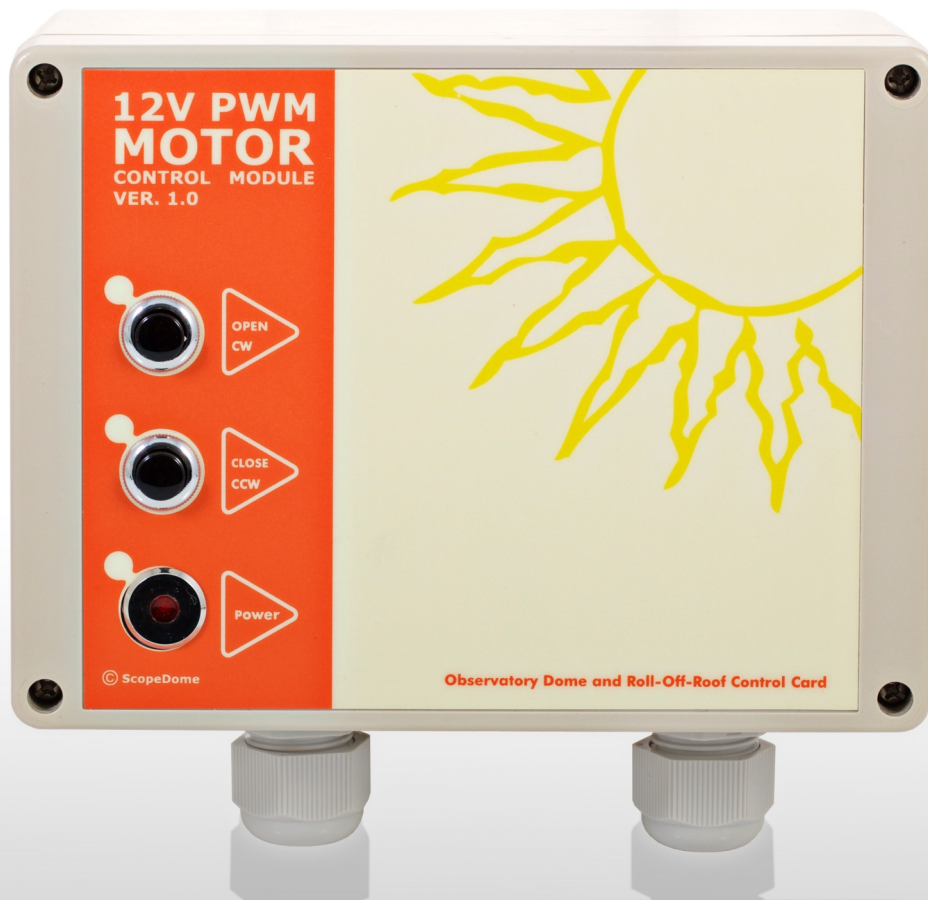


# 12V PWM MOTOR CONTROL MODULE VER. 1.0



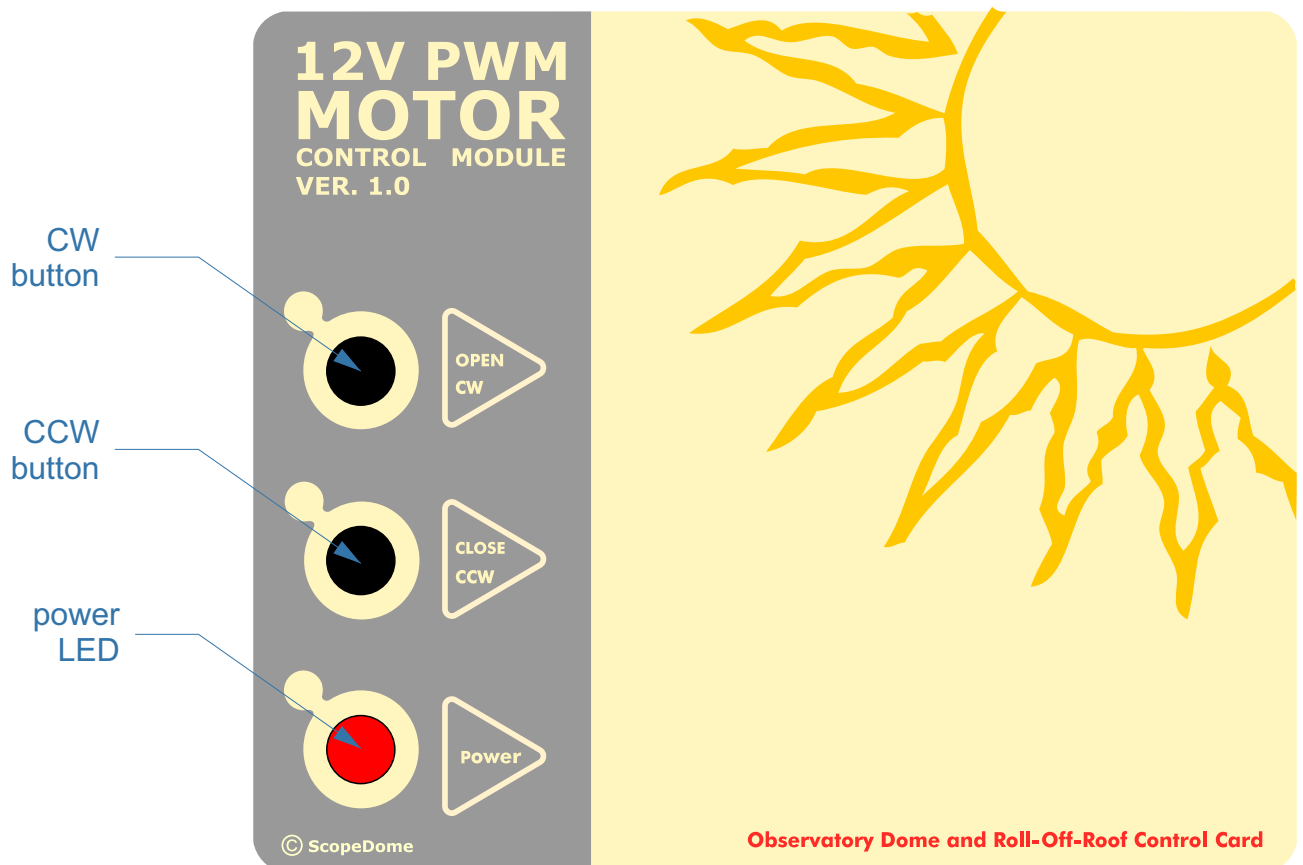
## Application

The controller is designed to control speed of 12V DC motor with power up to 150W. The input system has been designed for both roll off roof and dome-based observatories. Built-in CW/CCW and Open/Close buttons allow manual control of the motors. The controller is also suitable for direct cooperation with ScopeDome USB cards. This allows you to control the motor by PC - eg. through ASCOM drivers.

