
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan low	Output	AC 220V / 24V 50Hz
4	Do not connect	-	-
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: 2-speed ducted split or packaged air conditioner unit equipped with hot water coil with valve/ electric coil / gas burner for heating
Appropriate thermostat: **Prossimo 4211B**



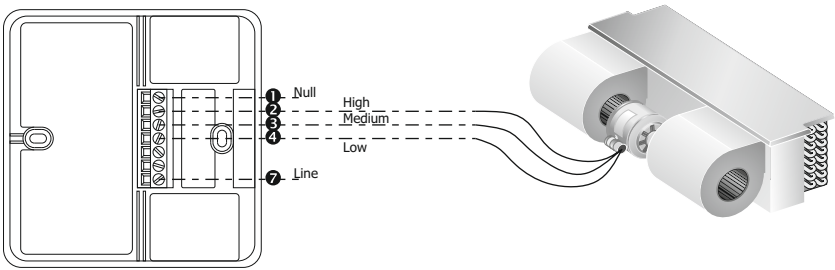
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan low	Output	AC 220V / 24V 50Hz
4	Do not connect	-	-
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	To valve/electric coil relay/gas burner controller	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: 2-speed ducted split or packaged air conditioner unit with reversing valve for heating
Appropriate thermostat: **Prossimo 4211C**



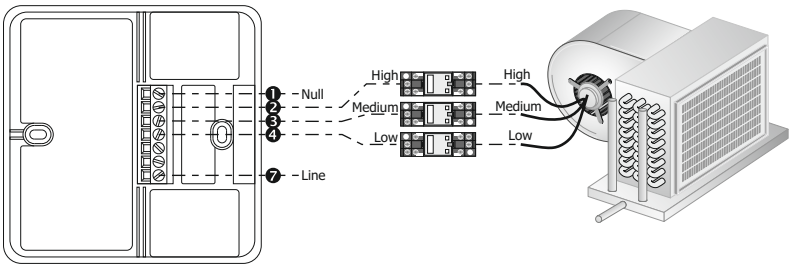
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan low	Output	AC 220V / 24V 50Hz
4	Do not connect	-	-
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	To reversing valve	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: 3-speed horizontal room fan coil
Appropriate thermostat: **Prossimo 4300**



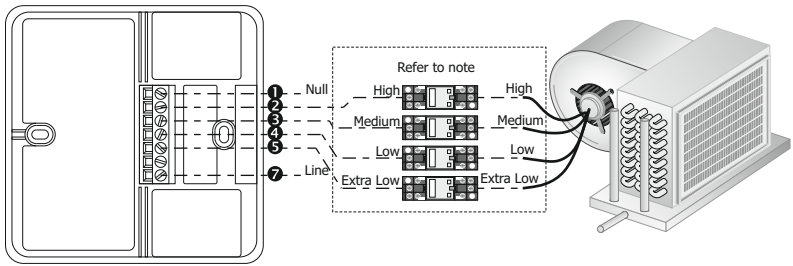
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	Do not connect	-	-
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: 3-speed ducted fan coil
Appropriate thermostat: **Prossimo 4300**



Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	Do not connect	-	-
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

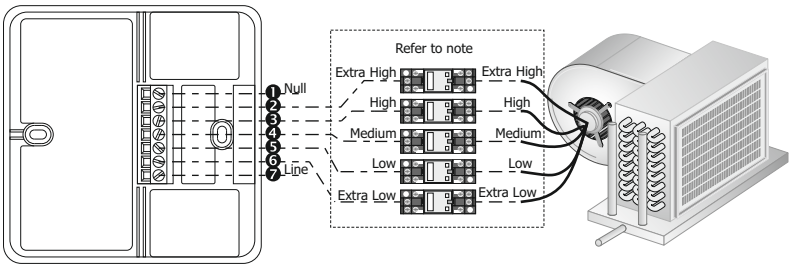
Air conditioner type: 4-speed horizontal room or ducted fan coil
Appropriate thermostat: **Prossimo 4400**



✍ If the rated current of the fan coil electro motor exceeds 3A, relays as illustrated are necessary between thermostat and electro motor. This may occur with large ducted fancoils.

Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	Fan extra low	Output	AC 220V / 24V 50Hz
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

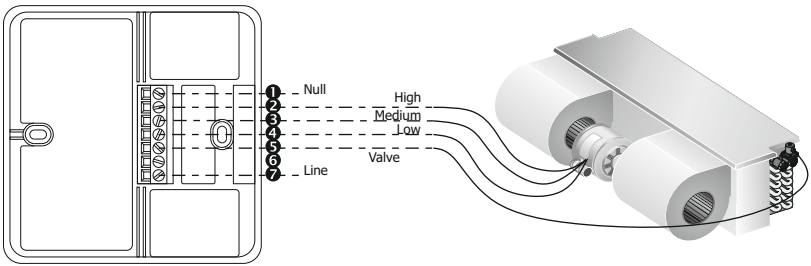
Air conditioner type: 5-speed horizontal room or ducted fan coil
Appropriate thermostat: **Prossimo 4500**



✍ If the rated current of the fan coil electro motor exceeds 3A, relays as illustrated are necessary between thermostat and electro motor. This may occur with large ducted fancoils.

