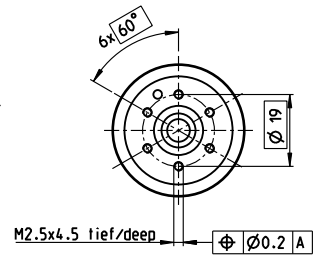
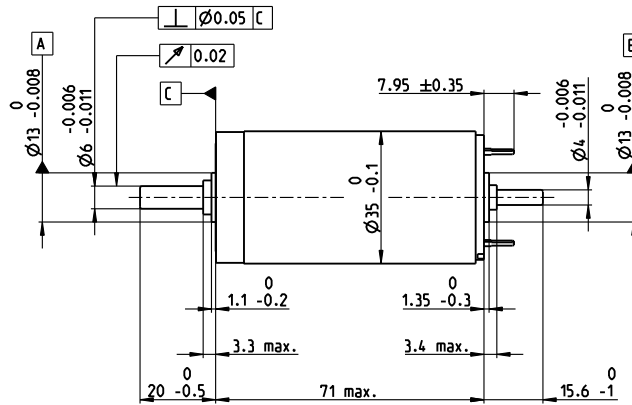
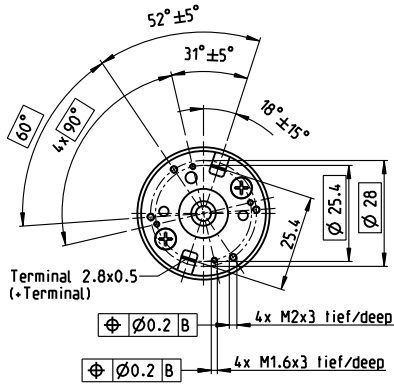


RE 35 $\varnothing 35$ mm, graphite brushes, 90 watt

RE



M 1:2

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

| | | Part Numbers | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|--|--|--|--|--|--|
| according to dimensional drawing | | 273752 | 323890 | 273753 | 273754 | 273755 | 273756 | 273757 | 273758 | 273759 | 273760 | 273761 | 273762 | 273763 | | | | | | | |
| shaft length 15.6 shortened to 4 mm | | 285785 | 323891 | 285786 | 285787 | 285788 | 285789 | 285790 | 285791 | 285792 | 285793 | 285794 | 285795 | 285796 | | | | | | | |

