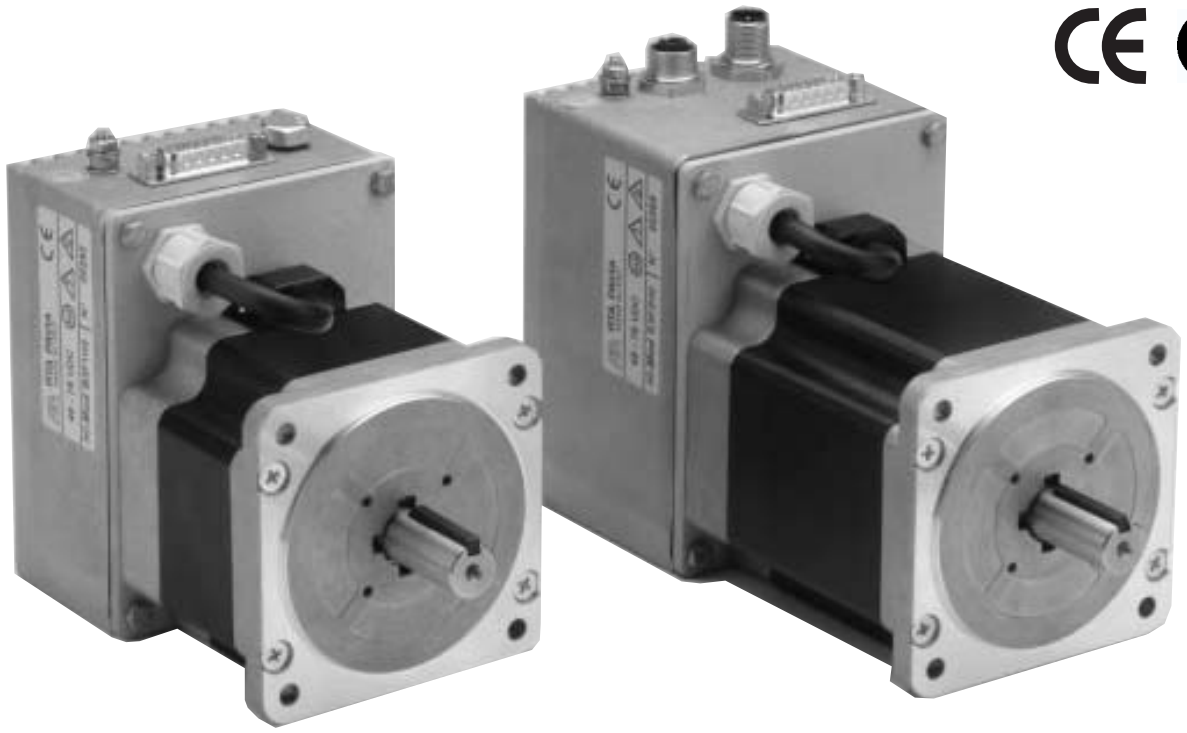
HI-MOD-B SERIES

INTEGRATED MOTOR & DRIVE



- **High efficiency bipolar chopper circuit with MOSFET output stage.**
- **Combined drive with 34 frame high torque motor, saves cabinet costs.**
- **Protection from motor short circuit, overtemperature and overvoltage.**
- **400 to 4000 steps/rev resolution for smooth motion.**
- **Runs on DC supply 32 to 75V.**
- **Saves motor cable costs. All E.M.I. is contained within motor.**
- **Available with step/direction, CANopen and RS485 inputs.**

The Hi-Mod series of combined stepper motor and drive provide a very compact solution to many low speed motion control applications. The drive is housed in a diecast box mounted on the back of the motor. Only a DC power supply and control inputs are required. This greatly reduces cabinet wiring and motor cable cost. No external fan cooling is required. The drives are ministepping upto 4000 steps/rev for smooth motion and include damping to reduce resonance. The motors are 34 frame high torque motors providing upto 6Nm or torque. One, two and three stack motors are available.

The Hi-Mod drives are available in several control input styles. This model has optoisolated step and direction inputs. The “C” model has CANopen input which can execute runs with position, speed and acceleration control. Datum searching is also possible. The “E” model also has *CANopen* control but has an optional encoder for detecting stall and position error. The “S” model has *RS485* input with 8 inputs, 3 outputs and the ability to store 128 lines of motion programs and run stand alone without a computer or PLC connected.

RTAHIMODBFT A.C.N.: 009 232 535

AUTOMATED MOTION SYSTEMS PTY.LTD. - PERTH - WESTERN AUSTRALIA - PH: (08) 9309 1896 FAX: (08) 9309 5671

SPECIFICATIONS

LOGIC INPUTS
Opto isolated (OFF = 0 -2V or open, ON = 3.5-13V)
Step *(8 μsec minimum pulse width)*
Direction
De-energise