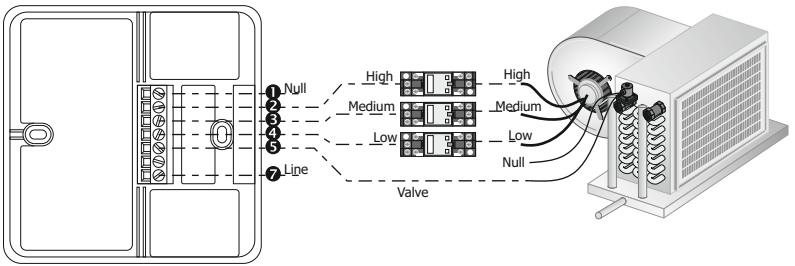
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan extra high	Output	AC 220V / 24V 50Hz
3	Fan high	Output	AC 220V / 24V 50Hz
4	Fan medium	Output	AC 220V / 24V 50Hz
5	Fan low	Output	AC 220V / 24V 50Hz
6	Fan extra low	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: 3-speed horizontal room fan coil with on/off valve
Appropriate thermostat: **Prossimo 4310A**



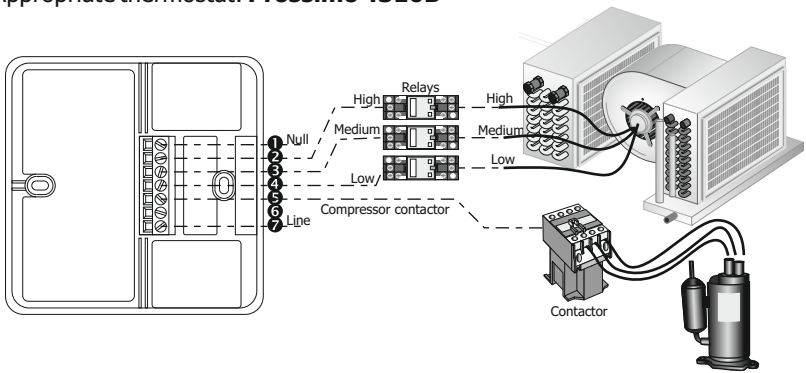
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	To valve	Output	AC 220V / 24V 50Hz
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: 3-speed ducted fan coil with on/off valve
Appropriate thermostat: **Prossimo 4310A**



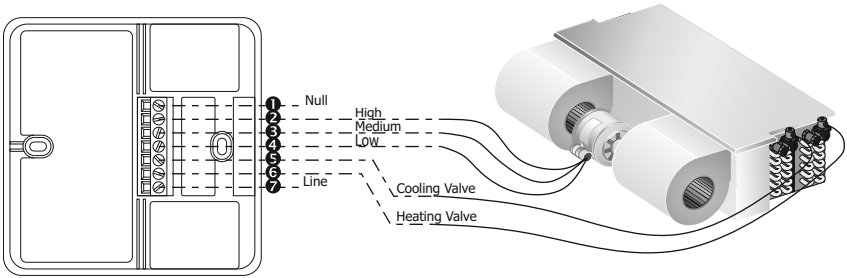
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	To valve	Output	AC 220V / 24V 50Hz
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: 3-speed ducted split or packaged air conditioner equipped with hot water coil for heating
Appropriate thermostat: **Prossimo 4310B**



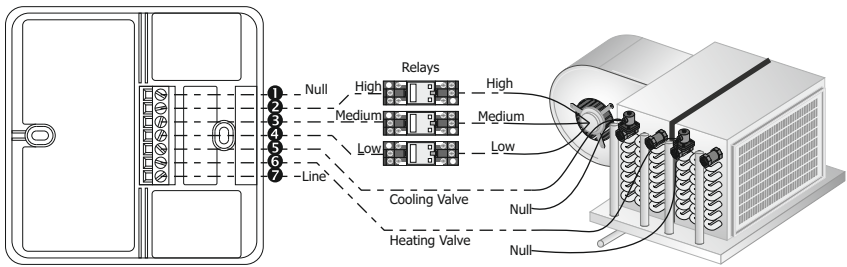
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	Do not connect	-	-
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Four-pipe horizontal room fan coil with two on/off valves
Appropriate thermostat: **Prossimo 4311A**



