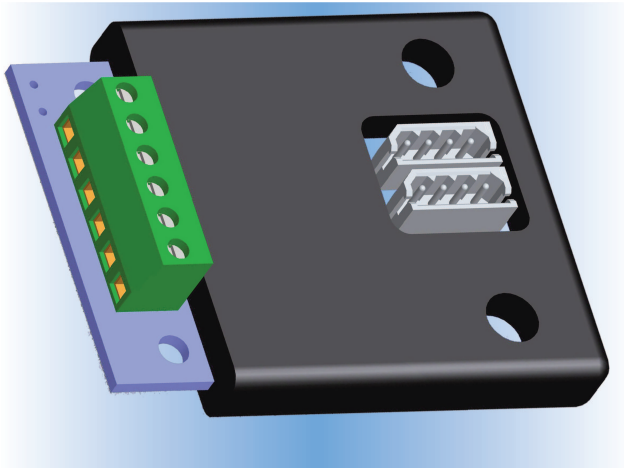# EC Temperature controller

(Temperature range: 20°C to 40°C)

The EC Fan Controller is designed to operate without the use of an external power supply; using an ebm-papst patented design the controller draws its power from the 10V PSU integrated in the ebm-papst EC fan (10V, < 1mA).

The unit is supplied with one pre-set temperature profile of 20ºC to 40ºC that will control the fan from 15 to 100% speed.

The EC Fan Controller also monitors the Tacho output from the fan and then generates an alarm output if a fan fail is detected.

The EC Fan Controller is fitted with an open drain fail safe alarm output as standard. This alarm is activated if a fan fail is detected or if the upper temperature limit is reached.

The controller will also generate an alarm if it detects either an open or short circuit on the NTC temperature input. During alarm conditions the fan will be run at full speed.

Environmental Limits

Operating temperature - Min: -20°C Max: +75°C
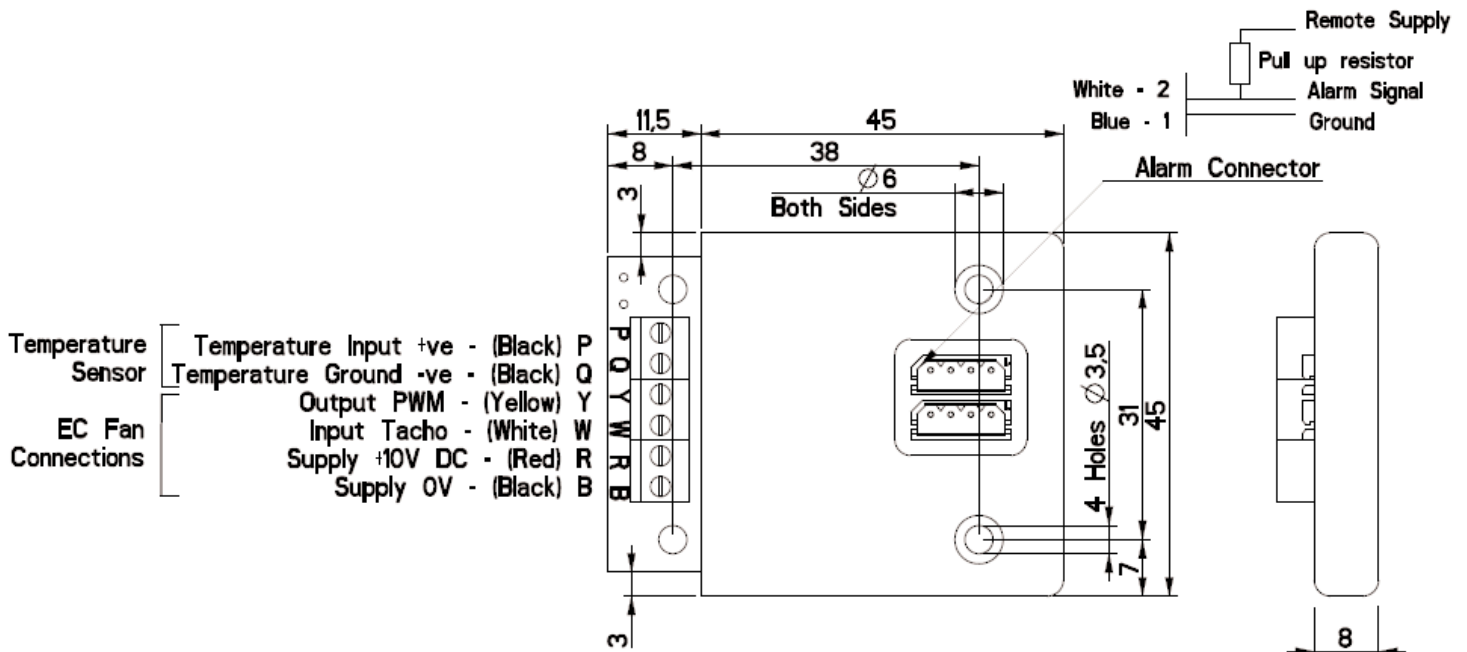
Humidity - Max: 90 %RH

Connection to alarm output

The blue wire should be connected to the ground reference of the monitoring device and the white wire to the alarm input on the monitoring device. Note that the alarm output supplies no voltage, it switches to ground instead. Therefore you should connect a pull up resistor from the alarm signal wire to a supply that is local to the monitoring device.

Safety

LVD   Not applicable

EMC   2004/108/EC

Note: for ebm-papst EC fans without an integrated 10 volt supply, please refer to the EC Fan Controller User Guide (980-OMI10740) for alternative wiring of the supply.

ebm**papst**