Operating instructions Time Programing

1 Overview

The following instructions describe how to set the clock and how to program the time programs of the TCY-BH for daily, weekly repeated action/function.

These operating instructions apply to devices that support time schedules that is devices with an integrated real-time clock.

For additional information, refer to the TCY-BH operating instructions.

2 Display and Operation

2.1 User Interface

Figure 1: TCY-BH

Figure 2: TCY-BH-U

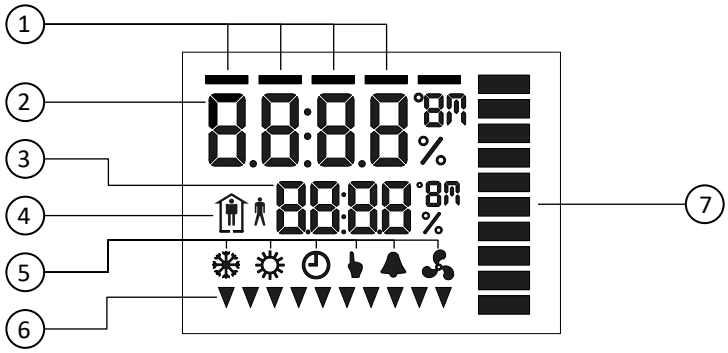
Button Symbol	Function	Description
⏻	Operating mode (Back)	Operating mode selection (On / Off, Occupied / Unoccupied mode) Menu navigation: Back to the previous menu Long press: Off if occupation mode is configured
▷ ●	Right (Confirm)	Menu navigation: Next menu point Alarms: Confirm the alarm
△	Up (+)	Adjust temperature set points and control parameters
▽	Down (-)	Adjust temperature set points and control parameters

2.2 LCD Display

Overview

This section explains the meaning of the symbols on the LCD Display.

Some of the symbols shown have no meaning depending on the type and version of the device used.



1	Control loop indication
2 3	Large digits Small digits
4	Operating Mode
5	Controlling Mode Alarm Fan is active / fan auto mode
6	Triangle indication
7	Indication side bar

2.3 Operating Modes

Display	Mode	Description
	Occupied (Comfort)	The device maintains the occupied (comfort) temperature set points defined within each control loop. In occupied mode, the fan can be set to auto or manual fan speed.
	Unoccupied (ECO)	The device maintains the unoccupied (ECO, economy) temperature set points defined within each control loop.
OFF	Protection (Holiday)	The device runs in standby. The system is protected against overheating and frost if enabled. Inputs are monitored for alarms.

2.4 Controlling Modes

Display	Mode	Description
	Cooling	Cooling mode activates cooling equipment for temperatures above the set point.
	Heating	Heating mode activates heater for temperatures below set point.
	Manual	Manual override mode
	Clock / Schedules	Set clock, change time schedules or indication of set time schedules
	Fan	The side bars show the fan speed.

2.5 Operation Status

Display	Status	Description
	Alarm	Alarm / Error active.

3 Time Programming

3.1 Clock Operation

Overview

This section gives an overview of the clock and the available timed functions of the device.

Note on Accuracy

Warning: Devices with a "D" addition (e.g. TCY-BH-D) have a real-time clock. This clock is accurate to two seconds a day.

Time Programs

Up to 4 time and weekday programs can be programmed (Pro1 to Pro4). Each of the time programs support up to 4 switching events. A switching event can change the operating mode of the controller.

Devices with a "D" addition (e.g. TCY-BH-D) have a real-time clock with a maintenance-free power backup.

A flashing clock indicates that the time has not been set or that the device has been without power for more than 48 hours. The time must be set for the schedules to work.

3.2 Clock Setting

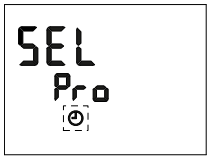
3.2.1 Setting time and date of clock

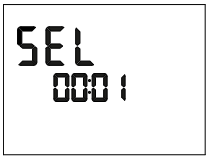
Overview

This section describes how to set the time and date of the system clock.

Procedure

1. Press the (▷ / ●) button longer than 3 seconds.
   ➔ **SEL** and **PRO** is displayed and the clock symbol flashes.
2. Press the (△) (▽) button to select the time display.
   ➔ **SEL** and the actual **Time** is displayed.





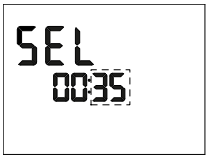
3. Press the (▷ / ●) button briefly to start changing the time and date:

   Minutes flashes: (△) (▽) button for adjustment, (▷ / ●) button to save.

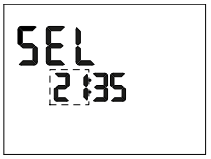
   Hours flashes: (△) (▽) button for adjustment, (▷ / ●) button to save.

   Day of the week flashes: (△) (▽) button for adjustment, (▷ / ●) button to save.
   Note: Monday is day 1 of the week.

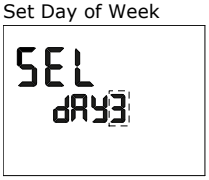
Set Minutes



Set Hours



Set Day of Week



Press the (⏻) button (1x) to go back.