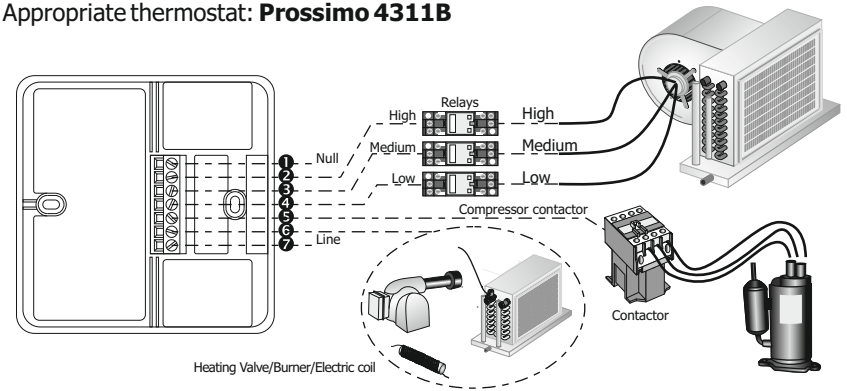
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	To cooling valve	Output	AC 220V / 24V 50Hz
6	To heating valve	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Four-pipe, 3-speed, ducted fan coil with two on/off valves
Appropriate thermostat: **Prossimo 4311A**



Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	To cooling valve	Output	AC 220V / 24V 50Hz
6	To heating valve	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

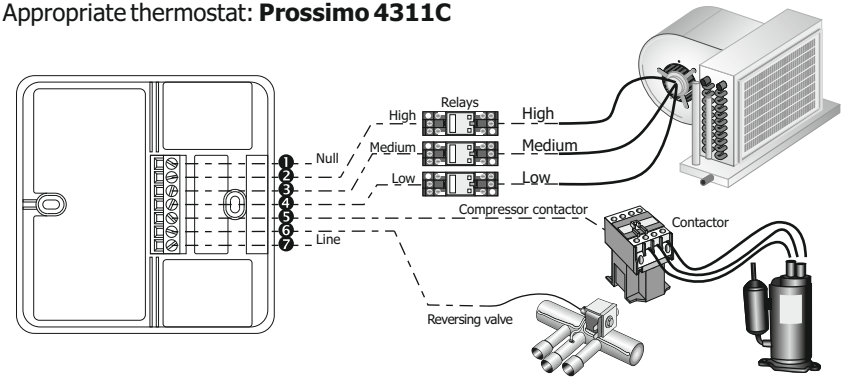
Air conditioner type: 3-speed ducted split or packaged air conditioner unit equipped with hot water coil with valve/ electric coil / gas burner for heating
Appropriate thermostat: **Prossimo 4311B**



Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	To valve/electric coil relay/gas burner controller	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

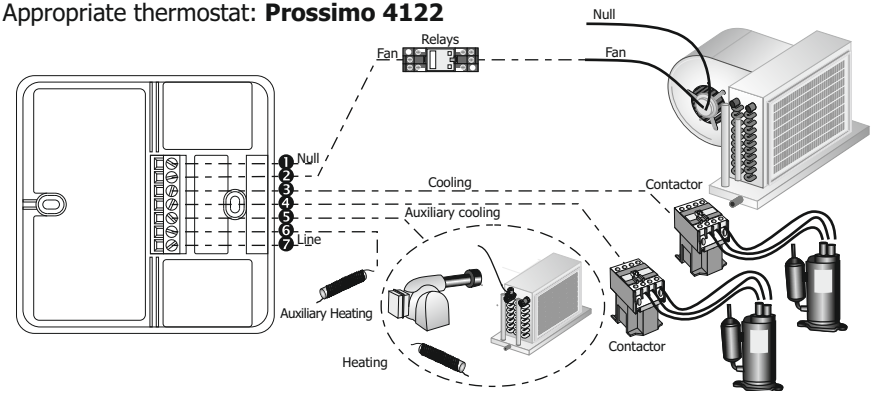
Air conditioner type: 3-speed ducted split or packaged air conditioner unit with reversing valve for heating

Appropriate thermostat: **Prossimo 4311C**



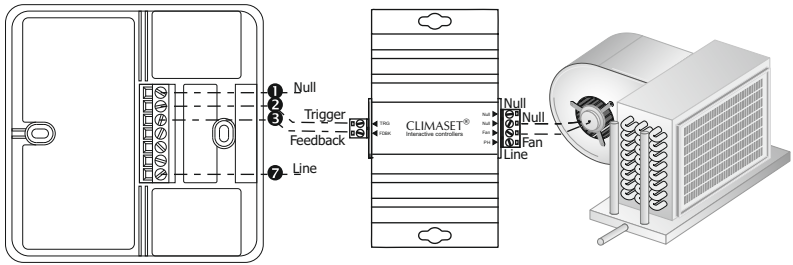
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan high	Output	AC 220V / 24V 50Hz
3	Fan medium	Output	AC 220V / 24V 50Hz
4	Fan low	Output	AC 220V / 24V 50Hz
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	To reversing valve	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Single-speed refrigerated type packaged air conditioner unit with maximum two stages of cooling and two stage of heating
Appropriate thermostat: **Prossimo 4122**



