



Touch Screen Thermostat

MTSVC/PROG/SUPER

Owner's manual and technician settings

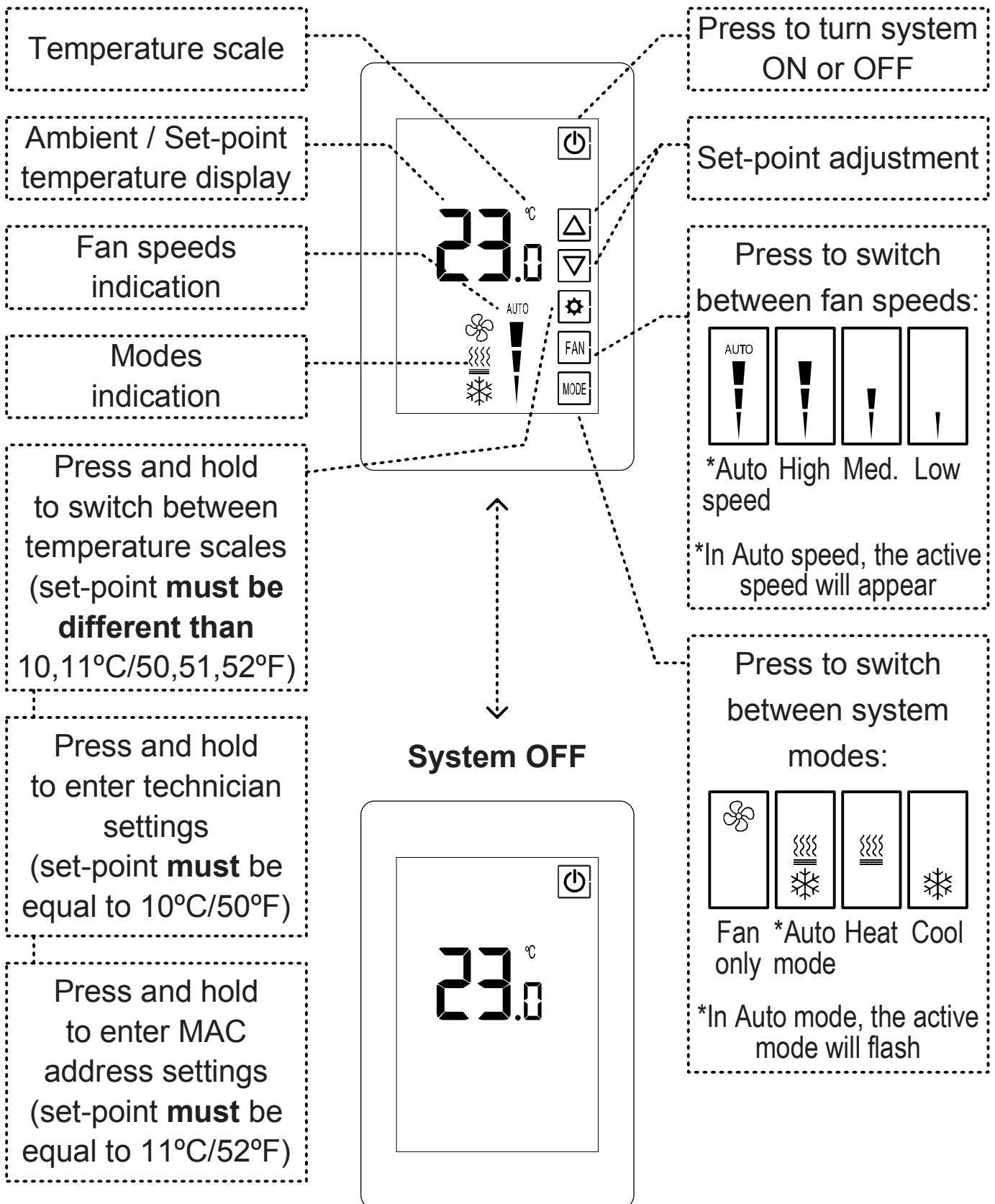
 **meitav-tec**

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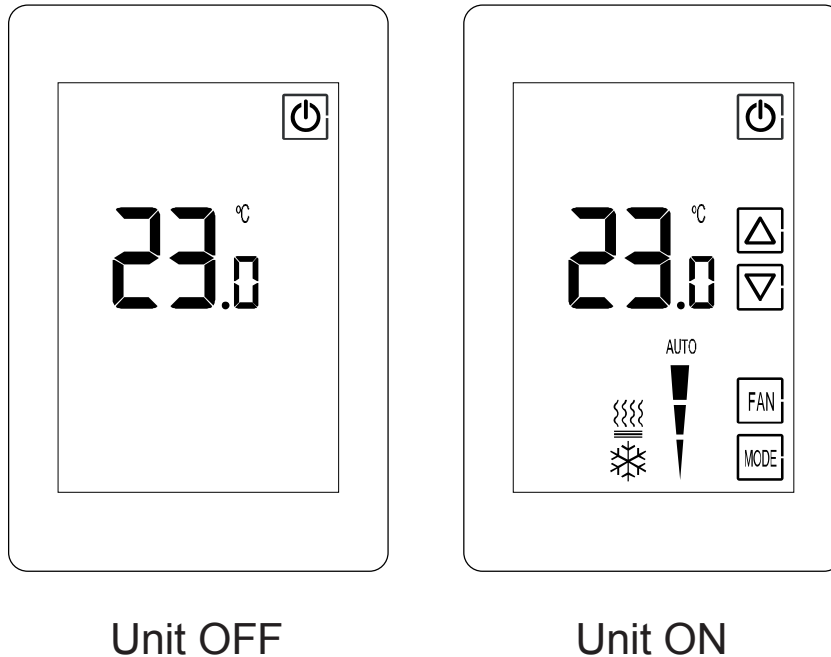
1. Owner's manual

1.1 Quick Guide





1.2 Turning the unit ON or OFF


- Press the  button to turn the unit ON – system mode and fan speed symbols will appear on display.
- Press again to turn the unit OFF – the symbols will disappear.



1.3 Adjusting the set-point temperature


- While the thermostat is ON, press the  or  buttons – the set-point temperature will flash.
- Press again to adjust the set point.

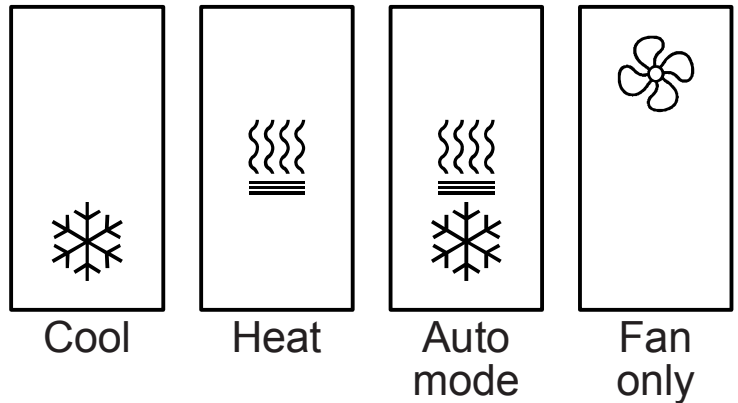
1.4 Switching between temperature scales

- Press and hold the  button to switch between temperature scales.



