

Brushless DC motors

→ 30 W motors with built-in electronic control SNI10

Ideal for small variable-speed automated systems

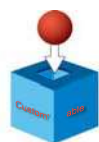
- Flexible: 4-quadrant variable speed control
- Complete: brake, encoder and class B EMC-compliant
- Discreet: compact and quiet
- Open: compatible with our logic controller PLCs
- High performance: excellent efficiency and long service life
- Safety measures on locking: torque limitation and automatic stop after 1 second



Part numbers

	801400	800400
Speed control	0-10 V and PWM	0-10 V and PWM
Part numbers	80140004	80040002
Supply voltage (V)	24 (18 → 28)	24 (18 → 28)
No-load characteristics		
Speed of rotation (rpm)	3100	3100
Absorbed current (A)	0.2	0.2
Nominal characteristics		
Speed (rpm)	2200	2200
Torque (mNm)	140	140
Absorbed current (A)	1.9	1.9
Maximum characteristics		
Start torque (mNm)	220	220
Starting current (A)	3.0	3.0
General characteristics		
Speed regulation	4	2
Conformity to EMC Directive in accordance with class (EN 55022)	B	B
Insulation class (conforming to IEC 85)	B (120°C)	B (120°C)
Casing temperature rise at 40°C ambient max. (°C)	15	15
Thermal time constant (mn)	15	15
Inertia (g.cm ²)	50	50
Weight (g)	800	800
Acoustic pressure at 50 cm (dBA)	40	40
Service life L10 (h)	20000	20000
Connection via connector on the cable	Yes	-
Connection via connector built into the motor	-	Yes
Supplied with connection accessory (bundle of wires)	-	Yes
Protection index	IP54	IP40
0-10 V speed input characteristics		
Input impedance (kΩ)	10	10
Full scale speed (rpm)	3100	3100
PWM speed input characteristics		
Input impedance (kΩ)	10	10
Level 0 input voltage (V)	< 1.7	< 1.7
Level 1 input voltage (V)	> 3	> 3
Frequency range (Hz)	150 → 5000	150 → 5000
Full scale speed (rpm)	3100	3100
Relay output characteristics		
Type of output	NPN	NPN
Max. current (mA)	50	50
Functions		
See table in selection guide, page	108	108

Product adaptations



- 4- or 2-quadrant speed regulation, open or closed loop
- With built-in electronic card TNi20
- No lead output but connector in motor
- Dimensions of motor shaft (Ø 2 to 8, lengths, pinion sized to shaft, etc.)
- Cable length, with or without connector

User information

Necessary precautions to avoid damaging the motor

*a) Do not reverse the polarity

*b) Do not short-circuit the encoder output (NPN) at the power supply

Do not use the motor as a generator

Stocked product

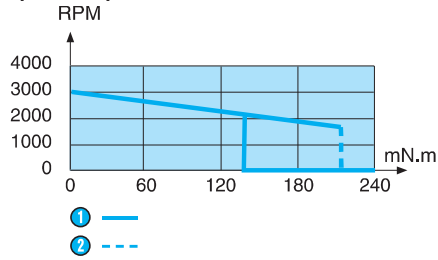
Product made to order

To order, see page 18



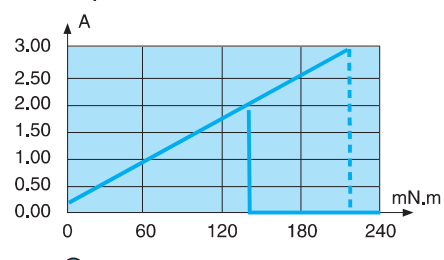
Curves

Speed/torque



- ① Continuous operation
- ② Cyclic operation

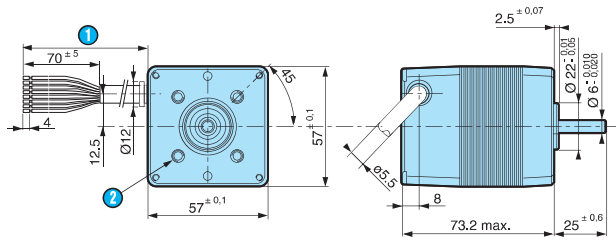
Current/torque



- ① Continuous operation
- ② Cyclic operation

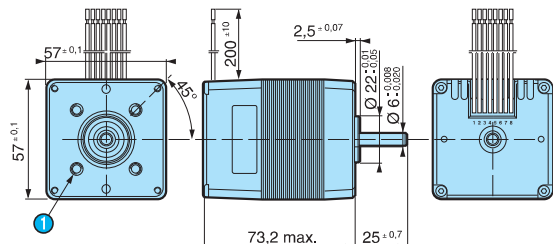
Dimensions

Version IP54 - 801400



- ① Cable length: 400 ± 10 mm
- ② 4 holes M5 x 0.86 H at 90° over Ø 40 depth of thread 4.5 min.

Version IP40 - 80040



- ① 4 holes M5 x 0.86 H at 90° over Ø 40 depth of thread 4.5 min.

Connections

Version IP54 - 801400

Marking on motor	Function	Wire colour
1 *a	Power earth	Black
2 *a	24 V power supply	Red
3	Signal earth	Blue
4	On/off input	Green
5	Direction input	Yellow
6	PWM speed setpoint	Orange
7	0-10 V speed setpoint	Brown
8 *b	12 points/rev encoder output	Purple

1 power cable
AWG24
8 conductors
UL2464

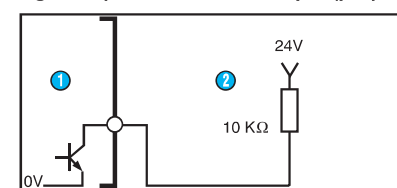
Version IP40 - 80400

Marking on motor	Function	Wire colour
1 *a	Power earth	Black
2 *a	24 V or 36 V power supply	Red
3	Signal earth	Blue
4	0-10 volts speed setpoint	Brown
5	PWM speed setpoint	Orange
6	Direction input	Yellow
7	On/off input	Green
8 *b	12 points/rev encoder output	White

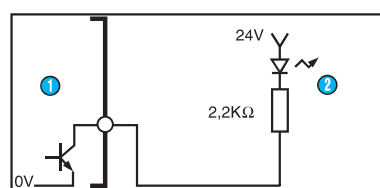
Use a connector type AMP MTA 100 640 400-8 or the assembly of connector and cable AWG22 delivered with the motor

Applications

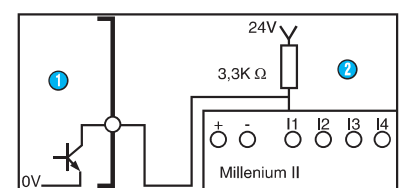
Wiring examples for encoder output (purple)



① Motor - ② Resistive load



① Motor - ② LED load



① Motor - ② Millenium II