

# RM-ECi controller



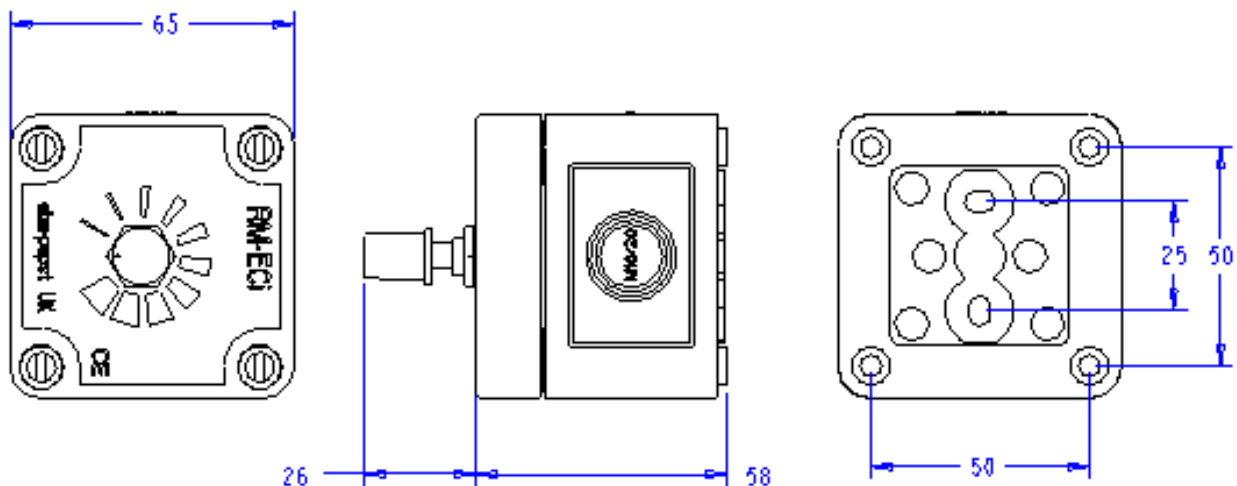
**General remarks:** The RM-ECi controller is designed for use with the full range of ebm-papst ECi (Electronically Commutated with integrated electronics) fans, it is powered via the DC output from by the fan and provides a 0-10V signal to enable infinitely variable speed control. The controller also enables speed measurement of the fan using a multimeter with a frequency measuring facility (where a tacho output is provided from the fan).

**Specification:** Input voltage 10 VDC (supplied from fan); Maximum ambient temperature 50°C; IP rating IP54; Cable entries 4 x M16 or M20; Mounting holes suitable for 4mm fixing; Output voltage range 0-10 VDC.

Nominal data	Supply voltage	Current draw max	Perm. amb. temp.	Mass
Type	VDC	mA	°C	kg
RM-ECi	10	1.1	50	0.1

Subject to alterations

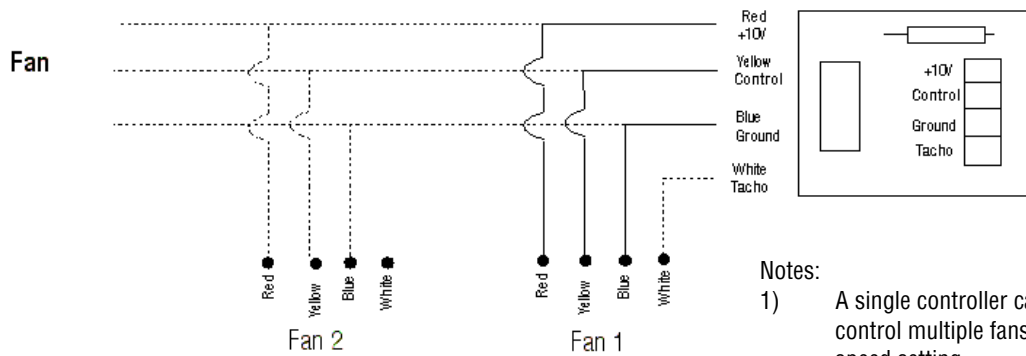
## Dimensions



# RM-ECi controller



## Wiring details



### Notes:

- 1) A single controller can be used to control multiple fans at the same speed setting
- 2) Connection to the controller is via four screw terminals or a Molex connector (range of connection leads available)
- 3) When the tacho wire is required this can only be connected to one fan (see note A).

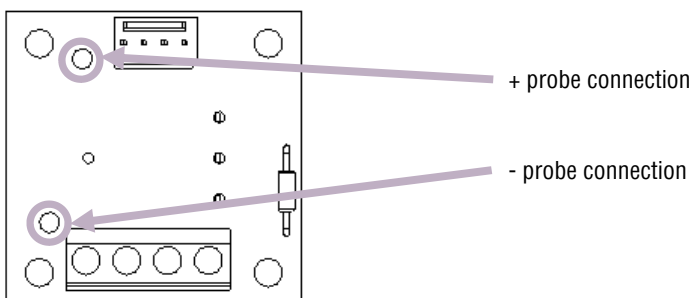
## Installation

- 1) Install in a dry sheltered position. Do not install in close proximity to heat sources
- 2) The maximum ambient temperature of the controller must not exceed 50°C

## Speed measurement

Connect a multimeter set to measure frequency on the probe points (marked + and -) on the PCB. The fan provides 1 pulse per revolution so the measured frequency can be converted to rpm using the following equation:

$$\text{RPM} = \text{Frequency (Hz)} \times 60$$



### Note A

Please note that under rare operating conditions it is possible that leaving the tacho wire permanently connected may lead to a small reduction in the maximum speed.