

37 W motors with built-in electronic control TNi20 801400 - PWM Part number 80140024



- Speed and torque control
- Gentle, non-regenerative braking
- Class B EMC-compliant
- Compatible with PLCs

Part numbers

	Type	Speed control	References
80140024	801400 - PWM	PWM	Connection via C12 connector built into the motor

Specifications

Supply voltage (V)	24 (18 →37)
--------------------	-------------

No-load characteristics

Speed of rotation (rpm)	2900
Absorbed current (A)	0,2

Nominal characteristics

Speed (rpm)	2230
Torque (mNm)	160
Absorbed current (A)	2,15

Maximum characteristics

Start torque (mNm)	220
Starting current (A)	3,0

General characteristics

Speed regulation	4
Conformity to EMC Directive in accordance with (EN 55022)	B
Insulation class (conforming to IEC 85)	B (120 °C)
Casing temperature rise at 40 °C ambient max. (°C)	15
Thermal time constant (mn)	15
Inertia (g.cm ²)	50
Acoustic pressure at 50 cm (dBA)	40
Service life L10 (h)	20000
Protection index	IP54
Weight (g)	800

0-10 V speed input characteristics

Input impedance (kΩ)	-
Full scale speed (rpm)	-

PWM speed input characteristics

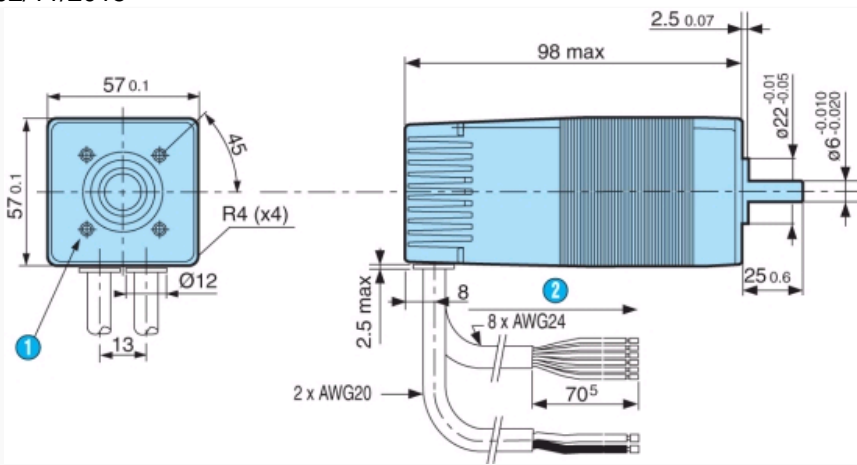
Input impedance (kΩ)	19
Level 0 input voltage (VDC)	< 2,5
Level 1 input voltage (V)	> 11,5
Frequency range (Hz)	150 →1000
Full scale speed (rpm)	4200

Relay output characteristics

Type of output	PNP
Max. current (mA)	50

Dimensions (mm)

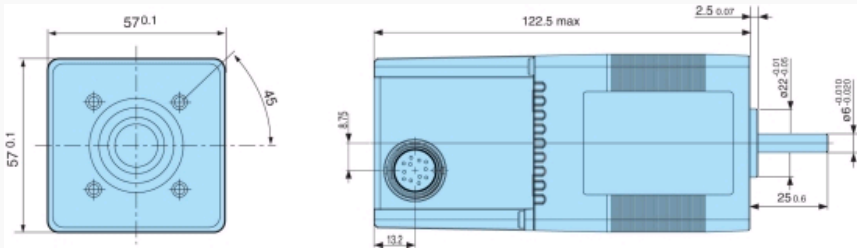
801400031-80140032



N°	Legend
1	4 holes M5 x 0.86 H at 90° over Ø 40 depth of thread 4.5 min.
2	Cable length : 500 ± 15 mm

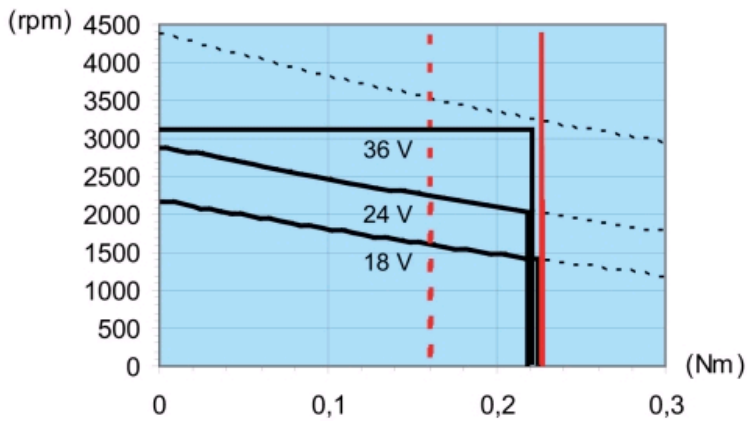
Dimensions (mm)