Note: set-point must be different than 10,11°C/50,51,52°F

1.5 Switching between system modes

- Press the  button to switch between system modes:



Notes:

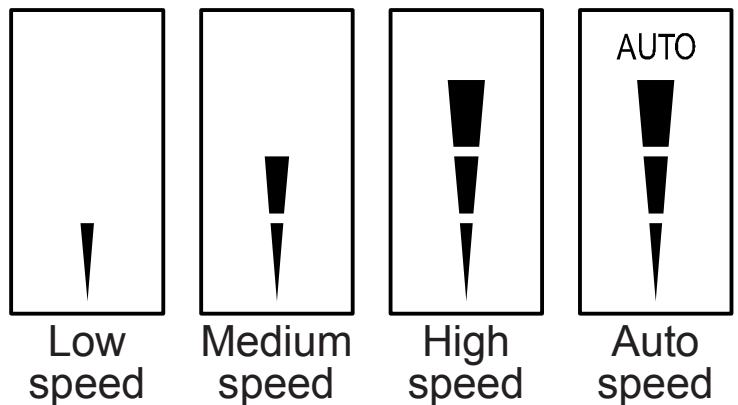
- During demand for cooling (cooling active), the  will flash.
- During demand for heating (heating active), the  will flash.

The selection of system modes may be disabled depending on system configuration.

1.6 Switching between fan speeds

- Press the  button to switch between fan speeds:

Note: When Auto speed is selected, the word "AUTO" and the active fan speed will appear on display



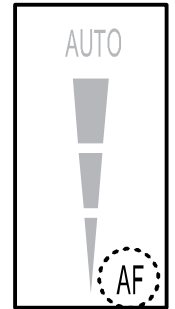
The selection of fan speeds may be disabled depending on system configuration.

1.7 Fan on demand (Auto fan)

- Press and hold the  button to activate or deactivate fan on demand (Auto fan) function.

Notes:



- When activated, the fan will run with demand for cooling or heating.
- The fan on demand function cannot be activated with “Fan only” mode.



AUTO FAN
active

This option may be disabled, depending on system configuration.

1.8 Lock the thermostat's buttons

- Press and hold the  button to lock or unlock the thermostat's buttons. When locked, the  icon will appear on display.

1.9 Weekly programs

A. General

Prior to programming, make sure that parameters P107, P108 and P109 in the technician settings are configured correctly.

Program types



- The thermostat can be configured to run four different types of weekly programs (set by technician parameter P107):
 1. Seven days program with same parameters for all days.
 2. Seven days program with different parameters for each day of the week.
 3. One schedule for the weekdays (Monday to Friday), one schedule for Saturday and another one for Sunday.
 4. One schedule for the weekdays (Monday to Friday) and another one for Saturday and Sunday.

Daily events


- Each daily program can use 2 or 4 schedule events per day (set by technician parameter P108).
- There are two options for settings the schedule events (set by technician parameter P109):
 1. **“EU Type”** - Start time and Stop time.
 2. **“US Type”** - Start time, set-point temperatures, system mode and fan speed.

1.9 Weekly programs (Cont')


Enabling/Disabling/Overriding the program

- Select “00” in parameter P107 to disable programming capabilities.
- When programming capabilities are enabled, press and hold the  button to temporarily discard the programmed schedule.
Press and hold the  button again to return to the program.
- The occupant can temporarily change the set point temperature to be different than the set point temperature specified by the program.
Changes will be affective until the next program event begins.

Programming procedure

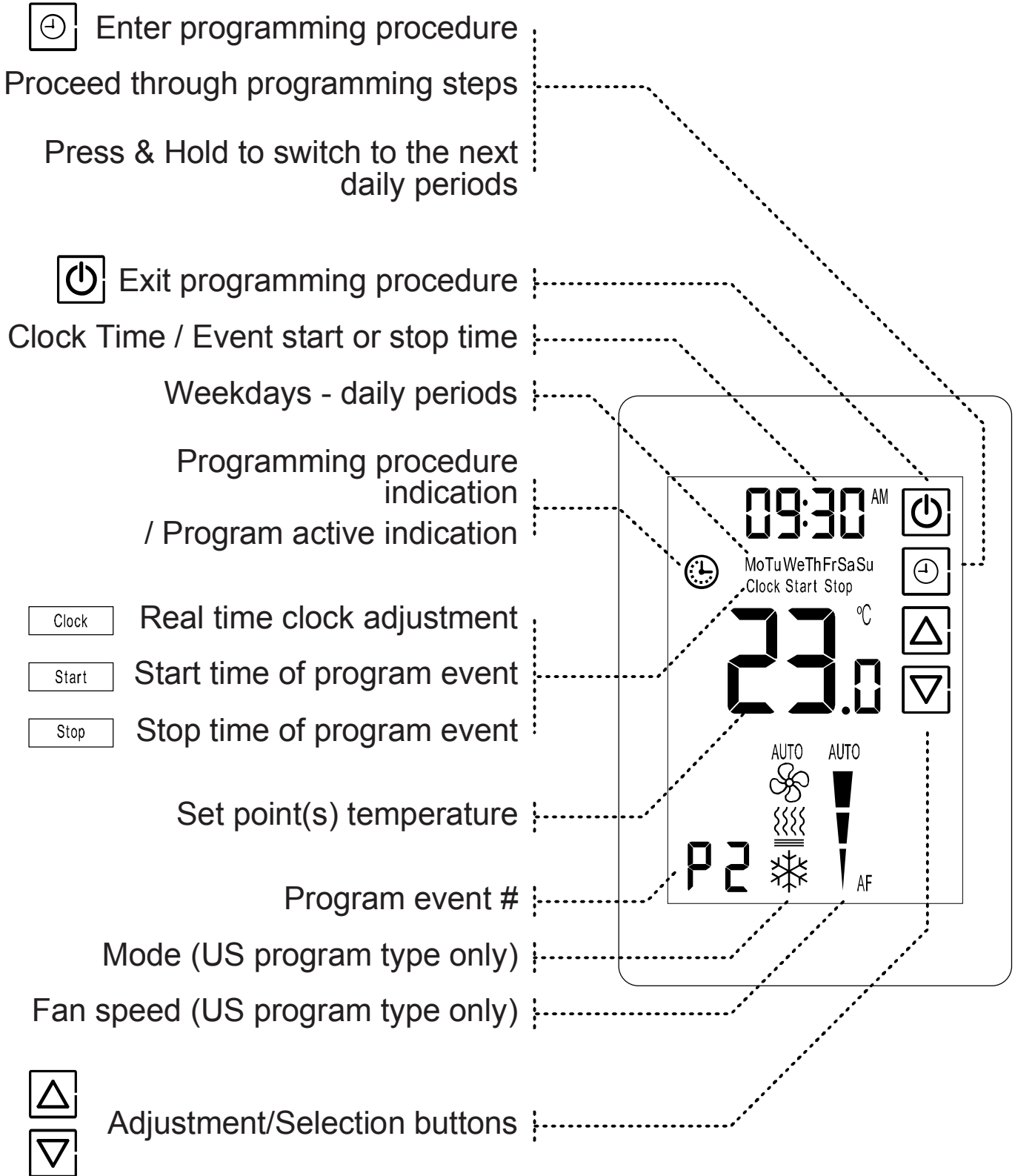
- The detailed programming procedure is described in the next sections.
Make sure to follow the right programming procedure, suitable for the program type and features selected by technician settings.
- Press the  button to enter and proceed through the steps of the real time clock and programming procedure.
- Use the arrow buttons to select or change value of a flashing icon.
- It is recommended to select programming values prior to the actual programming.

