

CN1003 controller



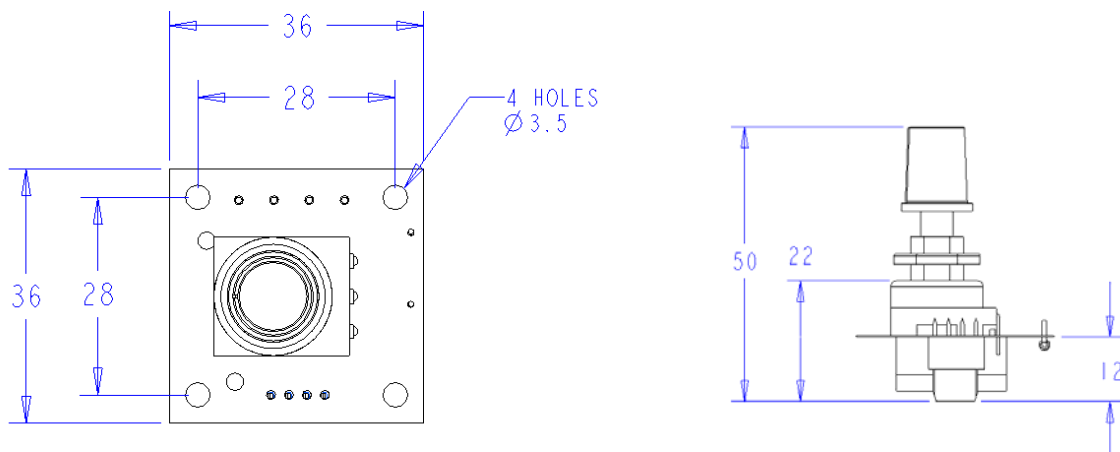
General remarks: The CN1003 controller is designed for use with the full range of ebm-papst ECI (Electronically Commutated with integrated electronics) fans, it is powered via the DC output from by the fan and provides a 0-10V signal to enable infinitely variable speed control. The controller also enables 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; Mounting hole diameter 10mm; Output voltage range 0-10 VDC.

Nominal data	Supply voltage	Current draw max	Perm.amb.temp.	Mass
Type	VDC	mA	°C	kg
CN1003	10	1.1	50	0.05

Subject to alterations

Dimensions

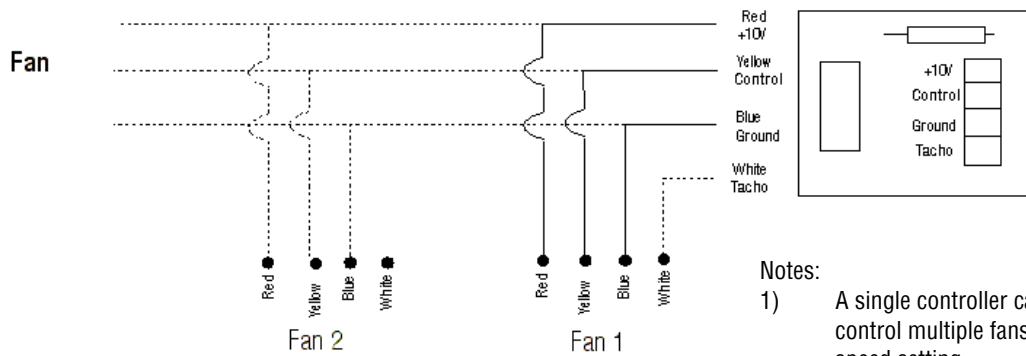




CN1003 controller



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).

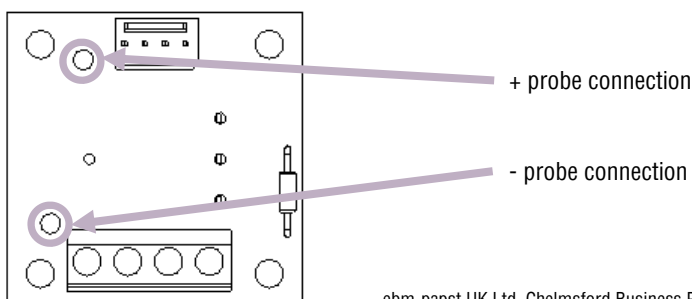
Installation

- 1) Remove the push fit knob and lock nut.
- 2) Drill a 10mm hole in the panel, install controller & fix using locking washer & nut.
- 3) Install in a dry sheltered position that provides suitable protection for the bare PCB. Do not install in close proximity to heat sources.
- 4) 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.

