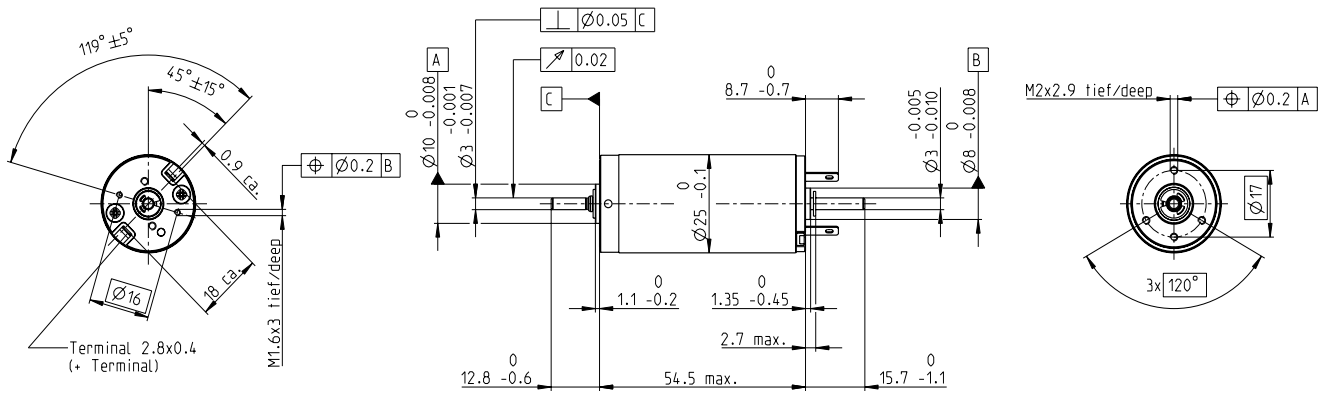


RE 25 Ø25 mm, graphite brushes, 20 watt

RE



M 1:2

- Stock program
- Standard program
- Special program (on request)

Part Numbers

according to dimensional drawing
shaft length 15.7 shortened to 4 mm

| | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 118749 | 118750 | 118751 | 118752 | 118753 | 118754 | 118755 | 118756 | 118757 |
| 302002 | 302003 | 302004 | 302005 | 302006 | 302007 | 302001 | 302008 | 302009 |

| Motor Data | | | | | | | | | |
|---|------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Values at nominal voltage | | | | | | | | | |
| 1 Nominal voltage | V | 9 | 15 | 18 | 24 | 30 | 42 | 48 | 48 |
| 2 No load speed | rpm | 10000 | 9660 | 10200 | 9560 | 9860 | 11100 | 10300 | 8240 |
| 3 No load current | mA | 110 | 60.8 | 53.9 | 36.9 | 30.5 | 25.2 | 20.1 | 15.2 |
| 4 Nominal speed | rpm | 8970 | 8430 | 8850 | 8330 | 8640 | 9920 | 9160 | 7040 |
| 5 Nominal torque | mNm | 11.1 | 20.5 | 22.9 | 26.3 | 26.7 | 27.1 | 27.7 | 28.7 |
| 6 Nominal current (max. continuous current) | A | 1.5 | 1.5 | 1.46 | 1.16 | 0.968 | 0.784 | 0.653 | 0.536 |
| 7 Stall torque | mNm | 232 | 225 | 220 | 243 | 249 | 283 | 264 | 209 |
| 8 Stall current | A | 29.1 | 15.8 | 13.5 | 10.4 | 8.72 | 7.94 | 6.03 | 3.81 |
| 9 Max. efficiency | % | 76 | 82 | 83 | 85 | 86 | 87 | 87 | 86 |
| Characteristics | | | | | | | | | |
| 10 Terminal resistance | Ω | 0.309 | 0.952 | 1.33 | 2.32 | 3.44 | 5.29 | 7.96 | 12.6 |
| 11 Terminal inductance | mH | 0.028 | 0.088 | 0.115 | 0.238 | 0.353 | 0.551 | 0.832 | 1.31 |
| 12 Torque constant | mNm/A | 7.96 | 14.3 | 16.3 | 23.4 | 28.5 | 35.6 | 43.8 | 55 |
| 13 Speed constant | rpm/V | 1200 | 670 | 586 | 408 | 335 | 268 | 218 | 174 |
| 14 Speed/torque gradient | rpm/mNm | 46.5 | 44.7 | 48 | 40.3 | 40.4 | 39.8 | 39.6 | 39.7 |
| 15 Mechanical time constant | ms | 5.68 | 4.87 | 4.77 | 4.55 | 4.47 | 4.4 | 4.37 | 4.35 |
| 16 Rotor inertia | gcm ² | 11.7 | 10.4 | 9.49 | 10.8 | 10.6 | 10.6 | 10.5 | 10.5 |

