



ACM2100

Dual Setpoint
EC Interface Module
GENTEQ 2.3/EON and US Motors/Nidec motors

Overview

The **ACM2100 Dual Setpoint EC Module** allows the user to set the motor speed and remotely switch the speed through an open-closed contact (switch).

The unit contains two onboard potentiometers to allow the customer to manually set both speeds. Onboard Digital multi-meter nodes provide setpoint and RPM measurements. The remote open-closed contact selects which potentiometer setting to apply.

The unit is designed to fit in a standard j-box enclosure and can be provided with an optional weather-proof cover (ACM2100 WP) suitable for outdoor installations.

The unit is powered by a remote 24V isolated step-down transformer supplied separately. The unit is compatible with GENTEQ 2.3 / EON (RPM mode) and US Motors/Nidec Perfectspeed motors.



Feature Set

1. Control interface for single motor/fan.
2. US Motors/Nidec EC motor & GENTEQ 2.3/EON motor compatible.
3. Powered by customer-supplied 24 volt isolation transformer.
4. Two onboard manual SETPOINT adjustments through keyed /slotted knobs.
5. Digital multimeter probe jacks for SETPOINT and RPM measurement.
 - Set-point in mV DC scale. Range 0 to 100% indicated as 0 to 1.000V (1000mV)
6. Green LED flashes set-point value.

Electrical & Environmental Parameters

Parameter	Min	Typical	Max	Units
Transformer Ratings 50/60Hz, 2.4VA	-	24	-	VAC
Input Voltage Range, AC	12	-	30	VAC
Input Voltage Range, DC	14	18	30	VDC
Input Current			25	mA
Motor Speed, Analog Output	0		10	VDC
Motor Speed, Digital Output (PWM)	0		10	VDC
Motor Enable, Digital Output	0		10	VDC
Open-Closed Contact Impedance	0		500	Ohms
Ambient Operating Temperature	-18	25	55	°C

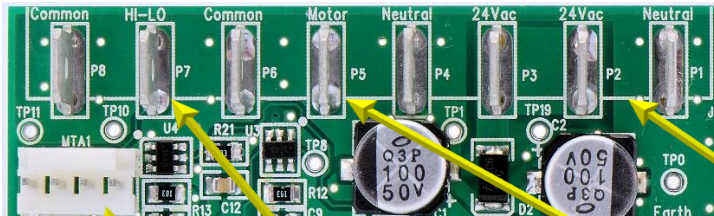
Mechanical Dimensions/Connections



FRONT VIEW
Plate 2.5 x 4.5 inches

Setpoint 1 (SP1) and SP2
manual screw-pots

Digital Multi-Meter probe
points Setpoint% and RPM



REAR VIEW
Board 1.75 x 2.5 inches

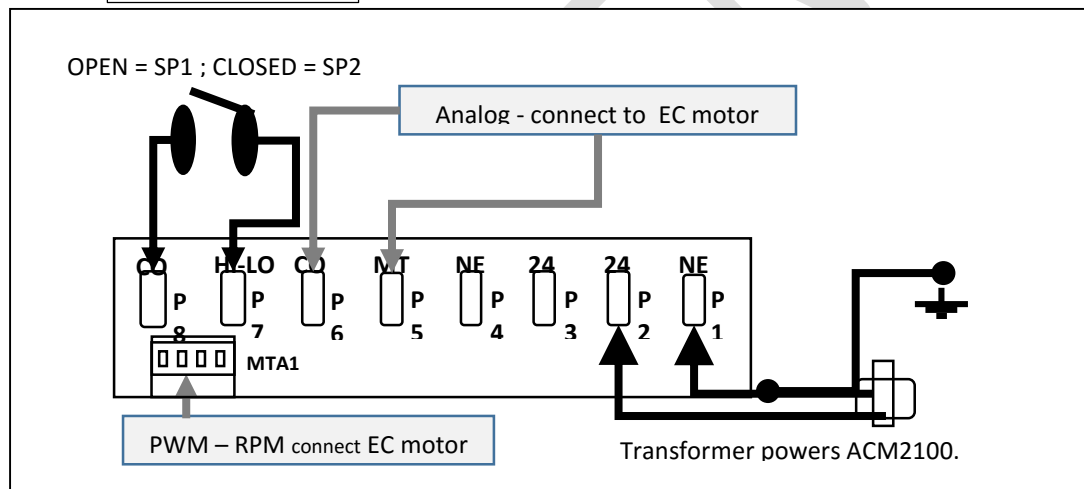
¼ inch quick-connect spade terminals.
(terminal-block – special order)

O/C Switch Input

0-10VDC Output

24V AC/DC Input

MTA 4-Pin Header



CONNECTIONS

1. 24V transformer (2 connection pairs*)
 2. 0-10V output to motor (1 connection pair*)
 3. Remote switch connection (1 connection pair*)
 4. 4 pin MTA header for EC motor connection (Enable, Speed & RPM)
- (*¼" quick-connect spades. *for screw terminal blocks – contact factory*)

Weatherproof Package Option – (ACM2100 WP) The unit can be supplied with weatherproof cover suitable for outdoor applications, mountable in a single-gang box.



AIRCARE AUTOMATION INC CONFIDENTIAL INFORMATION (do not reproduce without permission)
Email: info@aircareautomation.com Website: www.aircareautomation.com
8204 N. Lamar, Suite B-11 Austin, TX 78753. Tel: (512) 249-7526 Fax: (866) 542-0612