



### Ø 63 mm 194 and 255 Watts 194 W Part number 82890001



- Long service life
- Nominal power : 90 W
- For high-power drive applications
- Motor with long service life, 2 ball bearings
- Power supply via 2 output leads

#### Part numbers

| Type     | Type  | Voltage | References      |
|----------|-------|---------|-----------------|
| 82890001 | 194 W | 24 V    | Without encoder |

#### Specifications

##### No-load characteristics

|                         |      |
|-------------------------|------|
| Speed of rotation (rpm) | 3700 |
| Absorbed power (W)      | 10,8 |
| Absorbed current (A)    | 0,45 |

##### Nominal characteristics

|                                    |      |
|------------------------------------|------|
| Speed (rpm)                        | 3200 |
| Torque (mNm)                       | 270  |
| Usable power (W)                   | 90   |
| Absorbed power (W)                 | 120  |
| Absorbed current (A)               | 5,00 |
| Gearbox case temperature rise (°C) | 50   |
| Efficiency (%)                     | 75   |

##### General characteristics

|                                         |            |
|-----------------------------------------|------------|
| Insulation class (conforming to IEC 85) | F (155 °C) |
| Protection (IEC/EN 60529)               | IP20       |
| Max. output power (W)                   | 194        |
| Start torque (mNm)                      | 2000       |
| Starting current (A)                    | 34,1       |
| Resistance (Ω)                          | 0,7        |
| Inductance (mH)                         | 1,05       |
| Torque constant (Nm/A)                  | 0,059      |
| Electrical time constant (ms)           | 1,5        |
| Mechanical time constant (ms)           | 16         |
| Thermal time constant (mn)              | 41         |
| Inertia (g.cm <sup>2</sup> )            | 795        |
| Weight (g)                              | 1580       |
| Number of segments                      | 12         |
| Service life (h)                        | 5000       |
| Ball bearings                           | •          |
| Wires length (mm)                       | 200        |

##### Encoder characteristics

|                          |              |
|--------------------------|--------------|
| Current consumption (mA) | 0,5 →15      |
| Output current (mA)      | < 20 (25 °C) |
| Supply (V)               | 4,5 →35 DC   |
| Ambient temperature (°C) | -25 →+85     |

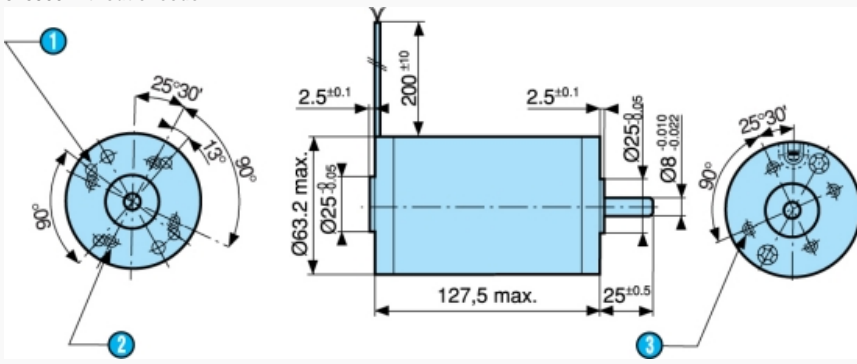
#### Accessories

| Connection                                                                            | Code     |
|---------------------------------------------------------------------------------------|----------|
| Pre-assembled female connector, casing 179228-3, tags 179227-1 and leads AWG24 250 mm | 79209895 |

#### Made to order products, available on request

- Built-in interference suppression
- Other supply voltages
- Shaft lengths at front and/or rear
- Motor 82 850 with 1 or 2 ball bearings
- Other fixing flanges on front and rear
- 200 pulses/rev optical encoder

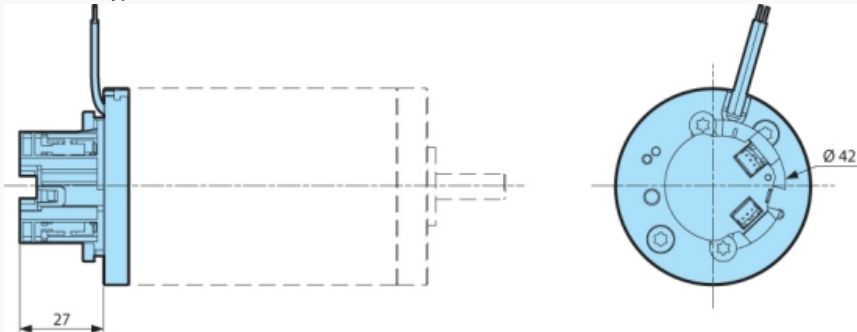
#### Dimensions (mm)



| N° | Legend                                                                  |
|----|-------------------------------------------------------------------------|
| 1  | 4 holes $\varnothing 3.65 \pm 0.05$ at $90^\circ$ over $\varnothing 48$ |
| 2  | 4 holes M5 over $\varnothing 40$ mm depth 7 mm                          |
| 3  | 4 holes M5 over $\varnothing 40$ mm depth 7 mm                          |

