

Aquarium controls

Task definition

easy is required to automatically control the aquarium lighting and the temperature in the living room of a house during the holiday period.

The aquarium lighting is switched on or off with selector switch S2 or via a time switch (H01) or manually (I01).

Time setting of the time switch:

Time switch H01 = Channel A: Mo - Su 06:00 - 22:00

The temperature of the water must be kept between 22° and 28 °C. This means that easy monitors the temperature and uses comparison functions to switch the heating on and off according to the water temperature.

easy switches the heating on at a temperature below 22 °C until the water temperature reaches 28 °C. easy then switches off the heating and does not switch the heating on again until the temperature falls below 22 °C.

Note!

In this example, an analog value is set for the temperature values. This value has to be determined and parameterised according to the sensor on the aquarium.

You determine the switch-on point via A01 and switch-off point via A02.

The oxygen pump and the filter is switched on and off manually.

Device class used

easy500

Wiring

Inputs

I01 = S1 Lighting manual on/off

I02 = S2 Selector switch for Manual/Auto lighting

I03 = S3 Button for filter and oxygen

I07 = B1 Temperature sensor
(Analog input: 10 V = 1023)

Outputs

Q01 = H1 Lighting

Q02 = K1 Heating

Q03 = K2 Filter pump

Q04 = K3 Oxygen pump

Parameters

A01 = Switch-on point

A02 = Switch-off point

H01 = Lighting time switch