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# DETAILS RECOMMENDED

### EC 40 Ø40 mm, brushless, 170 Watt, with Hall sensors

Part number 393023



| PRICE SCALES                            | Quantity | Price per unit |
|---|----------|----------------|
| Prices excluding VAT and shipping costs | 1-4      | €537.82        |
|   | 5-19     | €429.36        |
|   | 20-49    | €353.73        |
|   | from 50  | On request     |

Start combination

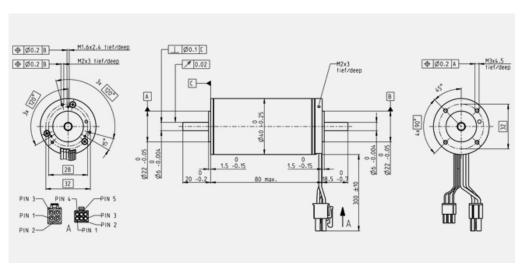
Order quantity 1

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Specifications Description Downloads

#### **Specifications**

#### TECHNICAL ILLUSTRATIONS



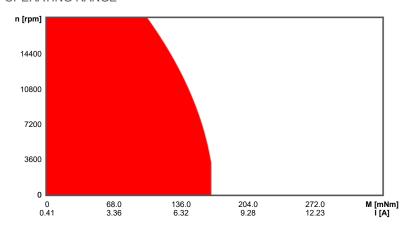
#### Dimension drawing

Information: Drawings are not to scale.

| lominal voltage  | 24 V                   |
|--|------------------------|
| No load speed  | 9840 rpm               |
| No load current  | 408 mA                 |
| Nominal speed  | 9130 rpm               |
| Nominal torque (max. continuous torque)                                | 163 mNm                |
| Nominal current (max. continuous current)                              | 7.35 A                 |
| Stall torque   | 2660 mNm               |
| Stall current  | 115 A                  |
| Max. efficiency  | 89 %                   |
|  | 1                      |
| CHARACTERISTICS  |                        |
| Terminal resistance  | 0.209 Ω                |
| Terminal inductance  | 0.084 mH               |
| Torque constant  | 23.2 mNm/A             |
| Speed constant   | 412 rpm/V              |
| Speed / torque gradient  | 3.71 rpm/mNm           |
| Mechanical time constant   | 2.09 ms                |
| Rotor inertia  | 53.8 gcm <sup>2</sup>  |
| Thermal resistance housing-ambient  Thermal resistance winding-housing | 5.21 K/W<br>1.05 K/W   |
| Thermal resistance housing-ambient                                     | 5.21 K/W               |
| Thermal time constant winding  | 17.6 s                 |
| Thermal time constant motor  | 1910 s                 |
| Ambient temperature  | -40+100 °C             |
| Max. winding temperature   | +155 °C                |
| J 1  | I                      |
| MECHANICAL DATA  |                        |
| Bearing type   | ball bearings          |
| Max. speed   | 18000 rpm              |
| Axial play   | 0 - 0.14 mm            |
| Max. axial load (dynamic)  | 23 N                   |
| Max. force for press fits (static)                                     | 100 N                  |
| (static, shaft supported)  | 5500 N                 |
| Max. radial load   | 75 N, 5 mm from flange |
|  |                        |
| OTHER SPECIFICATIONS   |                        |
| Number of pole pairs   | 1                      |
|  | 3                      |
| Number of phases   |                        |

Weight 580 g

### **OPERATING RANGE**



Continuous operation range

Short term operation range

### Description

The electronically commutated **EC motors** are characterized especially by their favorable torque characteristics, high power, extremely broad speed range and, of course, by their unsurpassed service life.

### Downloads

## CAD-FILES (STEP)

CAD drawing (STEP) (ZIP 275 KB)

Version 2017

#### **CATALOG PAGE**

| 目录页 (chinesisch, PDF 1 MB)                | Version 2020 |
|---|--------------|
| Katalogseiten (deutsch, PDF 114 KB)       | Version 2020 |
| Catalog page (english, PDF 112 KB)        | Version 2020 |
| Page de catalogue (française, PDF 113 KB) | Version 2020 |
| カタログページ (日本語, PDF 115 KB)                 | Version 2017 |

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| 1                |                |                     |                      |
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