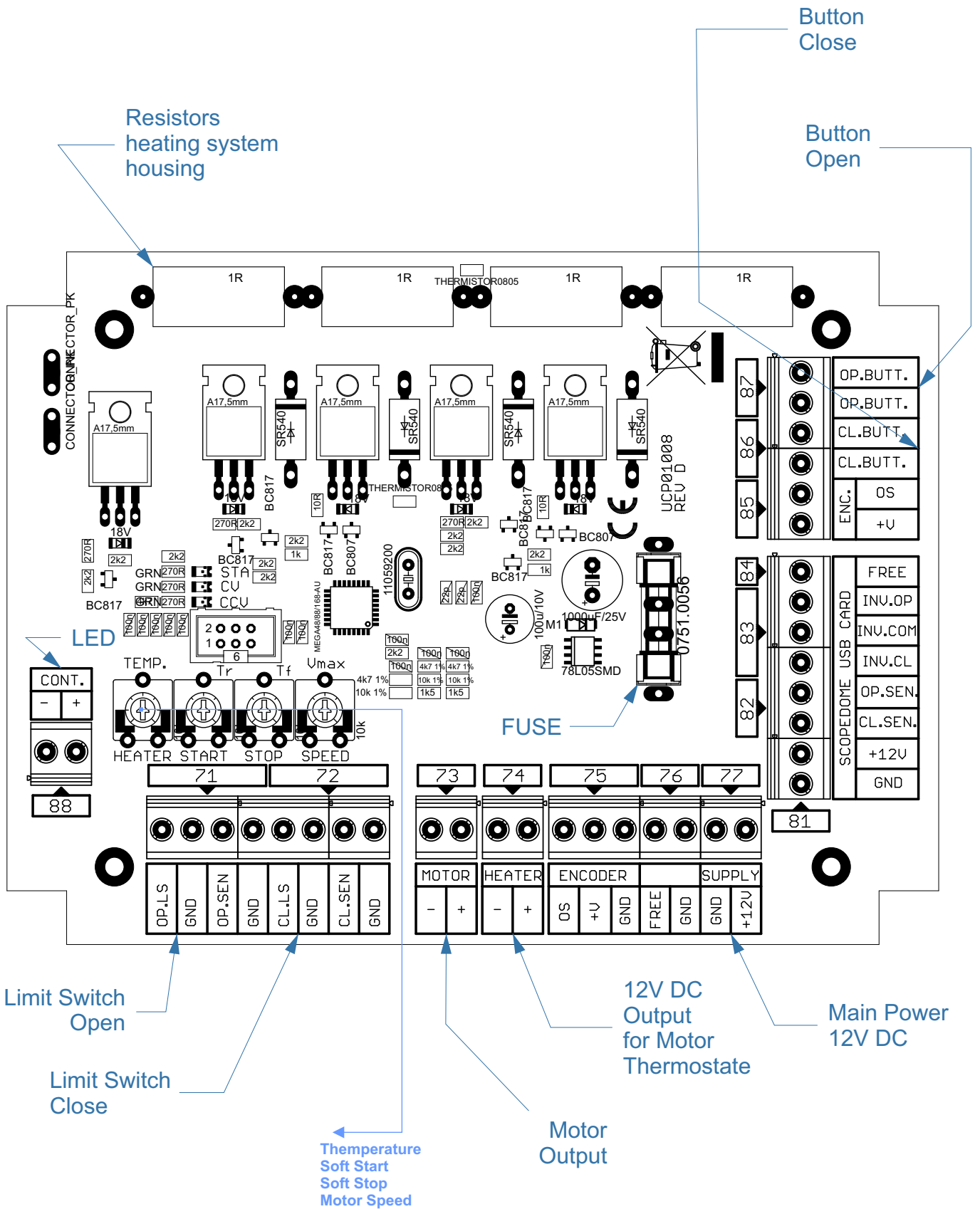
## Main features

- a) Setting the engine speed
- b) Control the direction of rotation (CW/CCW)
- c) Adjustable soft start
- d) Adjustable soft stop
- e) Built-in adjustable thermostat to control the temperature inside the driver's box
- f) Full protection of power transistors from overheating, short circuits and exceeding the maximum motor current
- g) Integrated inputs of limit switches stopping the engine
- h) Waterproof box