Exit the programming procedure

- At anytime during the programming procedure, Press the  button to exit and return to normal display.
- Any changed values will be saved.


1.9 Weekly programs (Cont')

Program display



1.9 Weekly programs

B. Adjusting the time and day of the week


- Press the  button – the word “Clock” will appear on display.

Hours

- The HOURS will flash.
- Use the arrow buttons to adjust the hours.




Minutes


- Press the  button again – the MINUTES will flash.
- Use the arrow buttons to adjust the hours.



Days

- Press the  button again – the DAYS will flash.
- Use the arrow buttons to select the day.



- If technician parameter P107 is not set to “00” (program is enabled), Press the  button to enter programming procedure.

Make sure to follow the right programming procedure, suitable for the program type and features selected by technician settings.

Section C – “EU Type”



Section D – “US Type”

- Otherwise, press the  button to return to normal display.

1.9 Weekly programs



C.2 Adjusting “EU type” daily programs

Start time

- Press the  button – the programmed weekday(s), “P1” indicating the first program event of the day and the word “Start” will appear on display.
- The HOURS will flash.
- Use the arrow buttons to adjust the start time hours of the first event.
- Press the  button again – the MINUTES will flash.
- Use the arrow buttons to adjust the start time minutes of the first event.



Stop time



- Press the  button again – the word “Stop” will appear on display.
- The HOURS will flash.
- Use the arrow buttons to adjust the stop time hours of the first event.
- Press the  button again – the MINUTES will flash.
- Use the arrow buttons to adjust the stop time minutes of the first event.
- **Follow the steps above for the other schedule events of the same daily period (P2 for 2 event per day, or P2, P3 and P4 for four events per day).**
- **Follow the steps above for all daily periods.**



1.9 Weekly programs


D. Adjusting “US type” daily programs

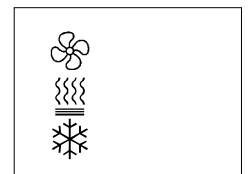
Start time

- Press the  button – the programmed weekday(s), “P1” indicating the first program event of the day and the word “Start” will appear on display.
- The HOURS will flash.
- Use the arrow buttons to adjust the start time hours of the first event.
- Press the  button again – the MINUTES will flash.
- Use the arrow buttons to adjust the start time minutes of the first event.




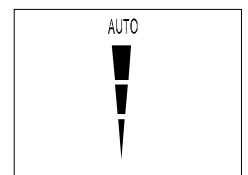
System mode

- Press the  button again – the selected system mode for the current programmed event will appear on display.
- Use the arrow buttons to select the mode (default Auto mode).



Fan speed

- Press the  button again – the selected fan speed for the current programmed event will appear on display.
- Use the arrow buttons to select the fan speed (default Auto speed).
- **Follow the steps above for the other schedule events of the same daily period (P2 for 2 event per day, or P2, P3 and P4 for four events per day).**
- **Follow the steps above for all daily periods.**



2. Installation Instructions

The MTSCV/PROG/SUPER Thermostat designed for flush mounting in the room to be controlled. It should be located where the occupant can easily read the display and use the controls.

If the built in temperature sensor is being used to measure room temperature, the panel should be placed where the temperature is representative of the general room conditions, away from cold or warm air draughts, radiant heat and direct sunlight.

The panel should not be installed on an outside wall.

- The standard installation height is 1.5 meter (5 feet) from the floor.



WARNING: Risk of Electric Shock and Property Damage.
Disconnect power supply before making electrical connections.
The installation is to be performed by a qualified electrician.



