

80 W Motomate Right angle gearbox Part number 80081001



- Movement control for simple mechanisms
- All-in-one solution for quick integration
- Compact with high performance
- Intuitive programming with graphical function blocks
- Adapted for severe environments
- 12 pulses per revolution of the motor
- Independant torque control
- Uses the functionalities of TNI20

Part numbers

| Type | Ratio | Max. speed (rpm) | Available torque (Nm) |
|------|-------|------------------|-----------------------|
|------|-------|------------------|-----------------------|

Specifications

General characteristics

| | |
|-------------------------------------|-------------|
| Supply voltage (V) | 24 (20 →37) |
| Max. current (A) | 6 |
| Immunity from micro power cuts (ms) | 1 |
| Operating temperature (°C) | -20 →+40 |
| Protection index | IP 54 |

Programming

| | |
|-------------------------|-----------------------|
| Inputs / outputs | 4I/4O |
| Programming method | Function blocks / SFC |
| Program size | 128 |
| Program memory | Flash EEPROM |
| Program cycle time (ms) | 10 |
| Real-time clock | No |

Logic inputs

| | |
|-------------------------------|------------|
| Max. number | 4 (I1 →I4) |
| Input impedance (kΩ) | > 10 |
| Logic 1 voltage threshold (V) | > 15 |
| Logic 0 voltage threshold (V) | < 5 |
| Response time (ms) | 10 |

High speed inputs

| | |
|-----------------------|------------|
| Max. number | 2 (I1 →I2) |
| Max. frequency (k Hz) | 4 |

Analogue input

| | |
|-------------------|------------|
| Max. number | 2 (I3 →I4) |
| Measurement range | 0-10 VDC |
| Resolution | 8 bits |
| Accuracy | ± 5 % |

Logic outputs / PWM

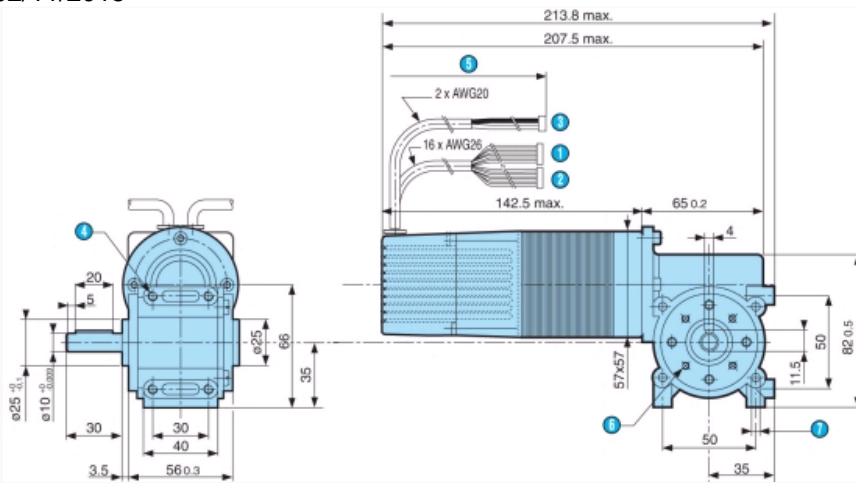
| | |
|------------------------|------------|
| Max. number | 4 (O1 →O4) |
| Type of output | PNP |
| Insulation | No |
| Max. current (mA) | 250 |
| Leakage current (mA) | < 0,1 |
| Response time (ms) | 10 |
| PWM frequency (k Hz) | 0.11 →1.8 |
| PWM accuracy at 120 Hz | 5 % |

Accessories

| Description | Code |
|---|------------|
| Programming kit PC/Motomate - serial port | 79 294 791 |
| Programming kit PC/Motomate - USB | 79 294 790 |
| Programming software on CD ROM | 79 294 792 |

Dimensions (mm)

Right angle gearbox



Radial load max. = 150 N Axial load max. = 100 N

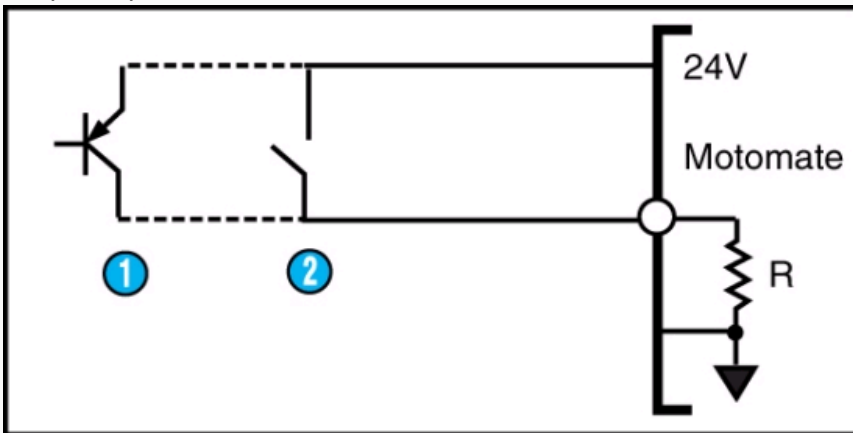
| N° | Legend |
|----|--|
| 1 | Connector 6 way : programming motomate |
| 2 | Connector 10 way : inputs/outputs motomate |
| 3 | Connector 2 way : power supply |
| 4 | 4 x M5 depth 8 mm |
| 5 | Cable length 500 ± 5 mm |
| 6 | 4 x M4 on Ø 36 depth 8 mm |
| 7 | 4 x M5 depth 8 mm |

