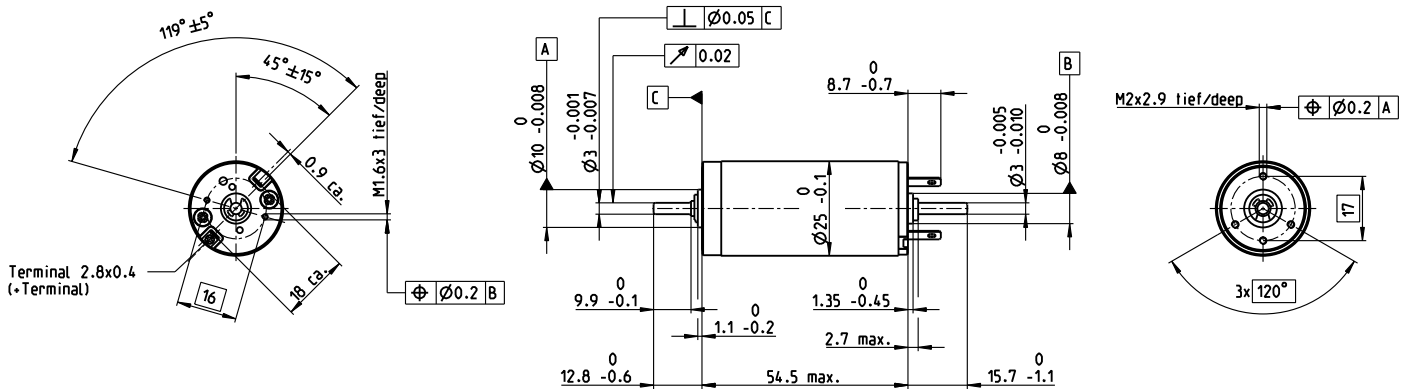


RE 25 Ø25 mm, Graphite Brushes, 20 Watt



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	48									
2	No load speed	rpm	10000	9660	10200	9560	9860	11100	10300	8240	5050									
3	No load current	mA	110	60.8	53.9	36.9	30.5	25.2	20.1	15.2	8.52									
4	Nominal speed	rpm	8970	8430	8850	8330	8640	9920	9160	7040	3830									
5	Nominal torque (max. continuous torque)	mNm	11.1	20.5	22.9	26.3	26.7	27.1	27.7	28.7	30									
6	Nominal current (max. continuous current)	A	1.5	1.5	1.46	1.16	0.968	0.784	0.653	0.536	0.343									
7	Stall torque	mNm	232	225	220	243	249	283	264	209	129									
8	Stall current	A	29.1	15.8	13.5	10.4	8.72	7.94	6.03	3.81	1.44									
9	Max. efficiency	%	76	82	83	85	86	87	87	86	84									
Characteristics																				
10	Terminal resistance	Ω	0.309	0.952	1.33	2.32	3.44	5.29	7.96	12.6	33.4									
11	Terminal inductance	mH	0.028	0.088	0.115	0.238	0.353	0.551	0.832	1.31	3.48									
12	Torque constant	mNm/A	7.96	14.3	16.3	23.4	28.5	35.6	43.8	55	89.6									
13	Speed constant	rpm/V	1200	670	586	408	335	268	218	174	107									
14	Speed / torque gradient	rpm/mNm	46.5	44.7	48	40.3	40.4	39.8	39.6	39.8	39.7									
15	Mechanical time constant	ms	5.68	4.87	4.77	4.55	4.47	4.4	4.37	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	10.5									

Specifications

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	14000 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) (static, shaft supported)	64 N	
28	Max. radial load, 5 mm from flange	800 N	
		16 N	

Other specifications

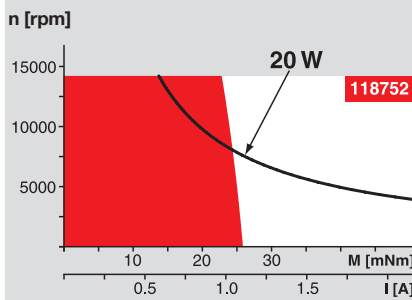
29	Number of pole pairs	1
30	Number of commutator segments	11
31	Weight of motor	130 g

Values listed in the table are nominal.
Explanation of the figures on page 151.

Option

Preloaded ball bearings

Operating Range

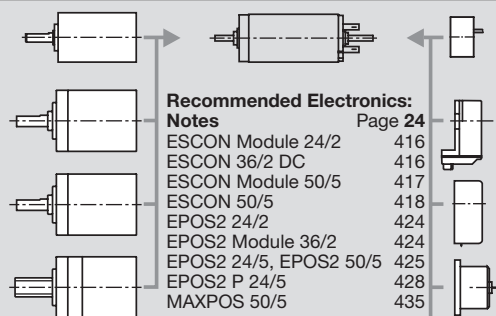


Comments

- 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

- Planetary Gearhead**
Ø26 mm
0.75 - 4.5 Nm
Page 336
- Planetary Gearhead**
Ø32 mm
0.75 - 6.0 Nm
Page 338/339/342
- Koaxdrive**
Ø32 mm
1.0 - 4.5 Nm
Page 347
- Spindle Drive**
Ø32 mm
Page 370-372



Overview on page 20-27

- Encoder MR**
128 - 1000 CPT,
3 channels
Page 392
- Encoder Enc**
22 mm
100 CPT, 2 channels
Page 398
- Encoder HED_ 5540**
500 CPT,
3 channels
Page 399/401
- DC-Tacho DCT**
Ø22 mm
0.52 V
Page 411
- Brake AB 28**
24 VDC
0.4 Nm
Page 446