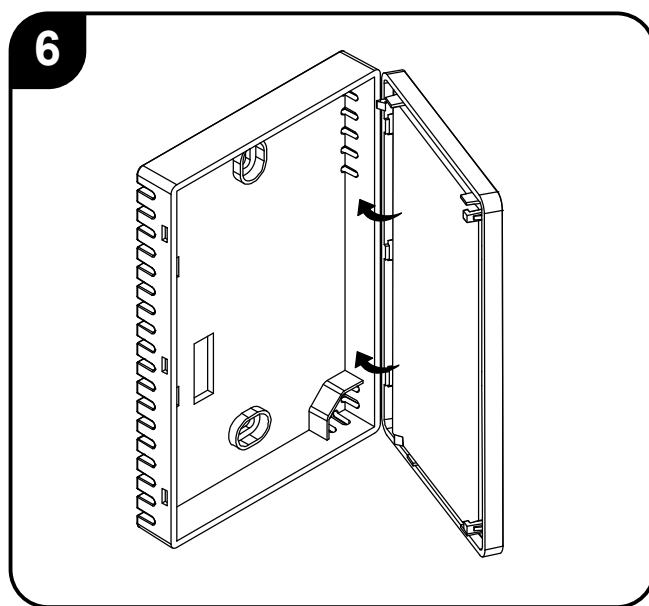
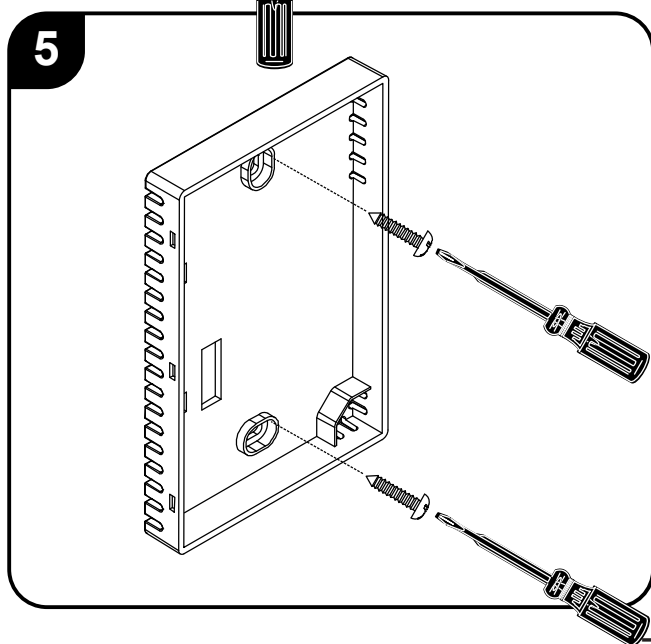
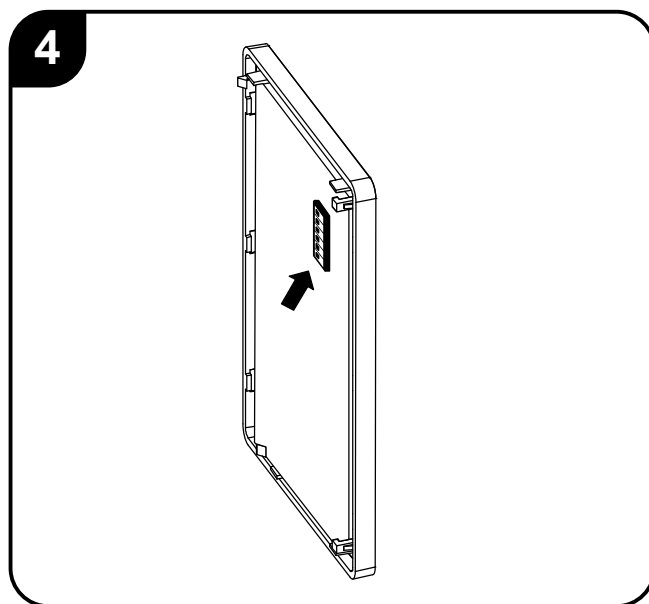
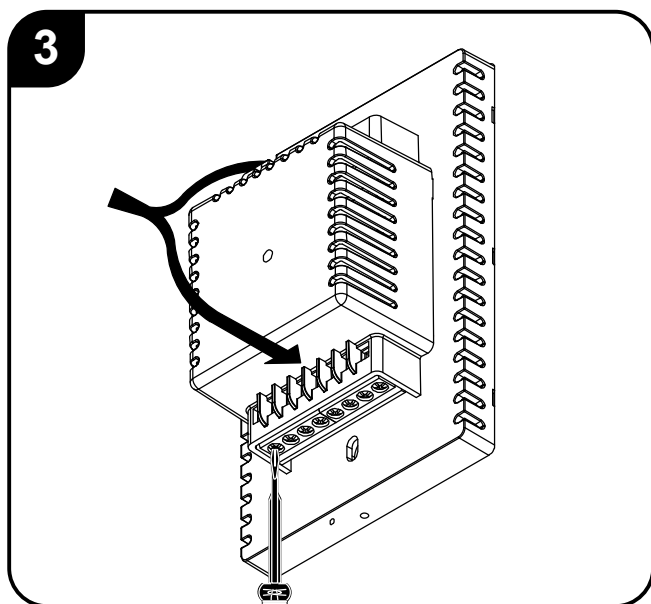
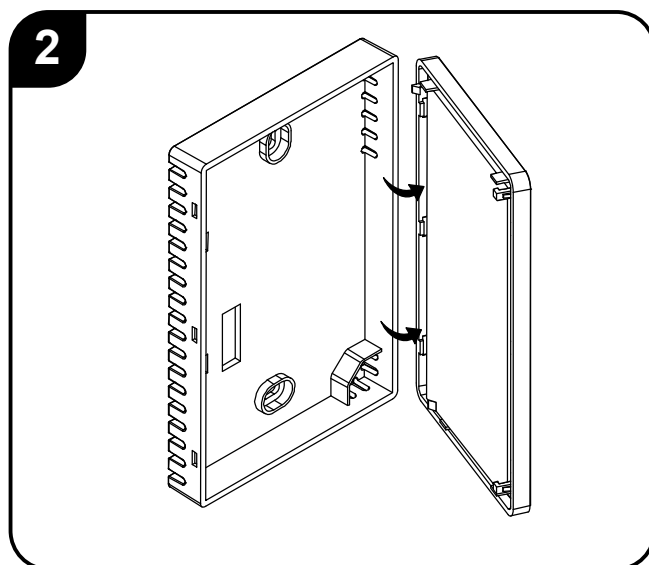
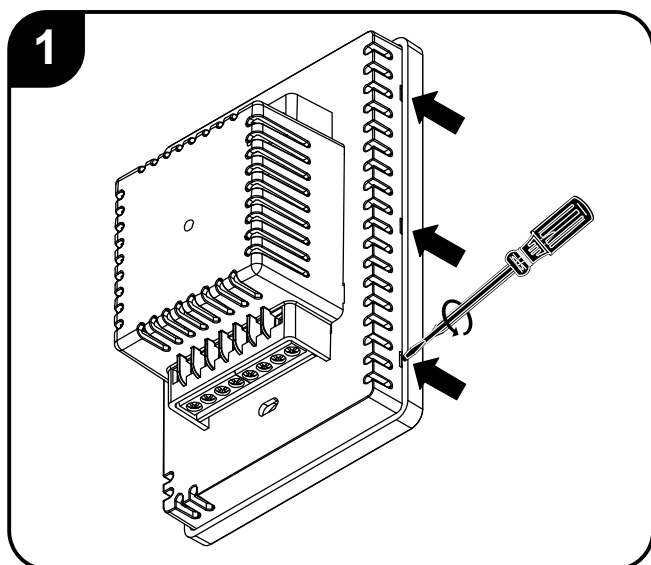
WARNING: The integrated circuits in the controller are sensitive to static currents. Take suitable precautions.