User precautions

- *a) Never reverse the polarity of the supply
- *b) Do not short-circuit the outputs O1 to O4 to ground
- Do not use the motor as a generator
- For more details on the geared motors, consult the brushless catalogue

Applications

Examples of input connections



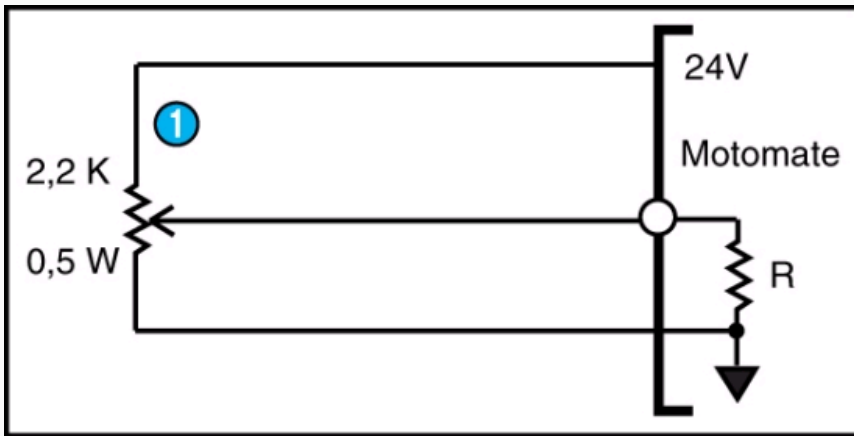
| N° | Legend |
|----|-------------------|
| 1 | Sensor output PNP |
| | or |
| 2 | Contact |

Applications



| N° | Legend |
|----|-------------------|
| 1 | Sensor output NPN |

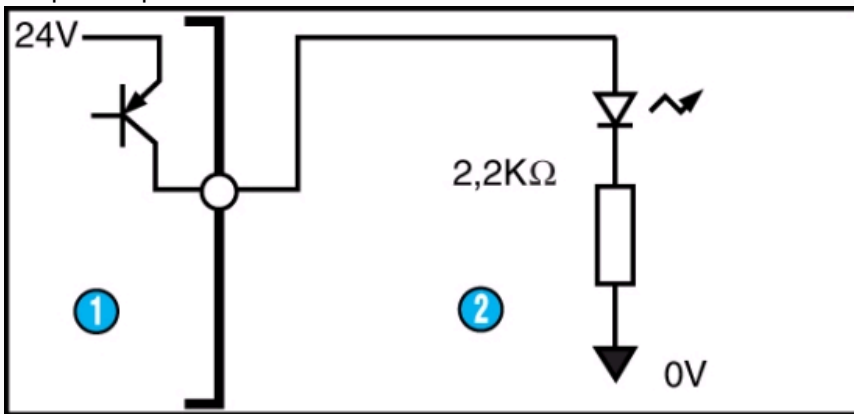
Applications



| N° | Legend |
|----|---------------|
| 1 | Potentiometer |

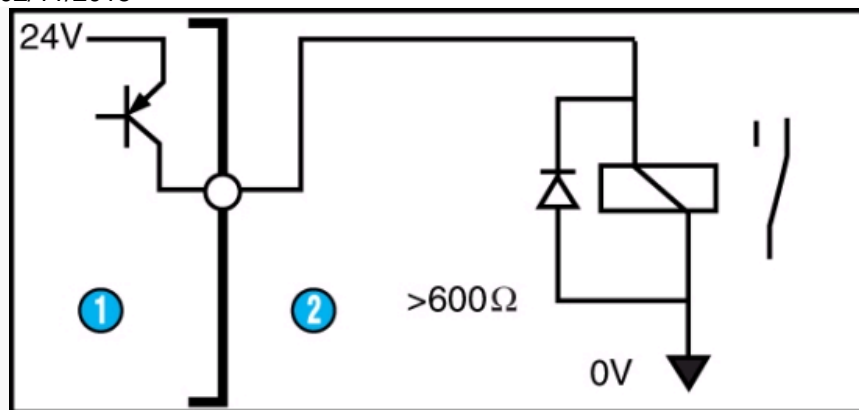
Applications

Examples of output connections



| N° | Legend |
|----|----------|
| 1 | Motor |
| 2 | Load LED |

Applications



| N° | Legend |
|----|------------|
| 1 | Motor |
| 2 | Load relay |

Product adaptations



- Special output shaft
- Special supply voltage
- Special cable length
- Customised electronics
- Special connectors
- Special gear ratios
- Special material for the gear wheels.
- Special mounting plate
- Customer programs installed at the factory