# Combo Unit: HI-MOD A/E



# INTRODUCTION

- Series of stepper motors with integrated ministep bipolar chopper drives equipped with programmable motion controller. Setting by means of CANopen interface. It is based on the following versions:
  - HI-MOD E with Incremental Encoder
  - HI-MOD A with Multi-Turn Absolute Encoder
- Compact system housed in a metallic box mounted on motor body, minimizing dimensions and optimizing wiring and mounting easiness.
- Target: advanced applications requiring the detection of motor loss of synchronism or stall by means of encoder and programmable motion controller setting by means of CANopen interface.
- UL/CSA certified.

FILE NUMBER: E355001



# **HIGHLIGHTS**

- Microstepping function up to 3.200 step/rev.
- Communication by means of CANopen interface.
- Command to execute runs with position control to set: distance, direction, speed and acceleration.
- Command to execute zero research (HOMING).
- Possibility to detect motor loss of synchronism or stall and position error by means of Incremental Encoder (HI-MOD E) or high resolution Multi-Turn Absolute Encoder (HI-MODA).
- The system does not need back-up battery to keep the information when shut down (HI-MODA).

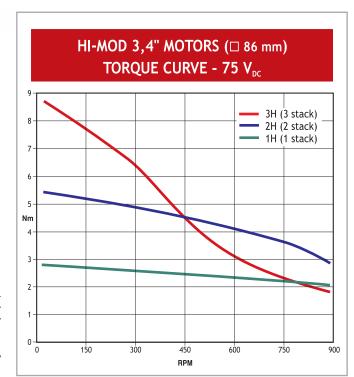


н	-MOD X <sub>1</sub> - X <sub>2</sub> - X <sub>3</sub> - X <sub>4</sub> - X <sub>5</sub> - n	
$X_1$ = Electronic features	$X_2 X_3 X_4 X_5$ = Motor type and power	n = Release software
E: CANopen - Incremental Encoder A: CANopen - Multi-Turn Absolute Encoder	<ul> <li>X<sub>2</sub> = Maximum power</li> <li>X<sub>3</sub> = Mechanical hardware identification</li> <li>X<sub>4</sub> = Motor type</li> <li>X<sub>5</sub> = Motor current</li> </ul>	0 ÷ 9

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### **TECHNICAL FEATURES**

- Range of operating voltages: 32-75 V<sub>DC</sub>.
- Microstepping: 400, 800, 1.600 and 3.200 steps /rev.
   Setting by means of CANopen interface.
- Automatic current reduction at motor standstill.
- Protections:
  - -Protection against under-voltage and over-voltage.
  - -Protection against a short-circuit at motor outputs.
  - -Overtemperature protection.
- Electronic resonance damping circuit to ensure acoustic noise and mechanic vibrations reduction.
- Command to execute runs with position control to set: distance, direction, speed and acceleration.
- Command to execute zero research (HOMING).
- Possibility to detect motor loss of synchronism or stall and position error by means of Incremental Encoder(HI-MOD E) or high resolution Multi-Turn Absolute Encoder (HI-MOD A).
- The system does not need back-up battery to keep the information when shut down (HI-MODA).
- UL/CSA certified.





### **MECHANICAL DIMENSIONS**

(mm) HI-MOD E, HI-MOD A 78.0  Type M Lenght  (mm)  1H 66.0 2H 96.5 3H 127.0			
HI-MOD E, HI-MOD A 78.0  Type	Model	A Lenght	86 mm
Type M Lenght  (mm)  1H 66.0  2H 96.5  3H 127.0		(mm)	
(mm)  1H 66.0  2H 96.5  3H 127.0	HI-MOD E, HI-MOD A	78.0	
1H 66.0 2H 96.5 3H 127.0	Туре	M Lenght	g
1H 66.0 2H 96.5 3H 127.0		(mm)	116 m
3H 127.0	1H	66.0	
110 mm 86 mm 86 mm Cr	2H	96.5	
116 mm 98 mm 98 mm	3H	127.0	↓
A M 28 mm —	CP/CL		The mm and the man