2. Installation Instructions (cont')

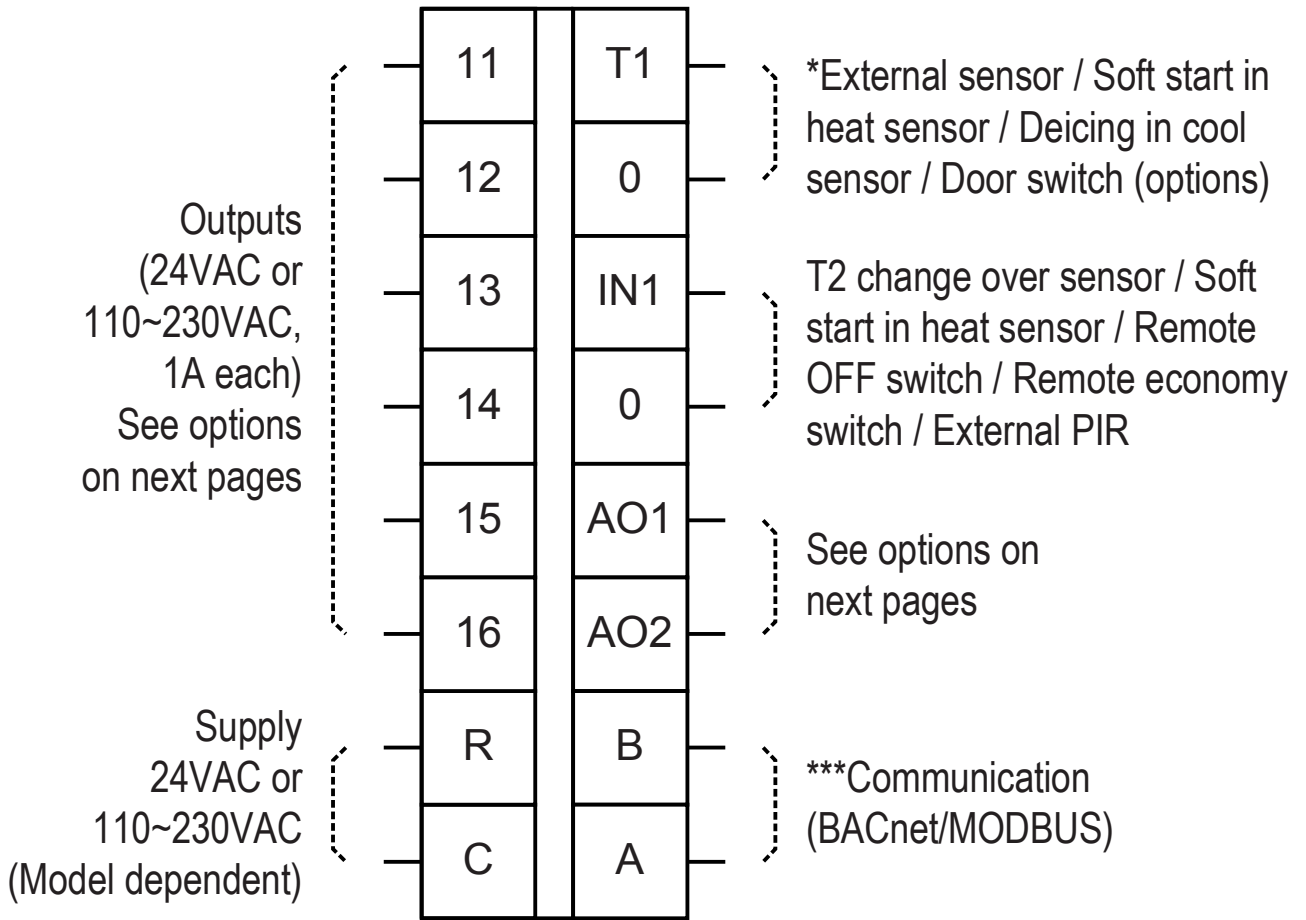
Installation procedure:

1. separate the front display from the back plastic cover by inserting a small flat screwdriver into each of the three slots as shown in the picture and rotating it gently.
2. Remove the front display and keep it in a safe place.
3. Connect the wires as shown in the enclosed wiring diagram. All terminals accept 1x0.5mm²/24 AWG.
4. If necessary, make changes to the DIP switches position as explained in this manual.
5. Place the thermostat in the electrical box and tighten up the 2 screws
Europe - Gewiss Box - GW 24 203 or similar
US - Carlon – B114R or similar or similar
6. Adapt the front frame-panel into its place, by pushing it towards the wall.

2. Installation Instructions (cont')



3. Wiring configuration and DIP Switches



* For T1,0 functionality – refer to parameter P8 in the technician settings section.

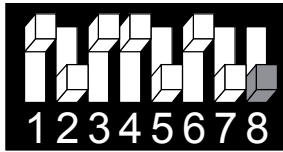
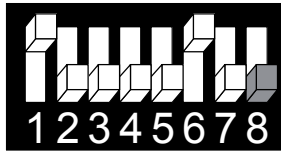
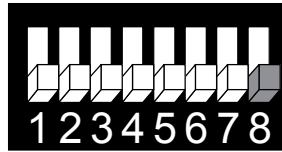
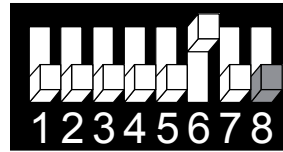
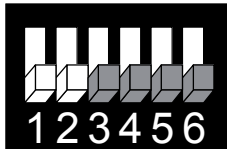
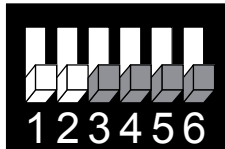
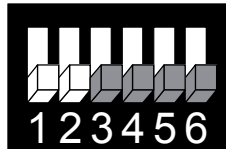
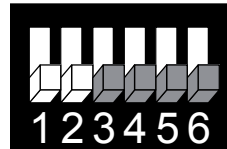
** For IN1,0 functionality – refer to parameter P9 in the technician settings section.

***Communication protocol is set by DIP Switch S1.8 as follows:

S1.8 ON – BACnet

S1.8 OFF – MODBUS

3. Wiring configuration and DIP Switches – AC systems

	HC32-1S	HP42-1S	HP22-3S	HP21-3S
11	Heat element 3	Heat element 2	Fan high	Fan high
12	Heat element 2	Heat element 1	Fan medium	Fan medium
13	Fan (1 speed)	Fan (1 speed)	Fan low	Fan low
14	Compressor 2	Compressor 2	Compressor 2	Heat element
15	Compressor 1	Compressor 1	Compressor 1	Compressor 1
16	Heat element 1 (see SW1.4 HC)	Heat pump (see SW1.4 HP)	Heat pump (see SW1.4 HP)	Heat pump (see SW1.4 HP)
AO1	X	X	X	X
AO2	X	X	X	X
SW1				
SW2				

SW1.8 = Protocol: ON – BACnet, OFF – MODBUS

SW1.4 = HP: ON – Heat pump active in cool, OFF – Heat pump active in heat
 HC: ON – Electrical heater, OFF – Oil/Gas heater (no fan)

SW1.5 = ON: Disable compressor delay, OFF – Enable compressor delay

S2.3 – S2.6 – Not in use – must remain in default factory position - OFF

HP - Heat pump system HC - Non heat pump system ## - Heating/Cooling stages

3. Wiring configuration and DIP Switches – AC systems

	HC21-3S	HP22-VFS	HP21-VFS	HC21-VFS
11	Fan high	Fan high	Fan high	Fan high
12	Fan medium	Fan medium	Fan medium	Fan medium
13	Fan low	Fan low	Fan low	Fan low
14	Heat element 2	Compressor 2	Heat element	Heat element 2
15	Compressor 1	Compressor 1	Compressor	Compressor 1
16	Heat element 1 (see SW1.4 HC)	Heat pump (see SW1.4 HP)	Heat pump (see SW1.4 HP)	Heat element 1 (see SW1.4 HC)
AO1	X	X	X	X
AO2	X	Fan VFS	Fan VFS	Fan VFS



SW1.8 = Protocol: ON – BACnet, OFF – MODBUS

SW1.4 = HP: ON – Heat pump active in cool, OFF – Heat pump active in heat

HC: ON – Electrical heater, OFF – Oil/Gas heater (no fan)

