TA682-W

Chronostat with Indoor Humidity Control

Operating Voltage	240V$_{AC}$ ± 20%
Relay contact	240V$_{AC}$ 50/60 Hz 5(1)A max
Wi-Fi	2.4GHz 802.11b/g/n

Features

- Valve / actuator control
- Summer / Winter (Cool / Heat) pre-programmed mode
- Temperature measurement and control
- Humidity measurement and control
  - deactivates relay when R.H.>80%. Valid for summer mode
- Output: digital type x 5
- 3.4" high-contrast VA TN with backlit
- Touch keys x 4
- Flush-mount installation in European electrical wall-box
- Super-cap retains clock and user schedule for 60 mins maximum

Technical Specification

|	
Measuring temperature	0 ~ 40ºC
Controlling temperature	5 ~ 35ºC
Measuring accuracy/resolution	±0.5ºC
Temperature control differential	±0.4°C
Humidity measurable range	5% ~ 95%, non-condensing
Humidity accuracy	±5%
Sensing elements	103AT NTC thermistor
	Digital humidity sensor
Operating Temperature	0 ~ 40 °C
Operating Humidity	5 ~ 95%R.H. non-condensing
Storage conditions	-5 ~ 60 °C, 5 ~ 95%R.H. non-condensing
Terminals	NC NO COM. 2mm^2 cable

Wi-Fi and Smartphone App

Avan-Stat

Dimensions and Line Drawing
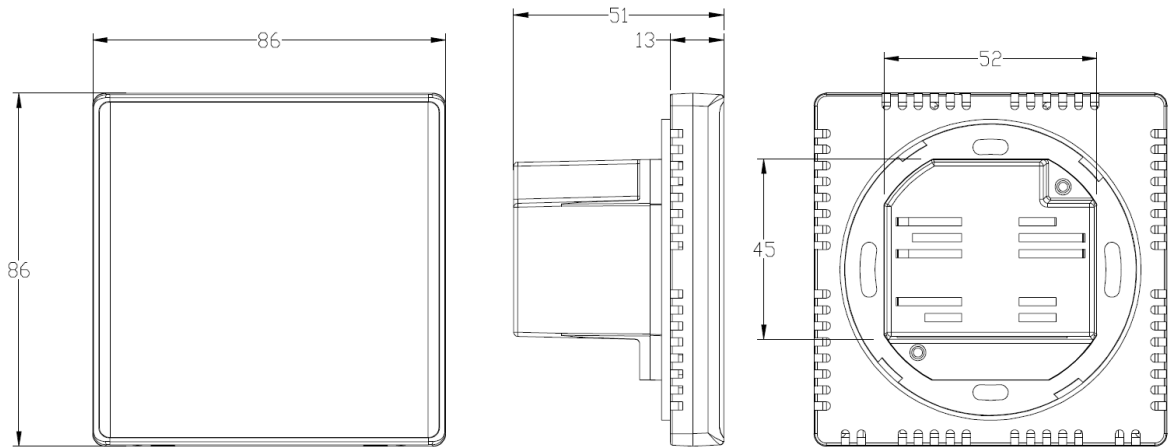
Special Requirement of Wall Box Fitting
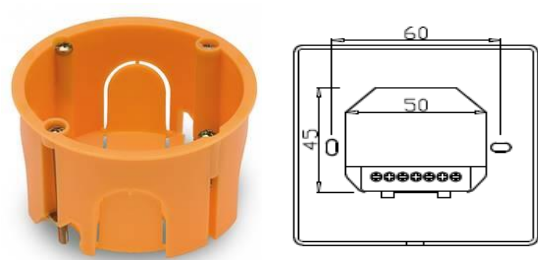
## Output Diagram
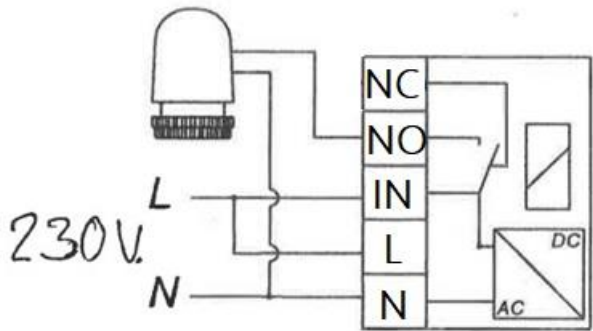
Display Content