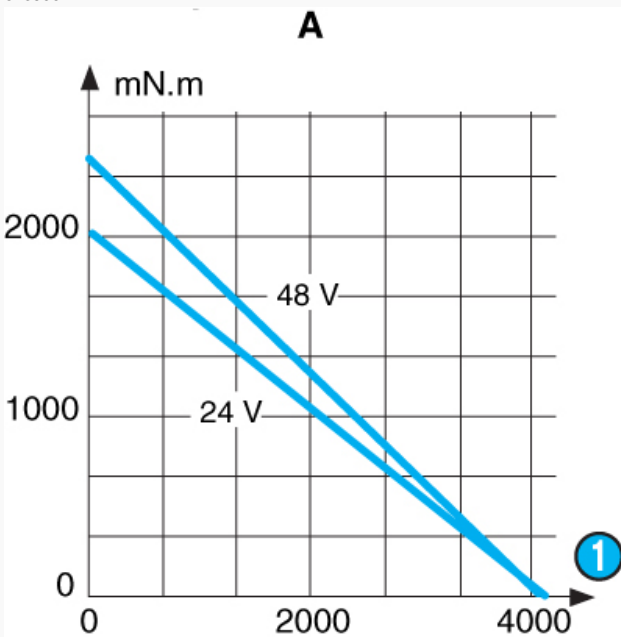
Dimensions (mm)

Encoder on type 828900



Curves

828900

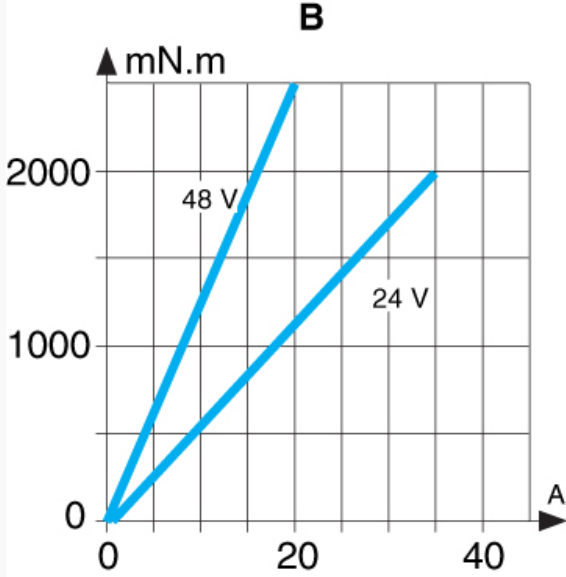


| N° | Legend |
|----|--------|
| 1  | rpm    |

|   |                    |
|---|--------------------|
| ✖ | Torque/speed curve |
|---|--------------------|

**Curves**

828900



|    |                      |
|----|----------------------|
| N° | Legend               |
| ✖  | Torque/current curve |

**Connections**

Encoder

| V DC   | RD            | RL             |
|--------|---------------|----------------|
| + 5 V  | 190 Ω - 1/4 W | 1,5 KΩ - 1/4 W |
| + 12 V | 560 Ω - 1/2 W | 3,9 KΩ - 1/4 W |
| + 24 V | 1200 Ω - 1 W  | 8,2 KΩ - 1/4 W |
| + 30 V | 1500 Ω - 1 W  | 10 KΩ - 1/4 W  |

|    |                                      |
|----|--------------------------------------|
| N° | Legend                               |
| ①  | Signal output                        |
| ②  | 0 V DC (encoder power ground supply) |
| ③  | Emitting diode                       |
| ④  | Power supply V DC                    |

**Product adaptations**

- Special output shaft
- Pinion on output shaft
- Special supply voltage
- Special cable length
- Special ball bearings
- Optical or Hall effect encoder - 1 or 2 channels - other resolutions
- Special mounting plate
- Special connectors
- EMC filter