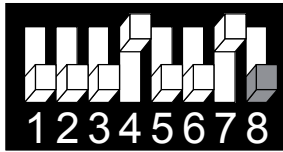
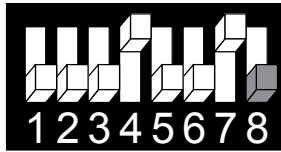
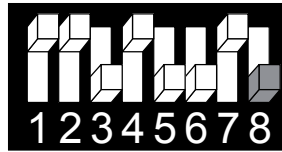
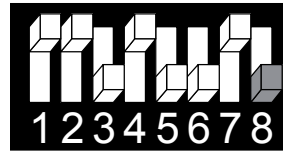
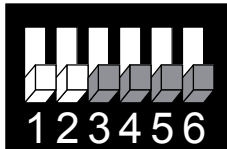
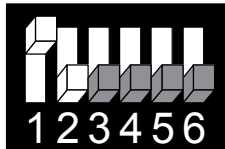
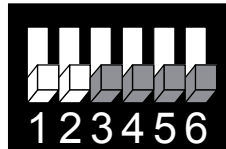
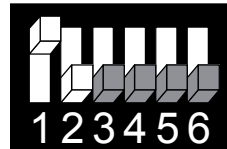
SW1.5 = ON: Disable compressor delay, OFF – Enable compressor delay

S2.3 – S2.6 – Not in use – must remain in default factory position - OFF

HP - Heat pump system HC - Non heat pump system ## - Heating/Cooling stages

VFS - Fan VFS

3. Wiring configuration and DIP Switches – Fan coil systems

	2-Pipe 3S	2-Pipe PID 3S	2-Pipe VFS	2-Pipe PID VFS
11	Fan high	Fan high	Fan high	Fan high
12	Fan medium	Fan medium	Fan medium	Fan medium
13	Fan low	Fan low	Fan low	Fan low
14	Heat element (2 nd stage heat)	Heat element (2 nd stage heat)	Heat element (2 nd stage heat)	Heat element (2 nd stage heat)
15	Cool/Heat valve	X	Cool/Heat valve	X
16	X	X	X	X
AO1	X	Cl/Ht valve PID	X	Cl/Ht valve PID
AO2	X	X	Fan VFS	Fan VFS
SW1				
SW2				

SW1.8 = Communication Protocol: ON – BACnet, OFF – MODBUS

SW1.4 = Enable/Disable 2nd heating stage: ON – Enable, OFF – Disable

SW1.5 = Chilled beam option (fan will not run with 1st stage cooling) – SW1.5 ON


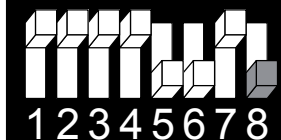

S2.3 – S2.6 – Not in use – must remain in default factory position - OFF

PID = Cool/Heat (Cl/Ht) valve PID

VFS = Fan VFS

3. Wiring configuration and DIP Switches – Fan coil systems

	4-Pipe 3S	4-Pipe VFS	4-Pipe 3S C-PID
11	Fan high	Fan high	Fan high
12	Fan medium	Fan medium	Fan medium
13	Fan low	Fan low	Fan low
14	Heat element (2 nd stage heat)	Heat element (2 nd stage heat)	Heat element (2 nd stage heat)
15	Cool valve	Cool valve	X
16	Heat valve (1 st stage heat)	Heat valve (1 st stage heat)	Heat valve (1 st stage heat)
AO1	X	X	Cool valve PID
AO2	X	Fan VFS	X

SW1			
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SW2			
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SW1.8 = Communication Protocol: ON – BACnet, OFF – MODBUS

SW1.4 = Enable/Disable 2nd heating stage: ON – Enable, OFF – Disable

SW1.5 = Chilled beam option (fan will not run with 1st stage cooling) – SW1.5 ON

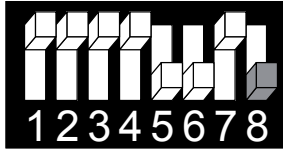
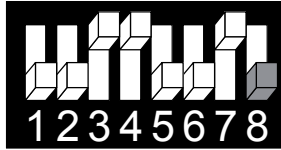
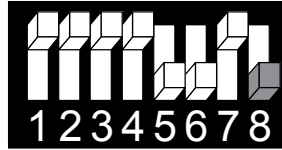
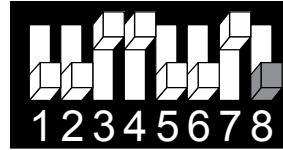
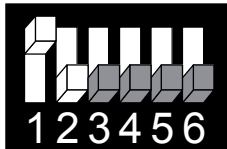
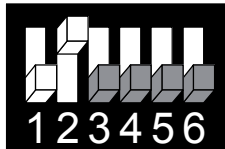
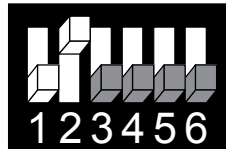
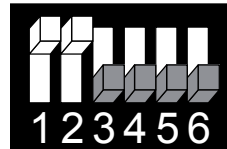
S2.3 – S2.6 – Not in use – must remain in default factory position - OFF

C-PID = Cool valve PID

H-PID = Heat valve PID

VFS = Fan VFS

3. Wiring configuration and DIP Switches – Fan coil systems

	4-Pipe VFS C-PID	4-Pipe 3S H-PID	4-Pipe VFS H-PID	4-Pipe 3S HC-PID
11	Fan high	Fan high	Fan high	Fan high
12	Fan medium	Fan medium	Fan medium	Fan medium
13	Fan low	Fan low	Fan low	Fan low
14	Heat element (2 nd stage heat)	Heat element (2 nd stage heat)	Heat element (2 nd stage heat)	Heat element (2 nd stage heat)
15	X	Cool valve	Cool valve	X
16	Heat valve (1 st stage heat)	X	X	X
AO1	Cool valve PID	Heat valve PID (1 st stage heat)	Heat valve PID (1 st stage heat)	Cool valve PID
AO2	Fan VFS	X	Fan VFS	Heat valve PID (1 st stage heat)
SW1				
SW2				

SW1.8 = Protocol: ON – BACnet, OFF – MODBUS

SW1.4 = Enable/Disable 2nd heating stage: ON – Enable, OFF – Disable

SW1.5 = Chilled beam option (fan will not run with 1st stage cooling) – SW1.5 ON

S2.3 – S2.6 – Not in use – must remain in default factory position - OFF

C-PID = Cool valve PID

H-PID = Heat valve PID

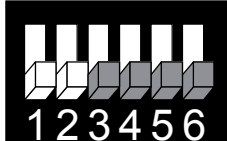
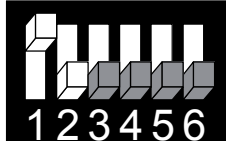
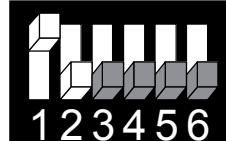
HC-PID = Cool and Heat valves PID