Touch Keys

#	Description
(M)	Mode / Menu
🕐	Accessing clock
△ ▽	Adjust settings

#	Description
☼	Cold
❄	Heat
📶	Wi-Fi connectivity
🔒	Touch key lock
SET	Setting mode
EXT	External Temp Sensor
P18	Program Number
⧺	Heating
✿	Cooling
⊶	Output
☺	Comfort Mode
🐾	Economy Mode
❄	Anti-freeze
▯	Window Opened

On/Off Control

(A)   Heating

- The thermostat flips the relay on or off according to the following diagram.
- Switching differential for heat mode is 0.4ºC as default.
- Relay protection time is 5 seconds. See **Relay Protection** on the next page.
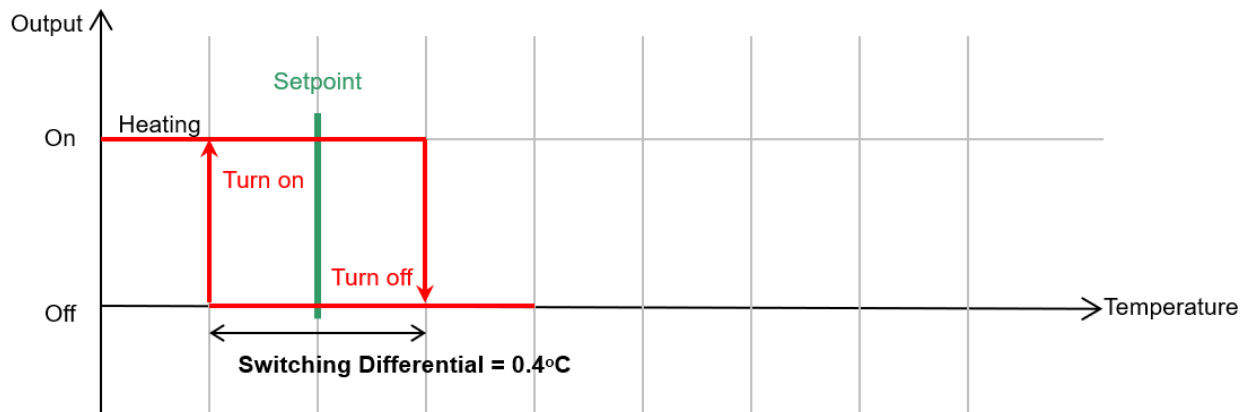

(B)   Cooling

- The thermostat flips the relay on or off according to the following diagram.
- Switching differential for cool mode is 0.4ºC as default.
- Compressor protection is 4-minute. See **Compressor Protection** on the next page.
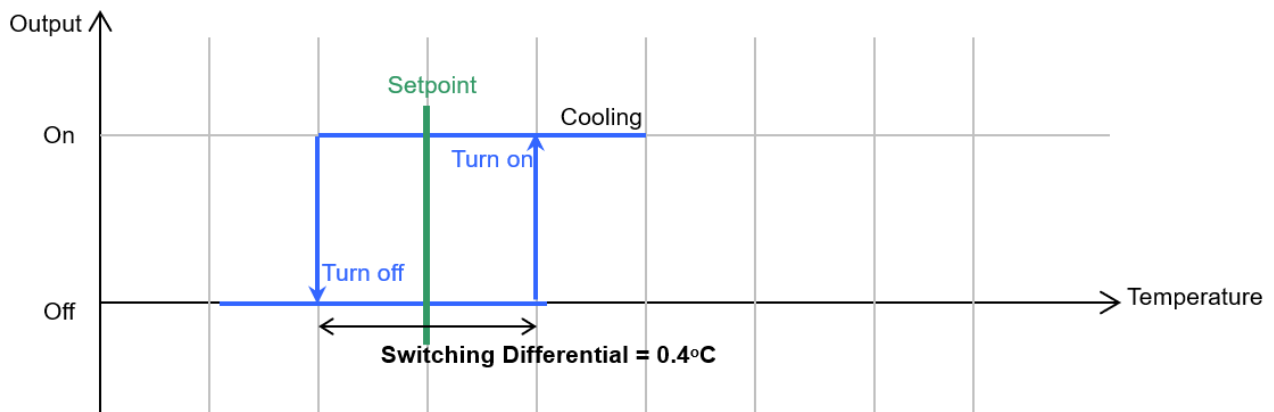
(C)   Humidity Control