| Motor Data | | | | | | | | | | | | | | | | |
|---|------------------|-------|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|--|--|
| Values at nominal voltage | | | | | | | | | | | | | | | | |
| 1 Nominal voltage | V | 15 | 24 | 30 | 42 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | | |
| 2 No load speed | rpm | 7200 | 7750 | 7280 | 7580 | 7310 | 6680 | 5990 | 4770 | 3830 | 3150 | 2590 | 2110 | 1630 | | |
| 3 No load current | mA | 188 | 128 | 94.1 | 70.5 | 58.9 | 52.6 | 46 | 34.9 | 27 | 21.6 | 17.3 | 13.9 | 10.5 | | |
| 4 Nominal speed | rpm | 6500 | 6990 | 6470 | 6800 | 6510 | 5870 | 5170 | 3930 | 2990 | 2290 | 1720 | 1230 | 737 | | |
| 5 Nominal torque (max. continuous torque) | mNm | 74.2 | 105 | 101 | 105 | 103 | 104 | 104 | 106 | 108 | 107 | 107 | 106 | 106 | | |
| 6 Nominal current (max. continuous current) | A | 4 | 3.72 | 2.68 | 2.07 | 1.71 | 1.58 | 1.41 | 1.15 | 0.934 | 0.764 | 0.628 | 0.508 | 0.393 | | |
| 7 Stall torque | mNm | 931 | 1200 | 976 | 1090 | 983 | 892 | 778 | 621 | 499 | 399 | 323 | 256 | 196 | | |
| 8 Stall current | A | 47.9 | 41.2 | 25.1 | 20.7 | 15.8 | 13.1 | 10.3 | 6.52 | 4.21 | 2.77 | 1.85 | 1.2 | 0.71 | | |
| 9 Max. efficiency | % | 85 | 87 | 87 | 88 | 88 | 87 | 86 | 85 | 84 | 83 | 81 | 79 | 77 | | |
| Characteristics | | | | | | | | | | | | | | | | |
| 10 Terminal resistance | Ω | 0.313 | 0.582 | 1.2 | 2.03 | 3.04 | 3.66 | 4.68 | 7.36 | 11.4 | 17.3 | 26 | 40.1 | 67.6 | | |
| 11 Terminal inductance | mH | 0.085 | 0.191 | 0.34 | 0.62 | 0.87 | 1.04 | 1.29 | 2.04 | 3.16 | 4.65 | 6.89 | 10.3 | 17.1 | | |
| 12 Torque constant | mNm/A | 19.4 | 29.2 | 38.9 | 52.5 | 62.2 | 68 | 75.8 | 95.2 | 119 | 144 | 175 | 214 | 276 | | |
| 13 Speed constant | rpm/V | 491 | 328 | 246 | 182 | 154 | 140 | 126 | 100 | 80.5 | 66.4 | 54.6 | 44.7 | 34.6 | | |
| 14 Speed/torque gradient | rpm/mNm | 7.91 | 6.54 | 7.55 | 7.03 | 7.5 | 7.55 | 7.77 | 7.75 | 7.74 | 7.99 | 8.1 | 8.38 | 8.47 | | |
| 15 Mechanical time constant | ms | 5.62 | 5.41 | 5.37 | 5.32 | 5.32 | 5.32 | 5.33 | 5.33 | 5.33 | 5.34 | 5.35 | 5.36 | 5.38 | | |
| 16 Rotor inertia | gcm ² | 67.9 | 79 | 67.9 | 72.3 | 67.7 | 67.2 | 65.4 | 65.7 | 65.7 | 63.8 | 63 | 61 | 60.6 | | |

| Specifications | Operating Range | Comments |
|--|-----------------|--|
| Thermal data 17 Thermal resistance housing-ambient 6.2 K/W 18 Thermal resistance winding-housing 2 K/W 19 Thermal time constant winding 30.1 s 20 Thermal time constant motor 707 s 21 Ambient temperature -30...+100°C 22 Max. winding temperature +155°C Mechanical data (ball bearings) 23 Max. speed 12000 rpm 24 Axial play 0.05 - 0.15 mm 25 Radial play 0.025 mm 26 Max. axial load (dynamic) 5.6 N 27 Max. force for press fits (static) 110 N (static, shaft supported) 1200 N 28 Max. radial load, 5 mm from flange 28 N Other specifications 29 Number of pole pairs 1 30 Number of commutator segments 13 31 Weight of motor 340 g Values listed in the table are nominal. Explanation of the figures on page 82. Option Hollow shaft as special design Preloaded ball bearings | | <ul style="list-style-type: none"> ■ 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 |

| maxon Modular System | | Details on catalog page 38 | |
|---|--|---|---|
| Planetary Gearhead $\varnothing 32$ mm 0.75 - 6.0 Nm Page 392-399 Planetary Gearhead $\varnothing 32$ mm 4.0 - 8.0 Nm Page 400 Planetary Gearhead $\varnothing 42$ mm 3 - 15 Nm Page 405 Screw Drive $\varnothing 32$ mm Page 426-433 | | Encoder MR 256 - 1024 CPT, 3 channels Page 479 Encoder HED_5540 500 CPT, 3 channels Page 486/488 DC-Tacho DCT $\varnothing 22$ mm 0.52 V Page 495 Brake AB 28 24 VDC 0.4 Nm Page 535 End cap Page 541 | Recommended Electronics: Notes Page 38 ESCON Mod. 50/5 501 ESCON 50/5 503 EPOS4 Micro 24/5 509 EPOS4 Mod./Comp. 50/5 510 EPOS4 Comp. 24/5 3-axes 511 EPOS4 50/5 515 EPOS2 P 24/5 520 |