## Control panel buttons

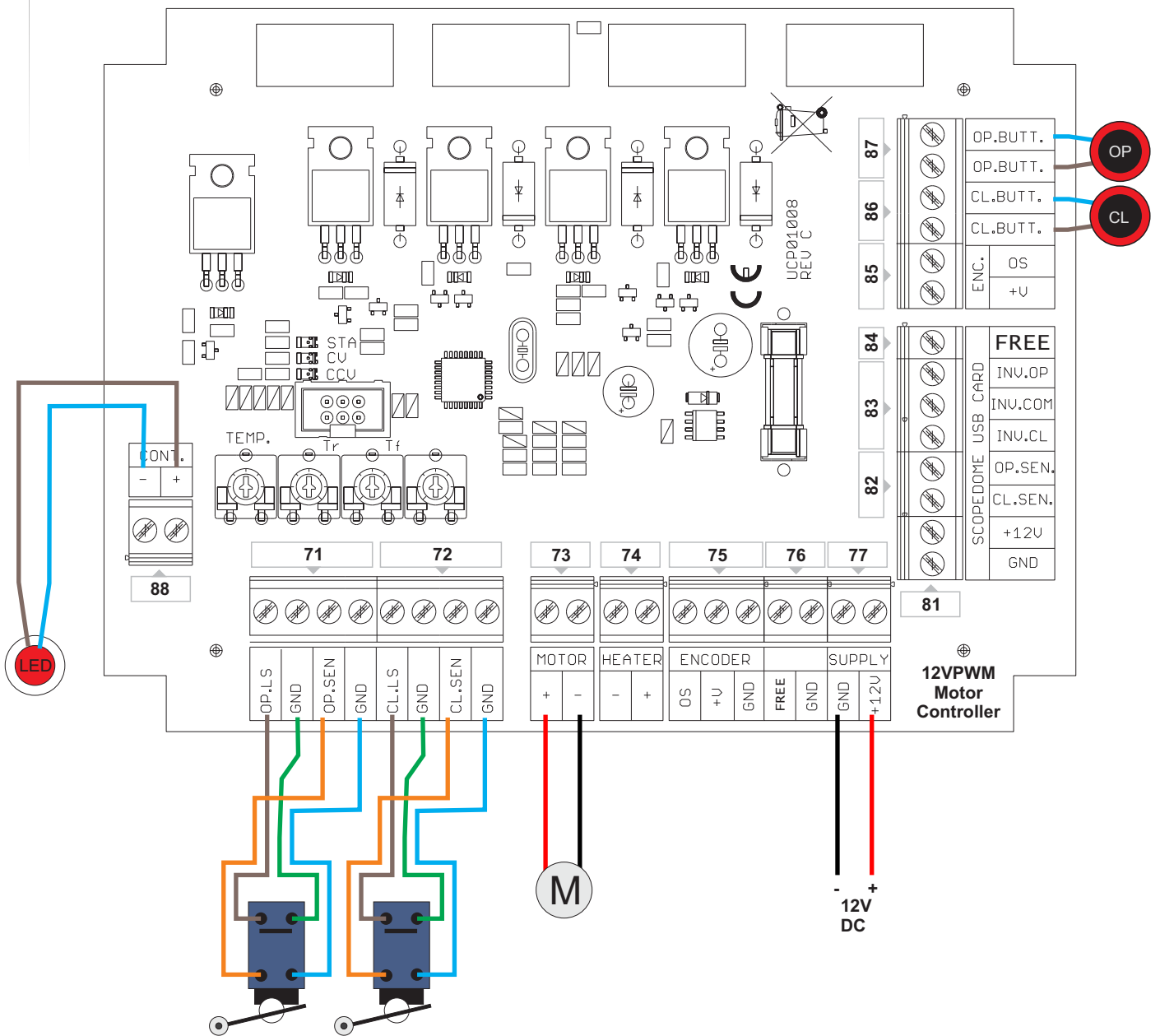


# Main inputs and outputs pins

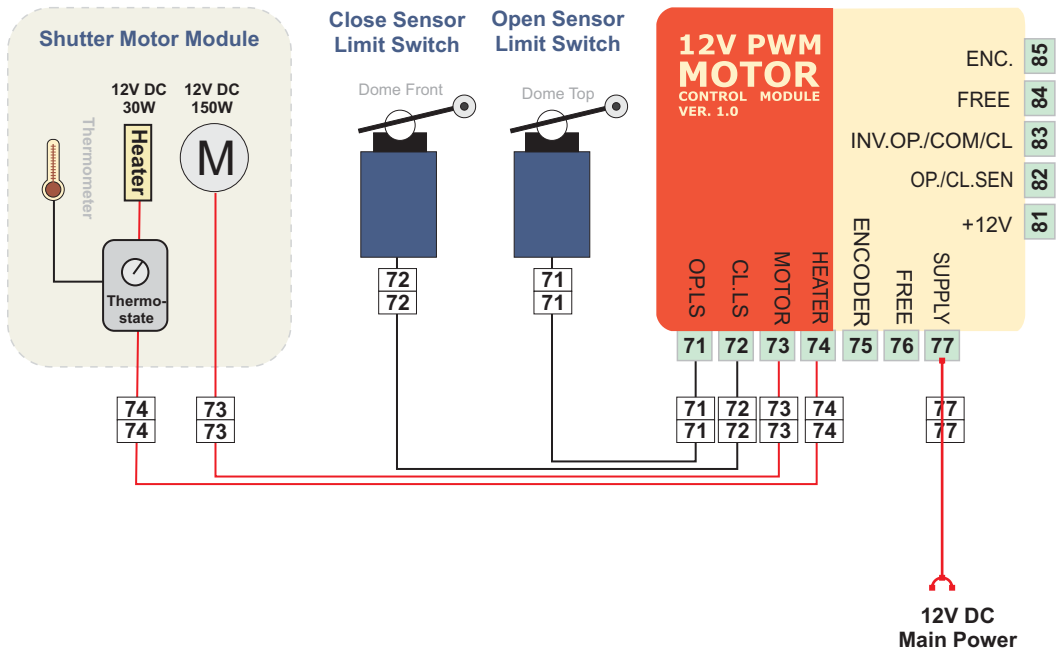