VFS = Fan VFS

3. Wiring configuration and DIP Switches – Fan coil systems

	4P-3S Floor heating	4-Pipe 3S C-PID Floor heating	4-Pipe VFS C-PID Floor heating
11	Fan high	Fan high	Fan high
12	Fan medium	Fan medium	Fan medium
13	Fan low	Fan low	Fan low
14	Floor heating (1 st stage heat)	Floor heating (1 st stage heat)	Floor heating (1 st stage heat)
15	Cool	X	X
16	Heat (2 nd stage heat)	Heat (2 nd stage heat)	Heat (2 nd stage heat)
AO1	X	Cool valve PID	Cool valve PID
AO2	X	X	Fan VFS

SW1			
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SW2			
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Floor heating – the fan will not run with 1st stage heat

SW1.8 = Protocol: ON – BACnet, OFF – MODBUS

SW1.4 = Enable/Disable 2nd heating stage: ON – Enable, OFF – Disable

SW1.5 = Chilled beam option (fan will not run with 1st stage cooling) – SW1.5 ON

S2.3 – S2.6 – Not in use – must remain in default factory position - OFF

C-PID = Cool valve PID





H-PID = Heat valve PID

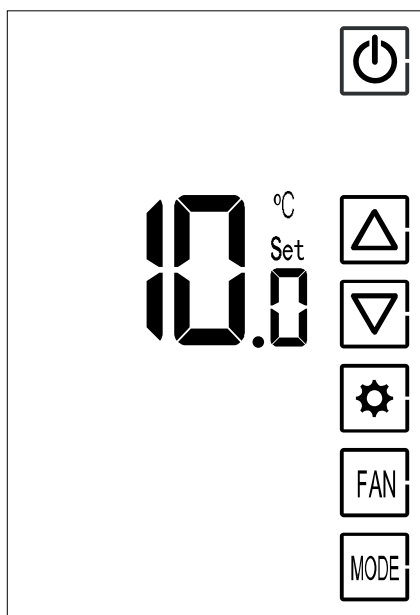
HC-PID = Cool and Heat valves PID

VFS = Fan VFS

4. Technician Settings

Enter technician settings

- Adjust the set-point temperature to 10°C/50°F.
- To enter technician settings, press and hold the  button for 5 seconds.
- Use the  button to advance to the next parameter.
- Use the  button to return to return to the previous parameter.
- Press the  button or wait 60 seconds to exit technician settings and return to normal display.



Note: The displayed parameters may depend on system configuration

4. Technician settings (cont')

P1 – Offset for temperature readings calibration

Range: -6...+6°C / -9...+9°F.

Default: 0°C / 0°F.

P2 – Set point limit for cooling

Range: 5...35°C / 41...90°F.

Default: 5°C / 35°F.

P3 – Set point limit for heating

Range: 5...35°C / 41...95°F.

Default: 35°C / 95°F.

P4 – Lock the [Fan] button

“01” - [Fan] button Locked

“00” - [Fan] button unlocked

P5 – Lock the [Mode] button

“01” - [Mode] button Locked

“00” - [Mode] button unlocked (default)

P6 – Lock the [On/Off] button

“01” - [On/Off] button Locked

“00” - [On/Off] button unlocked (default)

4. Technician settings (cont')

P7 – Lock the [+] and [-] buttons (Set buttons)

- "01" - [+] and [-] buttons Locked
 - "00" - [+] and [-] buttons unlocked (default)
-

P8 – Functionality of T1 terminals

- "00" - T1 terminals are not in use (default)
 - "01" - External sensor
 - "02" - Soft start in heat sensor (FC), Deicing in cool (AC)
 - "03" - Door switch
 - "04" - Window contact/Key-tag
-

P9 – Functionality of In1,0 terminals

- "00" - In1,0 terminals are not in use (default)
- "01" - T2 (Change over sensor)
- "02" - *T3 (Soft start in heat sensor)
- "03" - Remote On/Off switch
- "04" - Remote Economy switch
- "05" - External Passive Infrared detector (PIR)

* Where T1 terminals are used for external sensor, the In1,0 terminals can be used for T3 sensor.

P10 – Window contact (terminals In1,0) polarity

- "00" - Normally open (default)
 - "01" - Normally close
-

4. Technician settings (cont')

P11 – Window contact delay time

Range: 0...999 seconds

Default: 600 seconds

P12 – Door switch / Door key-tag (terminals T1,0) polarity

“00” - Normally open (default)

“01” - Normally close

P13 – Door switch / Door key-tag delay time

Range: 0...999 seconds

Default: 180 seconds

P14 – Enable/Disable Auto change over mode

“00” - Disable Auto change over mode

“01” - Enable Auto change over mode (default)

P15 – Occupancy sensor logic (PIR)

“00” - Thermostat turns off when unoccupied
and back on when re-occupied

“01” - Thermostat turns off when unoccupied
and remains off when re-occupied

“02” - Thermostat uses economy set points (default)

P16 – Enable/Disable Occupancy sensor

“00” - Disable

“01” - Enable (default)

4. Technician settings (cont')

P17 – PIR (occupancy sensor) delay time before switching to unoccupied mode (ON delay)

Range: 0...250 minutes, Default: 20 minutes

P19 – PIR (Occupancy sensor) polarity

“00” - Normally open (default)

“01” - Normally close

P25 – Economy set point for cooling

Range: 5...35°C / 41...90°F

Default: 30°C / 86°F

P26 – Economy set point for heating

Range: 5...35°C / 41...90°F

Default: 10°C / 50°F

4. Technician settings (cont')

P27 – Time on-delay between heating stages

Range: 0...600 seconds

Default: 5 seconds

P28 – Time off-delay between heating stages

Range: 0...600 seconds

Default: 1 seconds

P30 – Beeper ON or OFF

“01” - Beeper ON (default)

“00” - Beeper OFF

P31 – Fan ON delay in cooling (seconds) (FC only!)

Range: 0...120 seconds

Default: 0 seconds (no delay)

P32 – Fan OFF delay in cooling (seconds)

Range: 0...120 seconds

Default: 0 seconds (no delay)

P33 – Fan ON delay in heating (seconds) (FC only!)

Range: 0...120 seconds

Default: 0 seconds (no delay)

P34 – Fan OFF delay in heating (seconds)

Range: 0...120 seconds

Default: 30 seconds

4. Technician settings (cont')

P35 – Enable/Disable Freeze protection

“01” - Enable freeze protection (default)

“00” - Disable freeze protection

P36 – Freeze protection cut-in set point

Range: 8...15°C / 46...59°F

Default: 8°C / 46°F

P37 – Freeze protection cut-out set point

Range: 10...17°C / 50...63°F

Default: 10°C / 50°F

P40 – View filter counter (hours) – Read only

Range: 0...999 hours

P41 – Reset filter time

“00” - No action - keep counting (default)

“01” - Reset filter counter

P42 – Adjust filter alarm delay time counter (hours)

Range: 0...999 hours

Default: 0 hours (0 = Disable)

4. Technician settings (cont')

P43 – Soft start in heat – cut-in temperature (FC only!)