SUPPLY
32 to 75 VDC

MAXIMUM STEP FREQUENCY
60kHz

LOGIC OUTPUTS
Opto isolated (45V @ 50mA sink open collector)
Drive fault

RESOLUTION
400, 800, 1600, 3200 steps/rev
500, 1000, 2000 & 4000 steps/rev

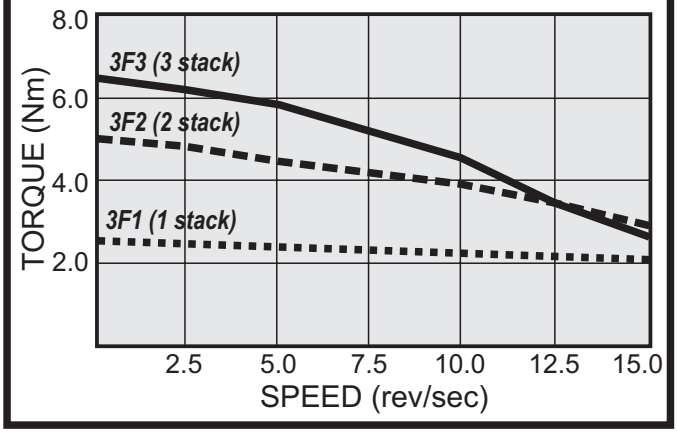
STANDBY CURRENT
automatic at 65%

OPERATING TEMPERATURE
5-45°C

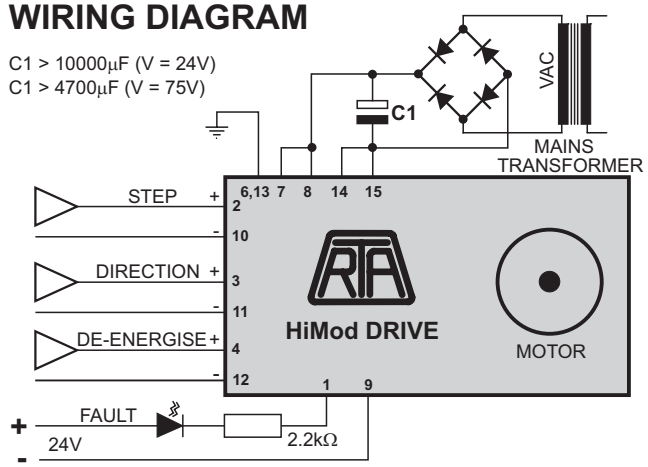
CONNECTIONS
D 15 pin male

PROTECTION
IP43

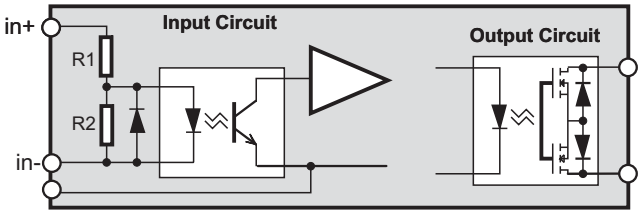
TORQUE



WIRING DIAGRAM

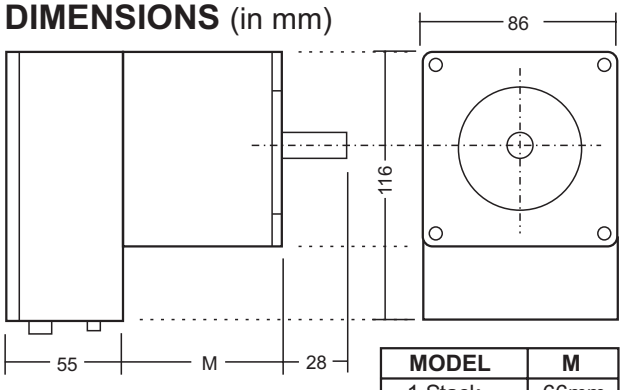


LOGIC SIGNALS



	STEP	DIRECTION	DE-ENERGISE
R1	270Ω	680Ω	680Ω
R2	470Ω	1000Ω	1000Ω

DIMENSIONS (in mm)



MODEL	M
1 Stack	66mm
2 Stack	96.5mm
3 Stack	127mm

CONNECTIONS

14	***-Supply***	- DC Power from rectifier and capacitor.
15	***-Supply***	
7	***+Supply***	+ DC Power from rectifier and capacitor.
8	***+Supply***	
9	***-Drive Fault***	Normally shorted when drive is in working state
1	***+Drive Fault***	but becomes open circuit when drive has shut down due to protection circuits.
12	***-De-energise***	When this signal is ON the drive is active.
4	***+De-energise***	When this signal is OFF the drive is inhibited so motor current (and holding torque) is zero.
11	***-Direction***	When this signal is ON the motor direction is
3	***+Direction***	reversed. This signal must be on for at least 100μs before STEP input is received and must remain on at least 100μs after the last step is received.
10	***-Step***	The motor steps once on the OFF-ON transition of
2	***+Step***	this signal. Ideal duty cycle is 50%.
6	***ground***	Connect to cable shield.
13	***ground***	Connect to cable shield

Use screened cable for power supply and logic signals!

ORDERING INFOPRMATION

B3F1H0	1 stack motor
B3F2H0	2 stack motor
B3F3M0	3 stack motor

Motors, transformers, controllers, motion control software and motor couplings also available on request.
Continuous development may necessitate changes in models and specifications without notice.

AUTOMATED MOTION SYSTEMS PTY.LTD.

MAILING ADDRESS:
P.O.BOX 1240
WANGARA DC
W.A. 6947

PHONE: (08) 9309 1896
FAX: (08) 9309 5671
EMAIL: sales@automotsys.com.au
INTERNET: http://www.automotsys.com.au

OFFICE ADDRESS:
UNIT2, 7 BARETTA RD.
WANGARA, PERTH
WESTERN AUSTRALIA

RTAHIMODBBK A.B.N.: 94 009 232 535