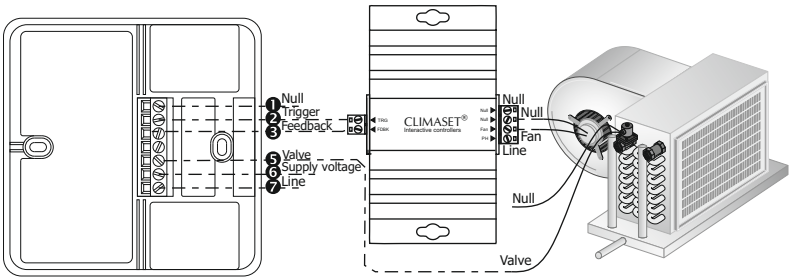
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V / 24V 50Hz
2	Fan	Output	AC 220V / 24V 50Hz
3	To primary compressor contactor	Output	AC 220V / 24V 50Hz
4	To auxiliary compressor contactor	Output	AC 220V / 24V 50Hz
5	To primary heating(valve/electric coil relay/gas burner controller)	Output	AC 220V / 24V 50Hz
6	To auxiliary heating	Output	AC 220V / 24V 50Hz
7	Line	Input	AC 220V / 24V 50Hz

Air conditioner type: Single-speed ducted fan coil
Appropriate thermostat: **Prossimo 4600**
Application: Converting single-speed ducted fan coil with asynchronous electro motor to adjustable, 6-speed fan coil.



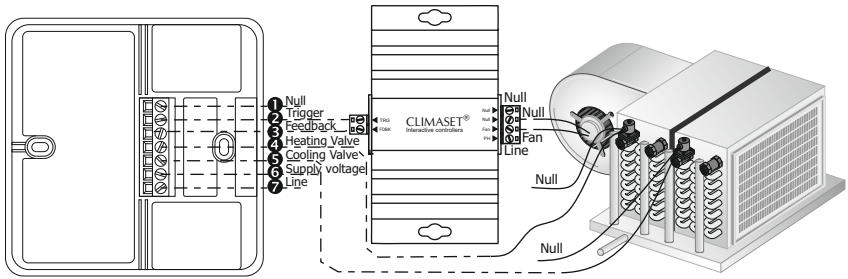
Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V 50Hz
2	Trigger	Output	AC 220V 50Hz
3	Feedback	Input	AC 220V 50Hz
4	Do not connect	-	-
5	Do not connect	-	-
6	Do not connect	-	-
7	Line	Input	AC 220V 50Hz

Air conditioner type: Single-speed, two-pipe ducted fan coil with on/off valve
Appropriate thermostat: **Prossimo 4610A**
Application: Converting single-speed ducted fan coil with asynchronous electro motor to adjustable, 6-speed fan coil.



Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V 50Hz
2	Trigger	Output	AC 220V 50Hz
3	Feedback	Input	AC 220V 50Hz
4	Do not connect	-	-
5	To valve	Output	AC 220V / 24V 50Hz
6	Supply voltage for the valve	Input	AC 220V / 24V 50Hz
7	Line	Input	AC 220V 50Hz

Air conditioner type: Four-pipe, single-speed, ducted fan coil with two on/off valves
Appropriate thermostat: **Prossimo 4611A**
Application: Converting single-speed ducted fan coil with asynchronous electro motor to adjustable, 6-speed fan coil.

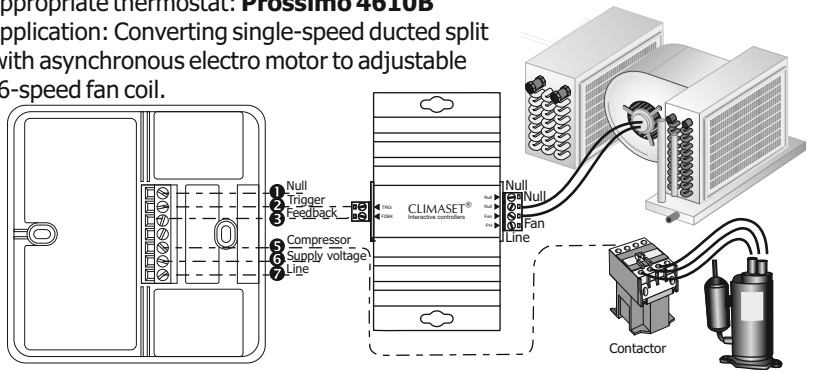


Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V 50Hz
2	Trigger	Output	AC 220V 50Hz
3	Feedback	Input	AC 220V 50Hz
4	To Heating valve	Output	AC 220V / 24V 50Hz
5	To Cooling valve	Output	AC 220V / 24V 50Hz
6	Supply voltage for the valves	Input	AC 220V / 24V 50Hz
7	Line	Input	AC 220V 50Hz

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

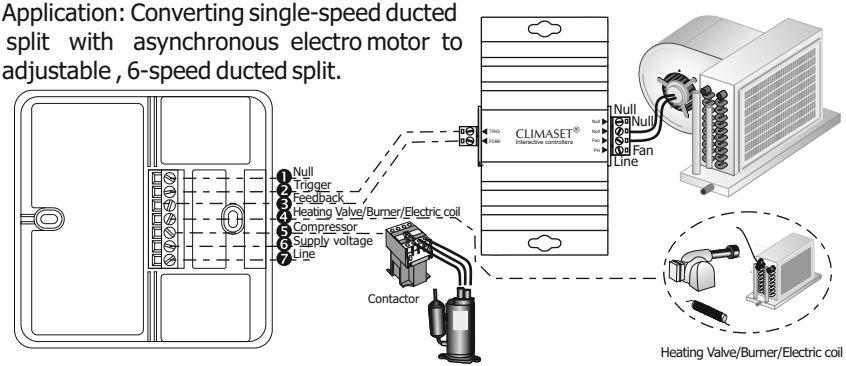
Appropriate thermostat: **Prossimo 4610B**

Application: Converting single-speed ducted split with asynchronous electro motor to adjustable , 6-speed fan coil.



Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V 50Hz
2	Trigger	Output	AC 220V 50Hz
3	Feedback	Input	AC 220V 50Hz
4	Do not connect	Output	AC 220V / 24V 50Hz
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	Supply voltage for compressor contactor	Input	AC 220V / 24V 50Hz
7	Line	Input	AC 220V 50Hz

Air conditioner type: Single-speed ducted split or packaged air conditioner unit equipped with hot water coil with valve/ electric coil / gas burner for heating
Appropriate Thermostat: **Prossimo 4611B**
Application: Converting single-speed ducted split with asynchronous electro motor to adjustable , 6-speed ducted split.

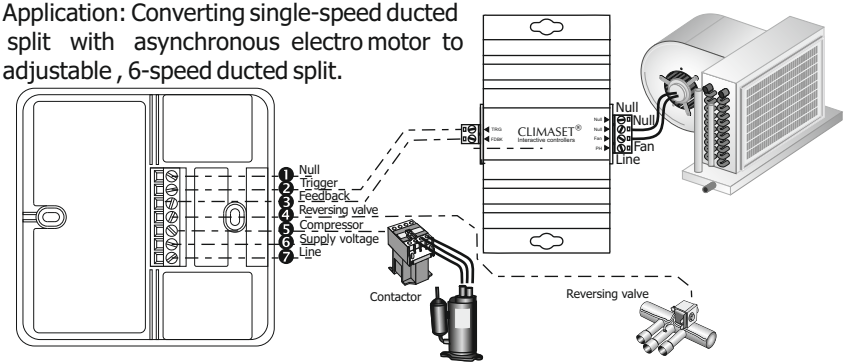


Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V 50Hz
2	Trigger	Output	AC 220V 50Hz
3	Feedback	Input	AC 220V 50Hz
4	To valve/electric coil relay/gas burner controller	Output	AC 220V / 24V 50Hz
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	Supply voltage for compressor & heating element	Input	AC 220V / 24V 50Hz
7	Line	Input	AC 220V 50Hz

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

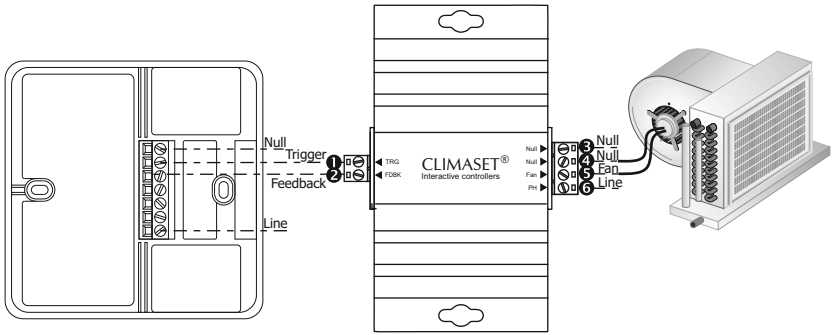
Appropriate thermostat: **Prossimo 4611C**

Application: Converting single-speed ducted split with asynchronous electro motor to adjustable , 6-speed ducted split.



Terminal number	Description	Input/ Output	Electrical characteristics
1	Null	Input	AC 220V 50Hz
2	Trigger	Output	AC 220V 50Hz
3	Feedback	Input	AC 220V 50Hz
4	To reversing valve	Output	AC 220V / 24V 50Hz
5	To compressor contactor	Output	AC 220V / 24V 50Hz
6	Supply voltage for contactor and reversing valve	Input	AC 220V / 24V 50Hz
7	Line	Input	AC 220V 50Hz

Appendix C. Wiring diagram of D46® dimmer



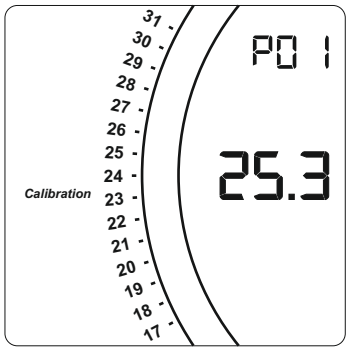
Terminal number	Description	Connection	Electrical characteristics
1	Trigger	From thermostat	AC 220V 50Hz
2	Feedback	To thermostat	AC 220V 50Hz
3	Null	From main supply	AC 220V 50Hz
4	Null	To fan	AC 220V 50Hz
5	Fan	To fan	AC 220V 50Hz
6	Line	From main supply	AC 220V 50Hz