The fan will not start before the temperature on T3 sensor reaches the cut-in temperature.

Range: 14...37°C / 57...99°F

Default: 36°C / 96°F

P44 – Soft start in heat – cut-out temperature (FC only!)

The fan will stop if the temperature on T3 sensor drops below the cut-out temperature.

Range: 14...37°C / 54...95°F

Default: 32°C / 89°F

P45 – Cool differential band (On/Off)

Range: 0...5°C / 0...10°F

Default: 1°C / 2°F

P46 – Cool differential band offset

Range: 0...5°C / 0...10°F

Default: 0°C / 0°F

P47 – Heat differential band (On/Off)

Range: 0...5°C / 0...10°F

Default: 1°C / 2°F

P48 – Heat differential band offset

Range: -5...0°C / -10...0°F

Default: 0°C / 0°F

4. Technician settings (cont')

P49 – Shift between Cool and Heat in Auto change over mode

Range: 0...10°C / 0...20°F

Default: 2°C / 4°F

P50 – Shift between Cooling stages (AC only!)

Range: 0...10°C / 0...20°F

Default: 2°C / 4°F

P51 – Shift between Heating stages

Range: 0...10°C / 0...20°F

Default: 2°C / 4°F

P52 – Cool proportional band (FC only!)

Range: 2...10°C / 4...20°F

Default: 2°C / 4°F

P53 – Cool proportional low limit (FC only!)

Range: 0...100%

Default: 0%

P54 – Cool proportional high limit (FC only!)

Range: 0...100%

Default: 100%

4. Technician settings (cont')

P55 – Heat proportional band (FC only!)

Range: 2...10°C / 4...20°F

Default: 2°C / 4°F

P56 – Heat proportional low limit (FC only!)

Range: 0...100%

Default: 0%

P57 – Heat proportional high limit (FC only!)

Range: 0...100%

Default: 100%

P60 – Proportional ON percent (FC only!)

Range: 0...30%

Default: 30%

P61 – Proportional OFF percent (FC only!)

Range: 0...20%

Default: 10%

4. Technician settings (cont')

P63 – Time on-delay between cooling stages (AC only!)

Range: 0...600 seconds

Default: 5 seconds

P64 – Time off-delay between cooling stages (AC only!)

Range: 0...600 seconds

Default: 1 seconds

P65 – Fan VFS proportional band in cooling

Range: 2...10°C / 4...20°F

Default: 2°C / 4°F

P66 – Fan VFS proportional band in heating

Range: 2...10°C / 4...20°F

Default: 2°C / 4°F

P67 – Fan VFS Low speed percent in cooling

Range: 0...30%

Default: 20%

P68 – Fan VFS Medium speed percent in cooling

Range: 30...60%

Default: 50%

P69 – Fan VFS High speed percent in cooling

Range: 60...100%

Default: 90%

4. Technician settings (cont')

P70 – Fan VFS Low speed percent in heating

Range: 0...30%

Default: 30%

P71 – Fan VFS Medium speed percent in heating

Range: 30...60%

Default: 50%

P72 – Fan VFS High speed percent in heating

Range: 60...100%

Default: 80%

P74 – VFS Medium speed differential

Range: 10...50%

Default: 35

P75 – VFS High speed differential

Range: 10...50%

Default: 35

4. Technician settings (cont')

P76 – Fan VFS Low limit in cooling

Range: 0...100%

Default: 0%

P77 – Fan VFS High limit in cooling

Range: 0...100%

Default: 100%

P78 – Fan VFS Low limit in heating

Range: 0...100%

Default: 0%

P79 – Fan VFS High limit in heating

Range: 0...100%

Default: 100%

P83 – View T2 temperature sensor readings

Note: If T2 is not connected, -9.8°C / -9.8°F
will appear on display

P84 – View T3 temperature sensor readings

Note: If T3 is not connected, -9.8°C / -9.8°F
will appear on display

4. Technician settings (cont')

P85 – Deice in cool – cut-in temperature (AC only!)

Range: -9.5...99°C / 15...210°F

Default: 0°C / 32°F

P86 – Deice in cool – cut-out temperature (AC only!)

Range: -9.5...99°C / 15...210°F

Default: 8°C / 46°F

P87 – Deice in heat time (AC only!)

Range: 120...420 Seconds

Default: 300 Seconds

P88 – Deice in heat break time (AC only!)

Range: 600...1800 Seconds

Default: 1500 Seconds

P89 – Deice in heat – cut-in temperature (AC only!)

Range: -9.5...99°C / 15...210°F

Default: 0°C / 32°F

P90 – Deice in heat – cut-out temperature (AC only!)

Range: -9.5...99°C / 15...210°F

Default: 16°C / 61°F

P91 – Compressor delay (AC only!)

Range: 0...360 Seconds

Default: 10 Seconds

4. Technician settings (cont')

P99 – One or Two set points (for cool and for heat)

“00” - One set point for cooling and heating (default)

“01” - two set points – one for cool and one for heat

P100 – Enable/Disable Screen dimming

“00” - Enable

“01” - Disable (default)

P101 – Screen dimming delay

Range: 0...99 minutes

Default: 5 minutes

P102 – Dimming percentage value

Range: 1,5,10...90%

Default: 10%

P105 – Display brightness

Range: 50...100%

Default: 100%

P107 – Programming options

“00” - Program disabled

“01” - Same program for all days

“02” - One program for Saturday and Sunday and another program for the weekdays (Monday to Friday)

“03” - One Program for the weekdays, One for Saturday and one for Sunday

“04” - Separate programs for every day

4. Technician settings (cont')

P108 – Number of program events per day

“00” - Two program events (P1 and P2)

“01” - Four program events (P1, P2, P3 and P4)

P109 – Program type

“00” - “US Type” (Start time, Set points, Mode and Fan speed)

“01” - “EU Type” (Start time, Stop time)

P114 – Cool PID Kp (FC only!)

Range: 0...100%

Default: 100%

P115 – Heat PID Kp (FC only!)

Range: 0...100%

Default: 100%

P116 – Cool PID Ki (FC only!)

Range: 0...100%

Default: 0%

P117 – Heat PID Ki (FC only!)

Range: 0...100%

Default: 0%

P118 – Cool PID Kd (FC only!)

Range: 0...100%

Default: 1%

4. Technician settings (cont')

P119 – Heat PID Kd (FC only!)

Range: 0...100%

Default: 1%

P198 – Protocol indication (read only!)


0 - MODBUS

1 - BACnet

P200 – Restore defaults






Press the  button to restore defaults

Press the  button twice to return to normal display

Press the  button to return to parameter P1 or wait 60 seconds to exit technician settings and return to normal display.

5. MAC Address

Enter MAC Address settings

- Adjust the set-point temperature to 11°C/52°F – the button  will appear on display.
- To enter MAC Address settings, press and hold the  button for 5 seconds.
- Use the  and  buttons to change the MAC Address. Set “0” for no communication.
- Press the  button to return to normal display.