3.3 Set Time Schedules

Overview

Up to 4 individual time programs can be programmed (Pro1 to Pro4).
Each of the time programs support up to 4 switching events.
A switching event can change the operating mode of the controller.

3.3.1 Set daily/weekly time schedules

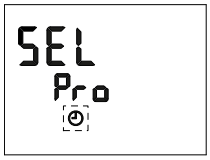
Overview

This section describes how to set a daily, weekly repeated action/function.

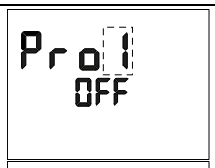
Procedure

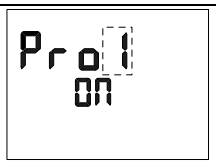
1. Press the (▷ / ●) button longer than 3 seconds.

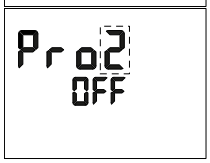
   ➔ **SEL** and **PRO** is displayed and the clock symbol flashes.



2. Press the (▷ / ●) button.
   ➔ **Pro1** and the actual schedule status of Pro1 is displayed.
3. Press the (△) (▽) button to select time program Pro1, Prog2, Prog3 or Prog4.
   ➔ Number of time program flashes.



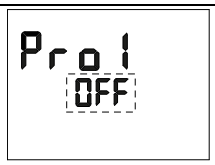


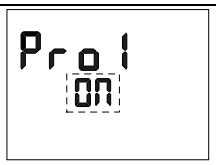


…

4. Press the (△) button briefly to go to the scheduler submenu.
   ➔ Schedule status indicates whether it is **OFF** or **ON**.
5. Press the (△) (▽) button to change the status.
6. Press the (▷ / ●) button to save the status.

Note: An "OFF" status disables all switching events for this time program!



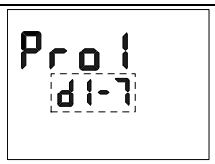


7. Press the (△) (▽) button to select day/days of the switching event:

   d1-7 = Monday (day 1) to Sunday (day 7)
   d1-5 = Monday to Friday
   d1-6 = Monday to Saturday
   d6-7 = Saturday to Sunday
   dAY1 = Monday
   … = …
   dAY7 = Sunday

8. Press the (▷ / ●) button to save.

Note: Monday is day 1 of the week!



…

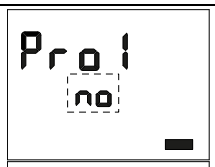
9. Press the (△) (▽) button to select operating mode of switching event number 1 indicating by 1 bar:

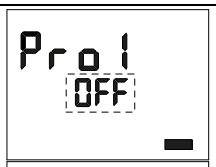
   no = Switching event not used
   OFF = Operating mode changes to off mode
   ECO = Operating mode changes to unoccupied (economy) mode
   ON = Operating mode changes to occupied (comfort) mode
   UNI = Operating mode does not change

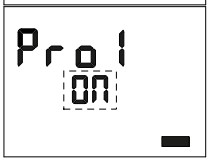
   ➔ 1 bar indicate setting of switching event 1 of 4 is executed.

   Note: Not used switching events should be set to "no".

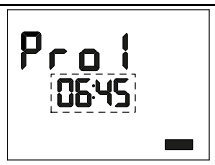
10. Press the (▷ / ●) button to save.



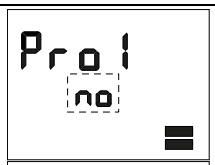


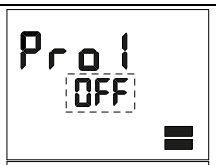


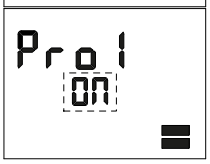
11. Press the (△) (▽) button to adjust the time the switching event will execute from 00:00…23:45 in 15 minutes steps.
    ➔ 1 bar indicate setting of switching event 1 of 4 is executed.
12. Press the (▷ / ●) button to save.



13. Now you can select the operating mode of the next switching event if needed by pressing the (△) (▽) button:
    no = Switching event not used
    OFF = Operating mode changes to off mode
    ECO = Operating mode changes to unoccupied (economy) mode
    ON = Operating mode changes to occupied (comfort) mode
    UNI = Operating mode does not change
    ➔ 2 bars indicate setting of switching event 2 of 4 is executed.
    Note: Not used switching events should be set to "no".
14. Press the (▷ / ●) button to save.







15. Press the (△) (▽) button to adjust the time the switching event will execute from 00:00…23:45 in 15 minutes steps.
    ➔ 2 bars indicate setting of switching event 2 of 4 is executed.
16. Press the (▷ / ●) button to save.

17. Now you can select the operating mode of the next switching event if needed by pressing the (△) (▽) button.
    …

…

To go back to the previous submenu/menu, press the (⏻) button.

Smart Sensors and Controls
Made Easy!

Quality - Innovation – Partnership

Vector Controls LLC
USA

infous@vectorcontrols.com
www.vectorcontrols.com