Appendix D. Extra settings

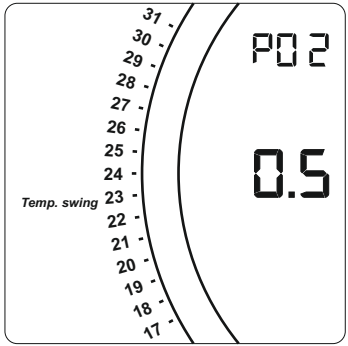
You may enter "Extra Settings" screen by holding up "▲" and down "▼" keys simultaneously for a few seconds. The program number will be displayed at the upper right corner of the screen followed by a brief description about each program. You may navigate through different programs by pressing up "▲" or down "▼" keys. Use "+" or "-" key to change each program parameters. Hold the power key for 3 seconds to save the settings and return to the main thermostat screen.

Extra settings are intended to be modified by experts. We do not recommend modification of these settings without enough knowledge about their effects.

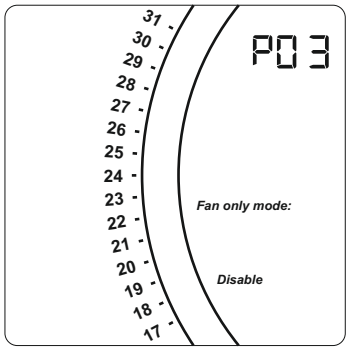
P01 - Calibration: Use this if you feel that the thermostat temperature differs from your room temperature. The thermostat is precisely calibrated in the factory, but as the temperature in thermostat position may differ by a few degrees centigrade in some locations in your room, you may calibrate the device to match a particular location. Using a precise thermometer at the location is helpful.



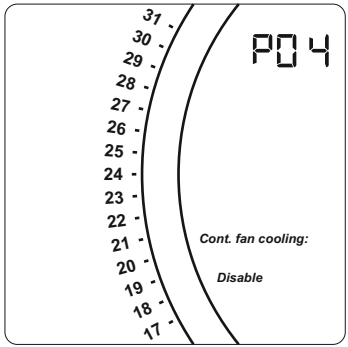
P02 - Temperature swing: This is the difference between the room and the set temperaure at which the device switcs on unless the device is in standby mode. You may set it between 0.5°C and 2.0°C. Recommended temperature swing for comfort is 0.5°C to 1.0°C, but you may set higher values up to 2.0°C to save more energy. Default factory setting for this parameter is 0.5°C.



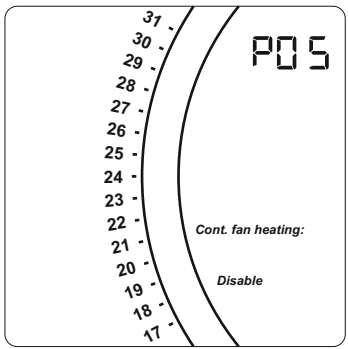
P03 - Fan only mode: If you enable this option, you can select the fan-only operation mode by pressing the heat/cool changeover key on the main screen. In this mode, the fan blows without heating or cooling the air. The availability of this option depends on thermostat and air conditioner type. Default factory setting for this parameter is "Disable".



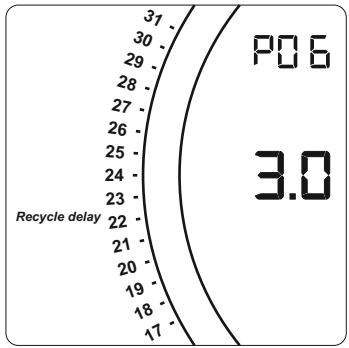
P04 - Continuous fan operation (cooling): With this option, the fan never switches off, but the thermostat controls the temperature by turning on or off the cooling component, such as a compressor or valve, etc. This option is not supported by all air conditioners and all thermostat models. The availability of this option depends on thermostat and air conditioner type. Default factory setting for this parameter is "Disable".



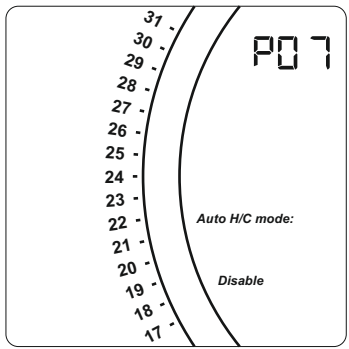
P05 - Continuous fan operation (heating): With this option, the fan never switches off, but the thermostat controls the temperature by turning on or off the heating component, such as a valve or burner, etc. This option is not supported by all air conditioners and all thermostat models. The availability of this option depends on thermostat and air conditioner type. Default factory setting for this parameter is "Disable".



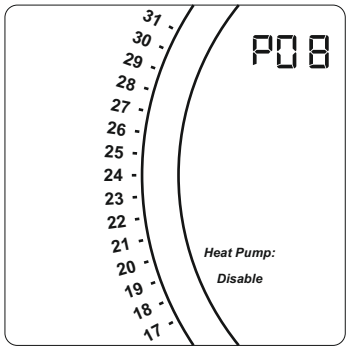
P06 - Recycle delay: If the thermostat directly commands a compressor, you need to set a 3-minute compressor restart delay to prevent damage to the compressor electro motor from successive restarts. The compressor cannot restart instantly after being switched off. The delay is necessary to equalize the pressure over the compressor. You may adjust the delay from 0 to 5 minutes. Default factory setting is 3 minutes.



