

Manual: QA Global Climate Mode

Automatic switching of the Summer / Transient / Winter climate mode according to the average outdoor temperature from the weather forecast.

Introduction

QA Global Climate Mode automatically determines the current climate mode — Summer, Transitional period or Winter — based on the average outdoor temperature. The application calculates the average temperature from past and future days with greater emphasis on the daytime from 05:00 to 22:00 and compares it with the configured limits. For stable mode switching, it uses a hysteresis of ± 0.5 °C.

The result is one of three modes:

- **Summer** — cooling is permitted, heating is switched off.
- **Transient** — spring or autumn period, a combination of both modes.
- **Winter** — heating is in operation, cooling is blocked.

In addition to the automatic mode, you can also set the climate mode manually. The application provides the current mode to the downstream applications for heating, cooling and other energy functions in the SHE system.

The application cooperates with Mervis SCADA for visualisation and with other QA applications of the Energy Management family — for heating, cooling, DHW heating and more.

Upstream and downstream applications

Upstream applications

Mandatory — one of the following applications with an outdoor temperature forecast:

- **QA Weather Forecast YR** (sheWeatherYR) — weather forecast from the YR service.
- **Solcast licence** (shePvSolcastForecast) — forecast from the Solcast service.
- **QA PV Forecast** (shePvForecastUCEEB) — forecast from the UCEEB service.

Downstream applications

Optional:

- **QA Heat Pump** — takes over the current climate mode for controlling heating and cooling by the heat pump.
- **QA DHW Mode** — takes over the current climate mode for controlling hot water heating.
- **QA Blind Control** — controls the blinds according to the weather forecast, the climate mode and the room temperature.
- **QA Window Control** — controls the opening of motorised windows according to the climate mode, the required temperature and the ventilation requirements.
- **Other applications for heating and cooling** — take over the current climate mode and control their function accordingly.

Installation and initial setup of the QA

Installation

Purchase the application in the Smart Home and Energy e-shop (<https://eshop.smarthomeenergy.cz>). After the purchase you receive an e-mail with a link to the activation form, in which you choose one of the two installation methods:

- **Installation via the SHE Installation Application (recommended)** – installation and subsequent updates take place automatically. It requires the “superuser” credentials for the unit. See the separate “Installation Application” manual for details.
- **Standalone installation file (*.fqax)** – install the file manually into the unit according to the unit manufacturer's instructions (logged in as “superuser”). This option does not allow automatic updates.

Before purchase, you can try out the application – the TRIAL version makes all functions available for 2 days.

After a successful installation, the **Annual climate mode** tile and the **AUTO**, **WINTER**, **TRANSIENT** and **SUMMER** tiles appear on the Heating Control desktop.

Operating prerequisites

- At least one of the upstream applications with an outdoor temperature forecast (QA Weather Forecast YR, Solcast licence or QA PV Forecast) must be installed and working in the unit.
- The application is intended for Fibaro HC3 / HC3L and Yubii Home / Home Pro units.

Opening the application control card

To open the application card in a web browser, move the cursor over the tile (e.g. **Annual climate mode**) and click the eye icon in the top-right corner of the tile.

Warning: Not all cards and tiles are displayed to all users. Each user selects which cards and tiles are displayed on the Display Settings card (sheViewControl application) – levels SHORT, ADVANCED and ADMIN. If you cannot see a described card, check the settings on this card.

User settings

Initial setup procedure

1. Verify that one of the applications with an outdoor temperature forecast is installed and working in the unit.
2. On the **Annual climate mode** card, set the average outdoor temperature limits for the Winter and Transient modes.
3. Set **Number of days future** and **Number of days past**, from which the average outdoor temperature is calculated.
4. Choose the control method — the **AUTO** button for automatic mode determination, or manually with the **WINTER**, **SUMMER**, **TRANSIENT** buttons.

“Annual climate mode” card

The current climate mode is displayed in the upper part of the card (**Control Mode** row, e.g. AUTO-SUMMER).

Mode selection buttons:

- **AUTO** — automatic determination of the climate mode according to the average outdoor temperature.
- **WINTER**, **SUMMER**, **TRANSIENT** — manual setting of the selected mode, suitable for testing or non-standard situations.

Calculation parameters:

- **Average outdoor temperature** — currently calculated average outdoor temperature.
- **Average outdoor temperature Transient** — limit between the Transient and Summer modes. With an average temperature above this value, the Summer mode applies.
- **Average outdoor temperature Winter** — limit between the Winter and Transient modes. With an average temperature below this value, the Winter mode applies.
- **Number of days future** — number of future days from the weather forecast that enter the average calculation.
- **Number of days past** — number of past days that enter the average calculation.

Between the two limits, the Transient mode applies. For stable switching, the application uses a hysteresis of ± 0.5 °C.

The **AUTO** tile displays the current average outdoor temperature. The **WINTER**, **TRANSIENT** and **SUMMER** tiles display the configured limits of the individual modes. You can also switch the mode quickly by clicking the relevant tile directly on the desktop, without opening the application card.

Notes

- The calculation of the average outdoor temperature gives greater weight to the daytime interval from 05:00 to 22:00.
- A manually set mode remains active until you select the **AUTO** button.
- For clear visualisation and for working with the measurement history and charts, we recommend connecting to **Mervis SCADA**.