**Info:** other inputs are used to connect with the ScopeDome USB Card.

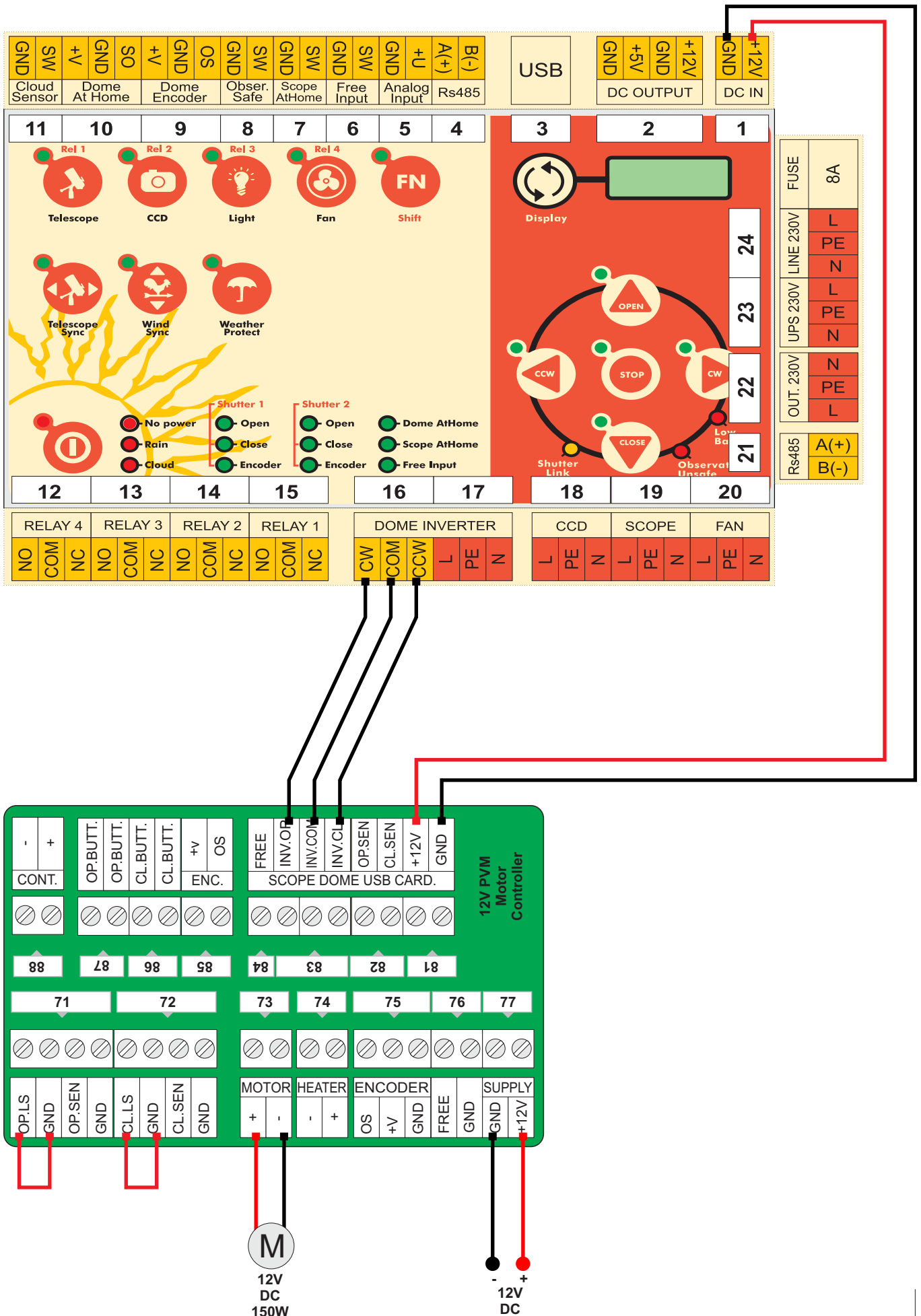
# Detailed diagram for Motor, Limit Switches, buttons and LED connections