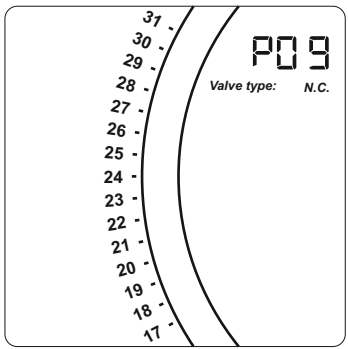
P07 - Automatic H/C changeover mode: Enabling this mode appends "Automatic Heat/Cool changeover" mode to operation modes of the thermostat. Selecting this operation mode, the thermostat itself decides to perform heating or cooling by comparing your set point with the room temperature. The availability of this option depends on thermostat and air conditioner type. Default factory setting for this parameter is "Disable".



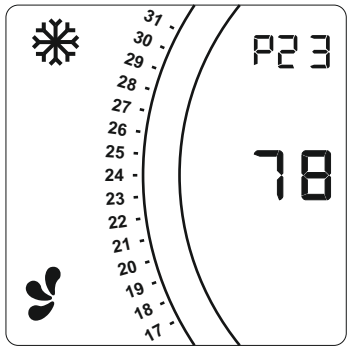
P08 - Heat pump: If your air conditioner provides heating by heat pump as well as another way of heating such as hot water coil, by enabling this option you may choose between both types of heating in operation modes. In this case heating by the other heating mode is represented by 1 and heating by heat pump is represented by 2 beside flame icon in main screen of the thermostat.

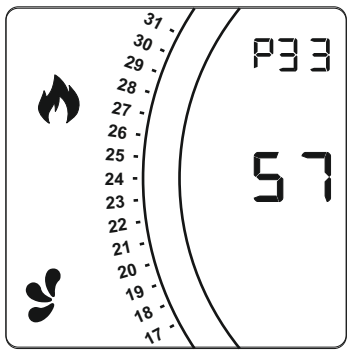


P09 - Valve type: Choose the type of actuator of electromagnetic valves, if they are present. Use "**+**" or "**-**" key to switch between normally closed or normally open type. N.C. stands for normally closed and is the default factory setting and N.O. stands for the normally open type. Not all the models supports electromagnetic valves. This program is skipped if not supported.



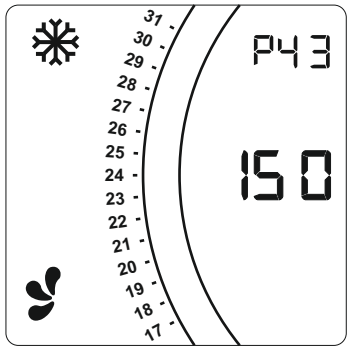
P21-26 / P31-36 - Adjustment of respective speed for each fan level: Using program 21 to 26 / 31 to 36, you may adjust the percentage of applied power for each respective fan level in cooling/heating mode. Number of the blades at the bottom left of the screen represents the affected fan level. Also the cooling or heating icon at the top left of the screen shows whether the adjustment applies to the fan speeds in cooling or heating mode. The applied power is proportional to the fan rotation speed and subsequently to the amount of the air conditioner air flow. The applied power percentage is limited to minimum 66% for 4610B,4611B and 4611C in cooling mode to prevent frost formation on the suction line of the compressor. Minimum applied power is limited to 33% for other models. The applied power percentage is limited to 33% for heating mode and also is applied to the blower mode as well.

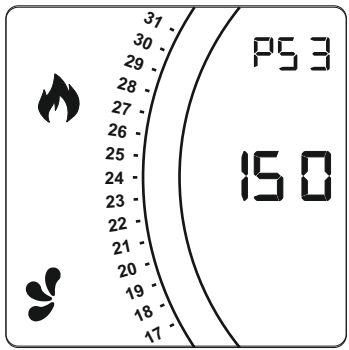




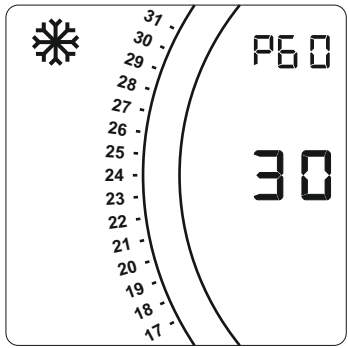
P41-46 / P51-56 - Fan acceleration time for each respective fan level in cooling / heating mode:

When fan is accelerating from stalled position or a lower fan speed, full power is applied for a short period to prevent overheating and damage of the fan. The value of fan acceleration time is represented in hundredth of a second and is adjustable between 0 to 500. You may use short push of power key to test the acceleration time for each fan level. The fan starts from stalled position and speeds up to nominal fan speed. The fan stops after 7 seconds. P41 to P46 are applied to cooling mode fan levels and P51 to P56 to heating or blower mode. The fan blades icon in bottom left of the screen indicates the affected fan level and the cooling or heating icon shows the determined mode. Use "+" or "-" to increase or decrease the acceleration time and power key to test the result.

