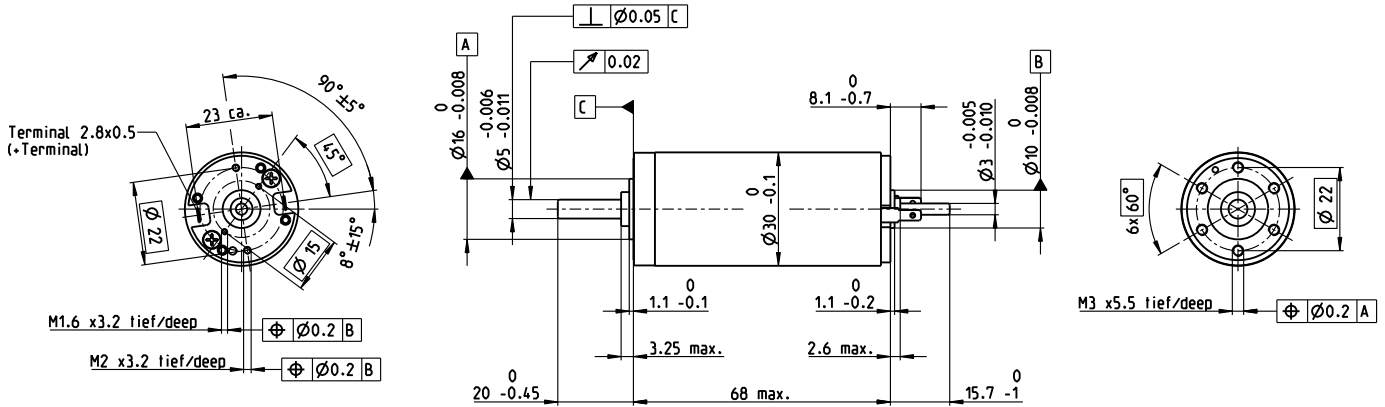


RE 30 Ø30 mm, Graphite Brushes, 60 Watt

RE



M 1:2

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

Part Numbers

according to dimensional drawing
shaft length 15.7 shortened to 8.7 mm

310005	310006	310007	310008	310009
268193	268213	268214	268215	268216

Motor Data						
Values at nominal voltage						
1 Nominal voltage	V	12	18	24	36	48
2 No load speed	rpm	8170	8590	8810	8590	8490
3 No load current	mA	301	213	165	106	78.6
4 Nominal speed	rpm	7630	7910	8050	7840	7760
5 Nominal torque (max. continuous torque)	mNm	51.6	75.5	85.6	86.6	89.7
6 Nominal current (max. continuous current)	A	4	4	3.47	2.28	1.74
7 Stall torque	mNm	853	1000	1020	1000	1050
8 Stall current	A	61.1	50.3	39.3	25.2	19.6
9 Max. efficiency	%	85	87	87	87	88
Characteristics						
10 Terminal resistance	Ω	0.196	0.358	0.611	1.43	2.45
11 Terminal inductance	mH	0.034	0.07	0.119	0.281	0.513
12 Torque constant	mNm/A	13.9	19.9	25.9	39.8	53.8
13 Speed constant	rpm/V	685	479	369	240	178
14 Speed / torque gradient	rpm/mNm	9.64	8.61	8.7	8.61	8.09
15 Mechanical time constant	ms	3.4	3.24	3.05	2.98	2.94
16 Rotor inertia	gcm ²	33.7	35.9	33.5	33.1	34.7

Specifications

Thermal data	
17 Thermal resistance housing-ambient	6.0 K/W
18 Thermal resistance winding-housing	1.7 K/W
19 Thermal time constant winding	16.3 s
20 Thermal time constant motor	593 s
21 Ambient temperature	-30...+100°C
22 Max. winding temperature	+125°C

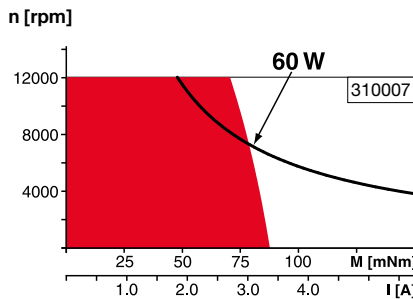
Mechanical data (ball bearings)	
23 Max. speed	12000 rpm
24 Axial play	0.05 - 0.15 mm
25 Radial play	0.025 mm
26 Max. axial load (dynamic)	5.6 N
27 Max. force for press fits (static) (static, shaft supported)	110 N
28 Max. radial load, 5 mm from flange	1200 N
	28 N

Other specifications	
29 Number of pole pairs	1
30 Number of commutator segments	13
31 Weight of motor	260 g

Values listed in the table are nominal.
Explanation of the figures on page 72.

Option
Preloaded ball bearings

Operating Range



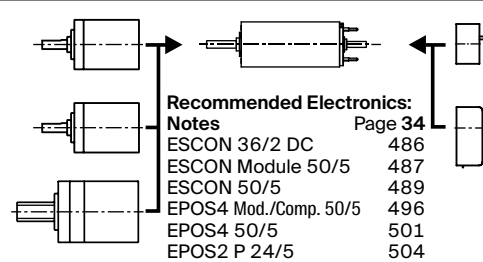
Comments

- 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 34

- Planetary Gearhead**
Ø32 mm
0.75 - 6.0 Nm
Page 383-390
- Koaxdrive**
Ø32 mm
1.0 - 4.5 Nm
Page 394
- Screw Drive**
Ø32 mm
Page 416-421



- Recommended Electronics:**
- | | |
|-----------------------|-----|
| ESCON 36/2 DC | 486 |
| ESCON Module 50/5 | 487 |
| ESCON 50/5 | 489 |
| EPOS4 Mod./Comp. 50/5 | 496 |
| EPOS4 50/5 | 501 |
| EPOS2 P 24/5 | 504 |

- Encoder MR**
256 - 1024 CPT,
3 channels
Page 464
- Encoder HED_ 5540**
500 CPT,
3 channels
Page 471/473