



**Fig. 1 ELH— electrical pre-heater; RL — relay; BRK— all circuit breaker; OAT— extra duct temperature sensor; CB — connection board; DO— digital output.**

## Installation and connection

1. Install electrical pre-heater (ELH) at least 100 mm distance from the unit in the outdoor air duct. Relay (RL) is used to control the pre-heater. Connect the relay to any free digital output on the connection board (CB).
2. Connect pre-heater (ELH) and the power supply to the relay (RL). A circuit breaker (BRK) is not included in the package and must be ordered separately. It must be installed in the circuit.
3. Install a duct temperature sensor (OAT) before the electrical pre-heater on the outdoor side of the unit and connect it to any free Analog Input on the connection board (CB).

## Configuration

1. Go to **Service** menu
2. Enter password (default 1111)
3. Go to **Components** menu, select **Extra Controller** menu and set **Extra Controller Mode** setting as **Preheater**. Pre-heater setpoint can be set in the same menu. Do other advanced settings if necessary. Read "Installation and Service" manual for more information.
4. Configure connection of the pre-heater. Go to **Service** menu. Select **Output** menu. In next menu select **DIGITAL** tab. Select the digital output to which the pre-heater is connected. Example if it is connected to D03 on the connection board, then select **DIGITAL OUTPUT 3** and select **Step Controller Y4 Extra Controller** from the output type list.
5. Configure internal outdoor temperature sensor as extra controller temperature sensor. Go to **Service** menu. Select **Input** menu. Select **ANALOG** tab. Select the **ANALOG INPUT 1** and change its configuration from **Outdoor Air Temperature Sensor (OAT) sensor** to **Extra Controller Temperature Sensor (ECT)**.
6. After sensor configuration is changed select the Analog Input to which the newly installed duct temperature sensor (OAT) is connected and configure it as **Outdoor Air Temperature Sensor (OAT)**.