80140024-80140026



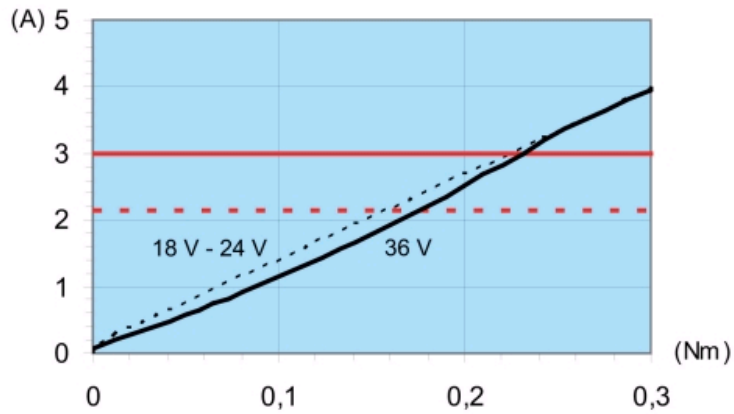
Curves

Speed/torque



Curves

Current/torque



Connections

80140031-80140032

Marking on motor	Function	Wire colour	
*a	Power ground supply	Black	1 power cable AWG20
*a	24 V power supply	Brown	2 conductors UL2464
	Signal ground	Black	
	On/off input	Green	
	Direction input	Yellow	
	Speed setpoint	Orange	1 control cable AWG24
*b	12 points/rev encoder output	Brown	8 conductors UL2464
*b	Encoder direction output	Red	
	Torque limiting setpoint	Blue	
*b	Torque saturation output	Purple	

Connections

80140024-80140026

Légende	Connecteur C12
Masse puissance	G+M
Alimentation 24 V puissance	E+F
Masse signaux	B
Entrée Marche/Arrêt	K
Entrée sens	J
Consigne vitesse	C
Sortie codeurs 12 points/tour	D
Sortie sens codeur	L
Consigne limitation de couple	A
Sortie saturation de couple	H

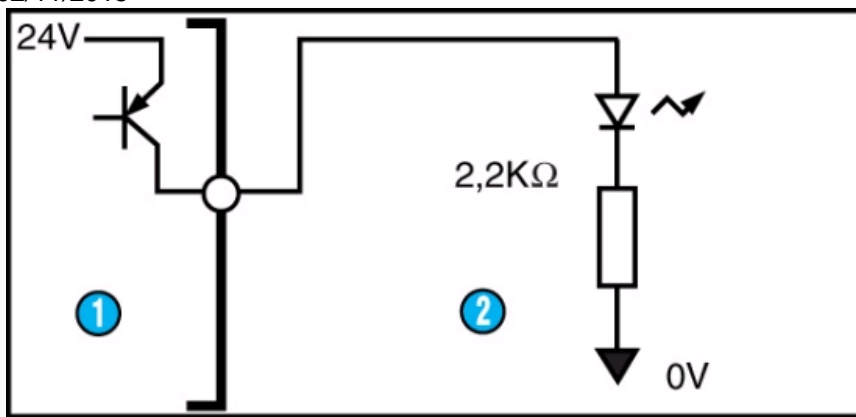
Precautions for use

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

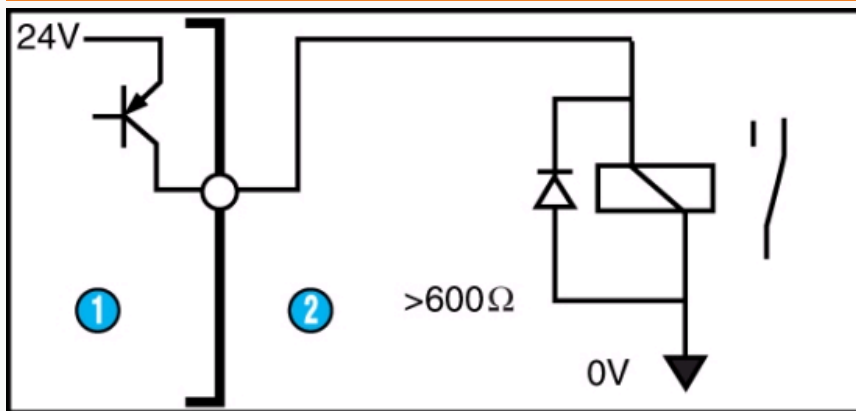
Applications

Wiring examples for encoder outputs, encoder direction, torque saturation



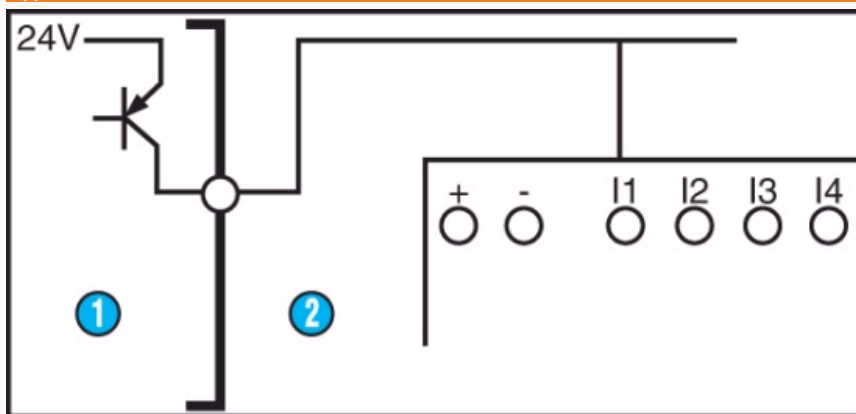
N°	Legend
1	Motor
2	LED load

Applications



N°	Legend
1	Motor
2	Relay load

Applications



N°	Legend
1	Motor
2	Millenium logic controller

Product adaptations

- Other characteristics (48 W nominal at 3200 rpm or 75 W nominal at 4700 rpm)
- Shaft diameter 8 mm