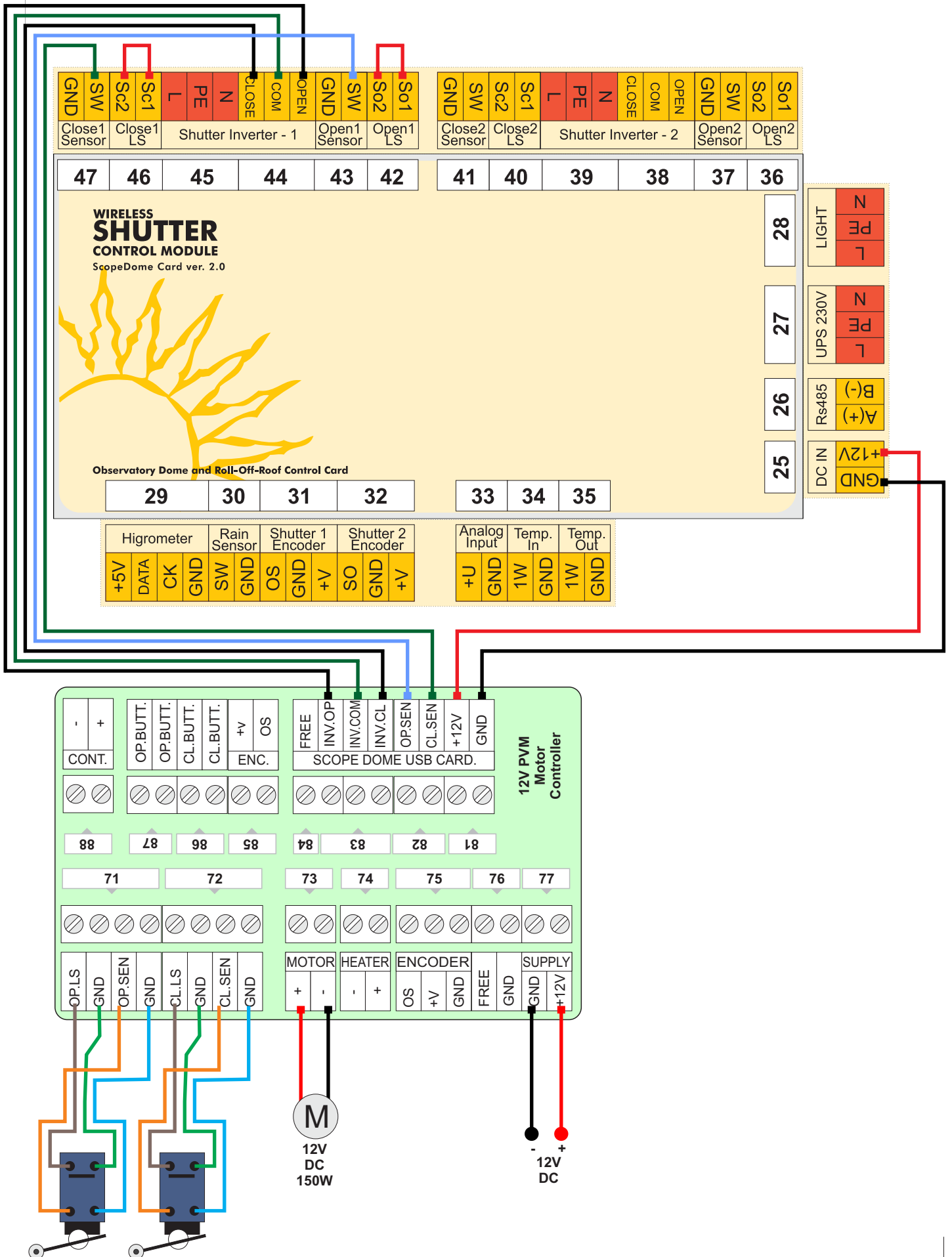
## A basic schematic of motor control roof or hatch of the dome.