Specifications Operating Range Comments

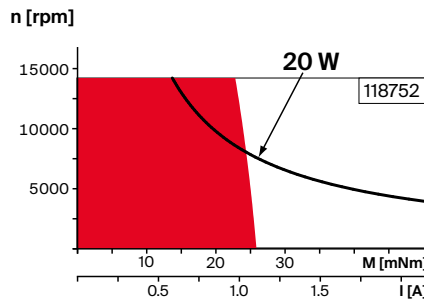
| Thermal data | |
|---------------------------------------|--------------|
| 17 Thermal resistance housing-ambient | 14 K/W |
| 18 Thermal resistance winding-housing | 3.1 K/W |
| 19 Thermal time constant winding | 12.5 s |
| 20 Thermal time constant motor | 612 s |
| 21 Ambient temperature | -30...+100°C |
| 22 Max. winding temperature | +125°C |

| Mechanical data (ball bearings) | |
|---------------------------------------|----------------|
| 23 Max. speed | 14.000 rpm |
| 24 Axial play | 0.05 - 0.15 mm |
| 25 Radial play | 0.025 mm |
| 26 Max. axial load (dynamic) | 3.2 N |
| 27 Max. force for press fits (static) | 64 N |
| (static, shaft supported) | 800 N |
| 28 Max. radial load, 5 mm from flange | 16 N |

| Other specifications | |
|----------------------------------|-------|
| 29 Number of pole pairs | 1 |
| 30 Number of commutator segments | 11 |
| 31 Weight of motor | 130 g |

Values listed in the table are nominal.
Explanation of the figures on page 90.

Option
Preloaded ball bearings



- **Continuous operation**
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.
- Short term operation**
The motor may be briefly overloaded (recurring).
- **Assigned power rating**

Modular System

Details on catalog page 44

| Gear | |
|-----------------|--|
| 416_GP 26 A | |
| 418_GP 32 BZ | |
| 419_GP 32 A | |
| 422_GP 32 C | |
| 429_KD 32 | |
| 452-460_GP 32 S | |

| Sensor | |
|-----------------------------|--|
| 510_Encoder MR 128-1000 CPT | |
| 515_Encoder Enc 22 | |
| 518_Encoder HEDS 5540 | |
| 520_Encoder HEDL 5540 | |
| 527_DC-Tacho DCT 22 | |

| Motor Control | |
|-------------------------------|--|
| 532_ESCON Module 24/2 | |
| 532_ESCON 36/2 DC | |
| 533_ESCON Module 50/5 | |
| 535_ESCON 50/5 | |
| 541_EPOS4 Micro 24/5 | |
| 542_EPOS4 Module 24/1.5 | |
| 542_EPOS4 Module 50/5 | |
| 543_EPOS4 Compact 24/5 3-axes | |
| 544_EPOS4 Compact 24/1.5 | |
| 545_EPOS4 Compact 50/5 | |
| 547_EPOS4 50/5 | |

| Accessories | |
|-----------------|--|
| 565_Brake AB 28 | |