- Valid for Summer Mode i.e. Cooling only.
- R.H. overrides relay control.
- Relay is turned off when the R.H. in the environment exceeds user-preset threshold.
- TA682-W must allow the shutdown R.H.% to be adjusted in a range between 40% and 80%, adjustable by users.

Internal Parameter Menu

- Press-n-hold on ⓜ key
- Press ⓜ to advance to the next item
- Press [▲] / [▼] to adjust the value
- Press [blank key] in the middle to confirm and exit

#	Items	Values	Default
P0	Screen Saver setting(^)	Black-out ("0") / Temp only ("1") / Clock, Time Slot, Temp ("2") / All icons on ("3")	2
P1	Screen Saver Countdown	5 ~120(^)	20
P2	Limited Mode	Enabled / Disabled	En
P3	---	---	
P4	Time Display format	24 / 12	12
P5	Temperature Offset	-5°C ~ 5°C	0°C
P6	Switching Differential in Heat mode	0.4°C / 1.0°C / 2.0°C	0.4°C
P7	Switching Differential in Cool mode	0.4°C / 1.0°C / 2.0°C	0.4°C
P8	Duration of T & RH on Display	30 sec / 60 sec / 90 sec	30
P9	Humidity setpoint(*)	60 ~ 90% R.H.	80

(^) P0 and P1 stored in RAM. Restored to default after a power surge

(*) valid only for Summer Mode

Advanced Parameter Menu

- Press-n-hold onto ⓜ and 🕐 keys together
- Press ⓜ to advance to the next item
- Press [▲] / [▼] to adjust the value
- Press 🕐 in the middle to confirm and exit

#	Items	Values	Default
P10	Clear Wi-Fi pairing data	Enable ("en") / Disable ("dis)	dis
P11	Restore Default	Enable ("en") / Disable ("dis)	dis
P12	Wi-Fi Pairing	Enable ("en") / Disable ("dis)	dis
P13	MAC address	5 hexadecimal data	-

Compressor / Relay Protection

- A predetermined off-time is observed after turning off the relay in heating / cooling
- If there is a call of Heat / Cool during the minimum-off delay, ⚓ flashes on LCD.
- After the minimum−off delay expires, ⚓ stays visible and the output is on.
- Duration of off-time for cooling is 4 minutes.
- Duration of off-time for heating is 5 seconds.

Defrost function

- Icon ❄ appears when ambient temperature drops below 5°C
- Output turns on regardless of setpoint temperature in Winter Mode
- Output turns off regardless of setpoint temperature in Summer Mode

Touch Key Lock

- In order to prevent undesirable manipulation on TA682-W when installed in public places, locking the four touch keys is recommended
- Simply press-n-hold on Ⓜ▽ together for 3 seconds
- While locked, the four touch keys on TA682-W do not respond to presses
- To unlock, press-n-hold on Ⓜ▽ together for 3 seconds again

External Temperature Sensor readings

- Press-n-hold ▲▼ together
- The temperature reading on the screen switches to external temperature sensor
- Release ▲▼ and the reading on the screen switches back to ambient temperature

Humidity readings

- Display toggles humidity readings and ambient temp readings in duration of 1 min
- Toggle duration adjustable in Internal Parameter Menu
- Measurable range: 10 ~ 95% R.H.
- Humidity Accuracy: ±5%

Product (rear view)