# A detailed diagram for dome motor connection with ScopeDome USB Card 2.0



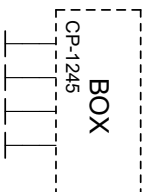
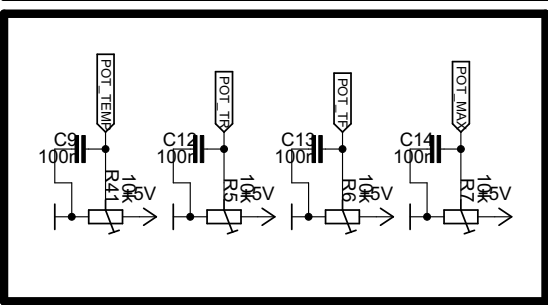
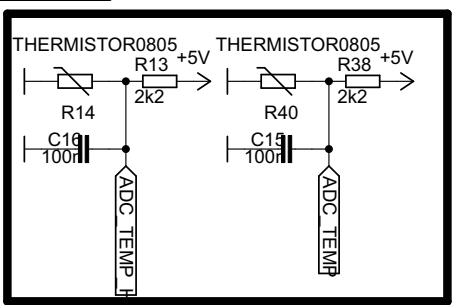
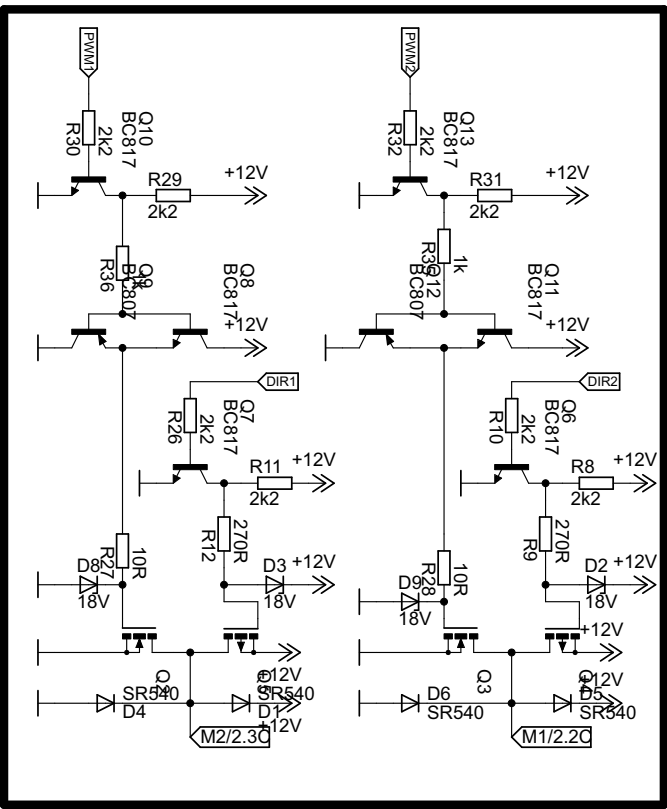
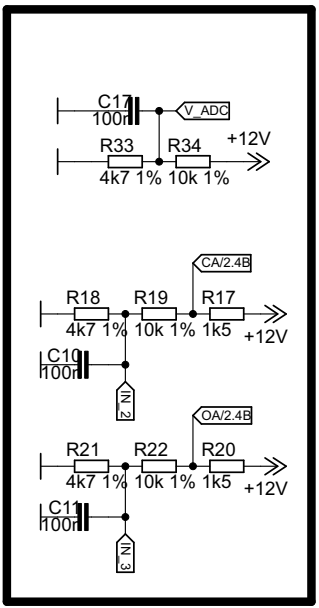
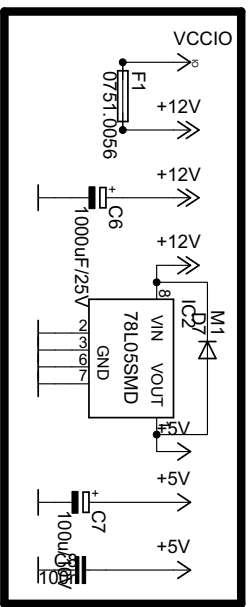
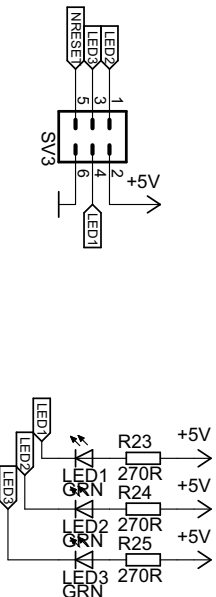
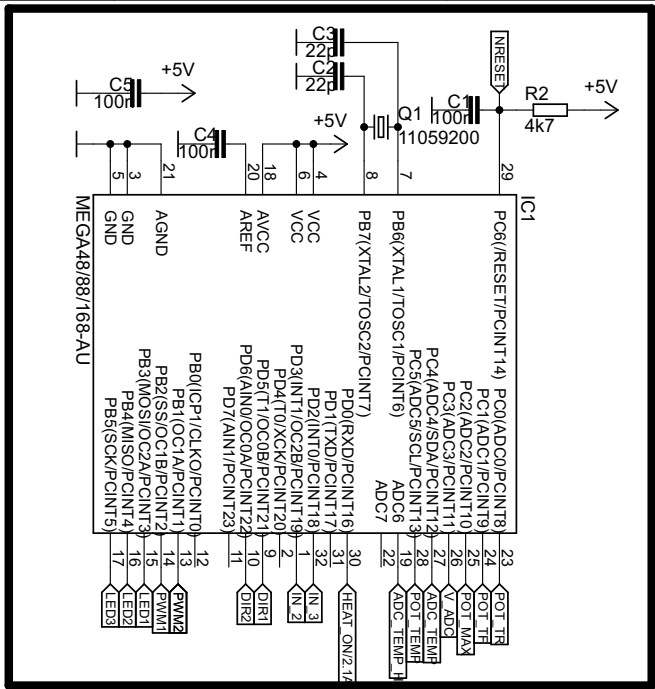
# A detailed diagram for shutter motor connection with ScopeDome USB Card 2.0