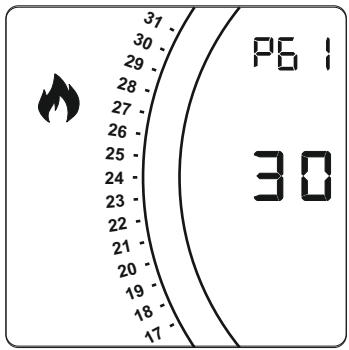




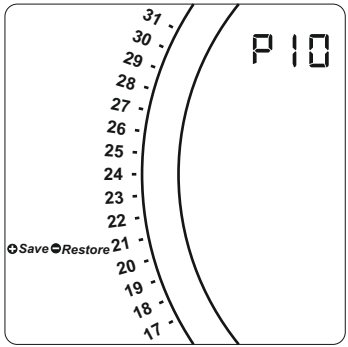
P60 - Fan stop latency in cooling mode: When the compressor stops or valve closes in the cooling mode, the coil is still cool. To maximize the performance of the air conditioner and to save more energy the fan may continue to blow with minimum fan speed for a specific time defined by time latency. Use "+" or "-" to adjust the fan stop latency time in seconds.



P61 - Fan stop latency in heating mode: When the compressor stops in heat pump systems or valve closes in the heating mode, the coil is still hot. To maximize the performance of the air conditioner and to save more energy the fan may continue to blow with minimum fan speed for a specific time defined by time latency. Use "+" or "-" to adjust the fan stop latency time in seconds.



P10/P99 - Save / Restore: Use "**+**" key to save all changes and return to the main screen. On the other hand you may use "**-**" key to restore all the settings to their initial values as set by the factory. It is useful if you forgot the changes you made and you are not satisfied by them.



✍ You may not have all the options listed if your air conditioner or your thermostat does not support them.

Appendix E. Troubleshooting

Issue	Action
The display has vanished	Check whether the circuit breaker is on and the fuse inside the thermostat is not blown. In any of these cases, we recommend that your air conditioner and your wiring be checked by a technician. Note for the technician: Turn off the circuit breaker. Detach the wires from the thermostat. Shorten the phase wire with one of the wires except the null. Turn on MCB and measure the current. Repeat the operation for each wire. Compare the results with the specified current in the air conditioner catalogue. Make sure that the air conditioner has no problem. Turn the circuit breaker off. Replace the fuse with the same type if it is blown (refer to Appendix E. for fuse ratings). Never bridge the fuse or replace it with another type of fuses. Turn the circuit breaker on again. If the circuit breaker is turned off again automatically, or if the fuse blows again, contact your local customer service provider.

Issue	Action
The air conditioner does not start	1. Check whether the power icon indicates the Operational mode. 2. Check whether you have selected heating or cooling appropriately. 3. Check whether the temperature difference is above the temperature swing which by default is 1ºC. Check Extra Settings screen for the swing temperature.
The air conditioner is always running	1. Check whether you have selected the heating or cooling mode appropriately. 2. Check whether your desired temperature is too low or too high. The best value for desired temperature is about 25ºC. 3. It is possible that your air conditioner capacity is not enough for your application or its performance has been reduced because of some technical problems.
Burnt fuse	Have a professional check the wiring. Always replace the fuse with one with the same ampere rating and the same I^2t. Never bridge a fuse with a wire or other conducting material.

✍ Contact your local customer service provider if the problem is not resolved or is not listed here.

Appendix F. Technical specifications of Prossimo® Thermostats

Dimensions	Temperature sensitivity	0.1°C
	Backlight	White
	Display length	56 mm / 2.2 inches
	Display width	56 mm / 2.2 inches
	Width	90 mm / 3.5 inches
	Length	90 mm / 3.5 inches
	Height	26 mm / 1 inch
Weight	Net weight	Max. 150g
	Gross weight	Max. 355g
Operating conditions	Temperature	0°C to 70°C
	Humidity	5% to 90% non-Condensing
Fuse specifications	Current rating	3.15 A
	Nominal melting I^2t	80 A^2/S
Optional remote controller specifications	Max. effective distance	8 m
	Max. viewing angle	30°

Appendix G. Technical specifications of D46® dimmers

Dimensions	Width	70 mm / 2.75 inches
	Length	136 mm / 5.35 inches
	Height	32 mm / 1.25 inches
Weight	Net weight	Max. 220g
	Gross weight	Max 390g
Maximum absolute ratings	Supply voltage	220VAC / 50Hz
	Maximum capable power	2.2 KW
	Maximum allowable current	10A
Operating conditions	Temperature	0°C to 50°C
	Humidity	5% to 90% non-Condensing
Fuse specifications	Current rating	10 A
	Nominal melting I^2t	310 A^2/S