# PCB scheme

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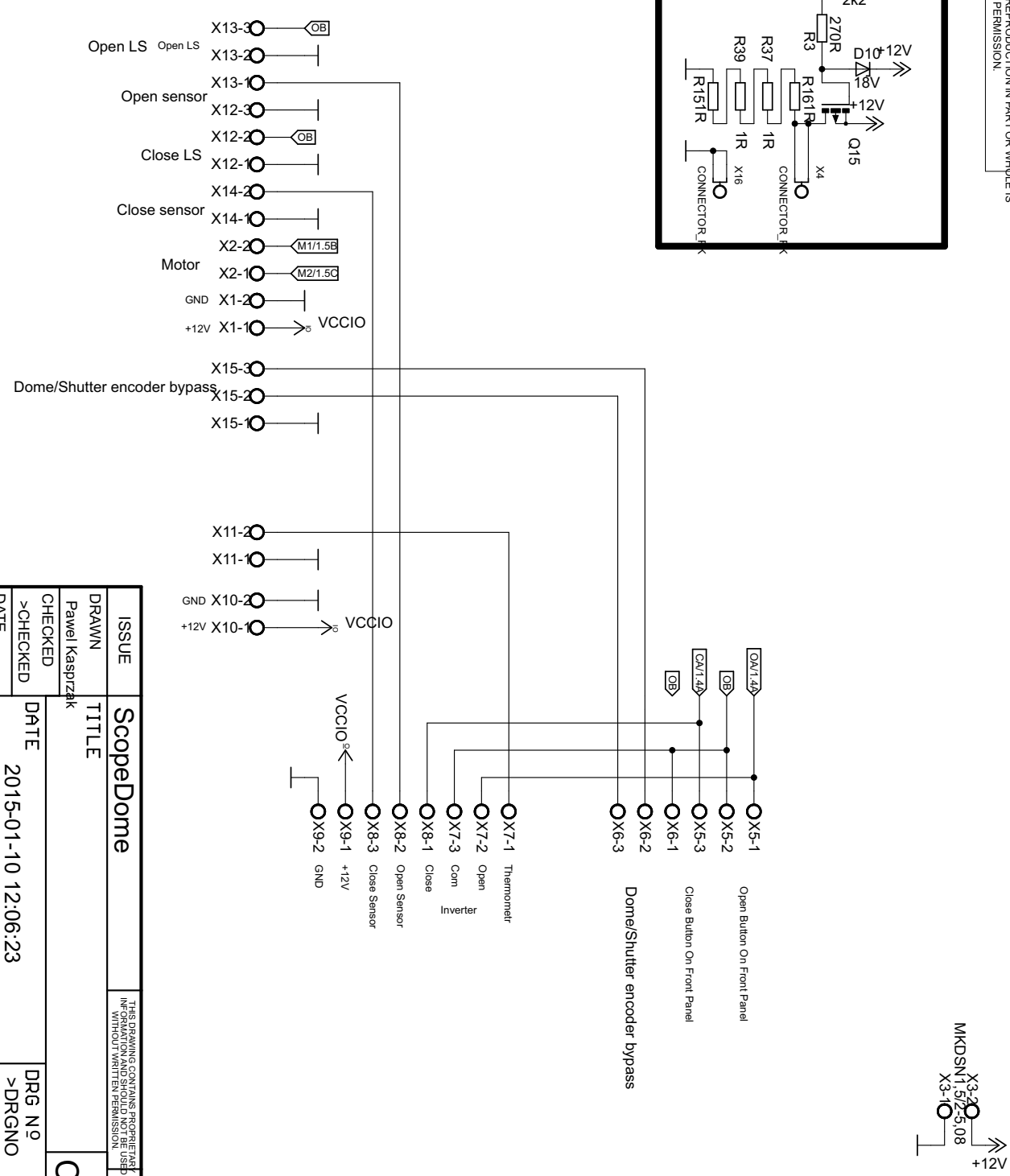
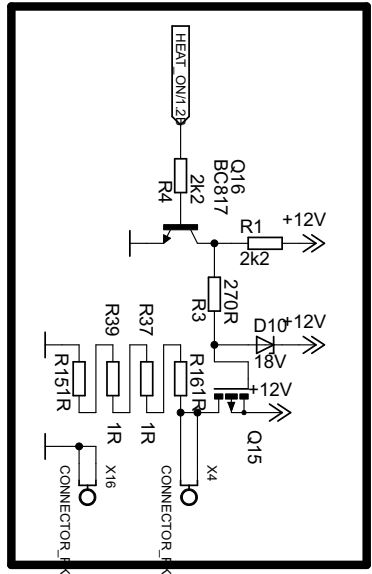
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# PCB scheme

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