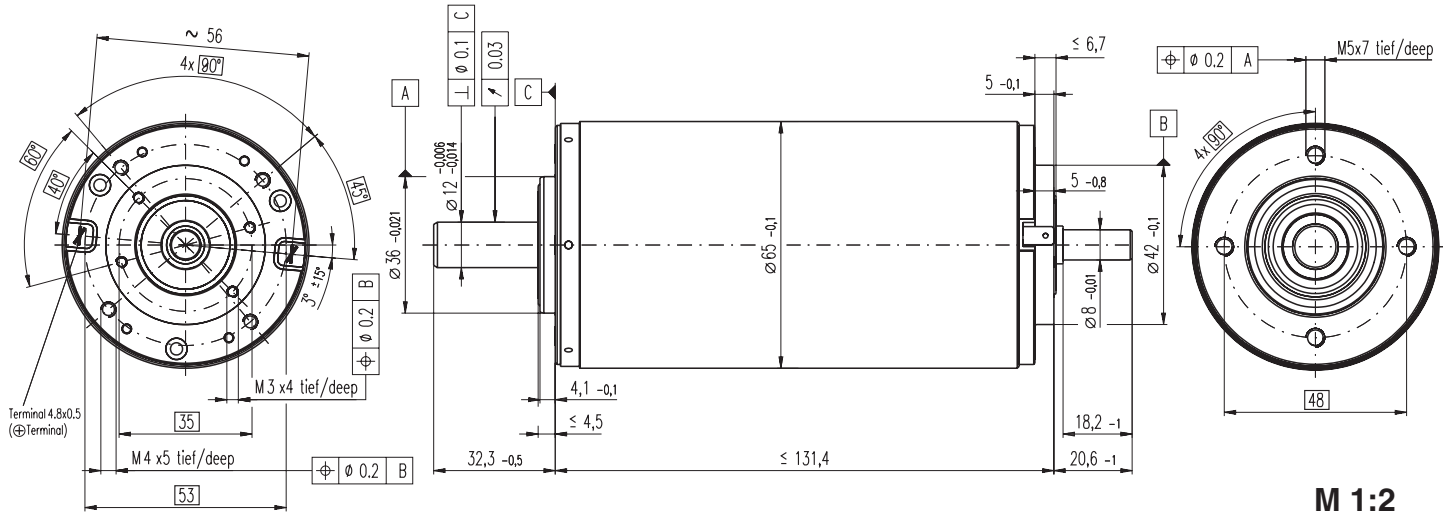


RE 65 \varnothing 65 mm, Graphite Brushes, 250 Watt

NEW



M 1:2

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

Order Number

353294 353295 353296 353297 353298 353299 353300 353301

Motor Data (provisional)

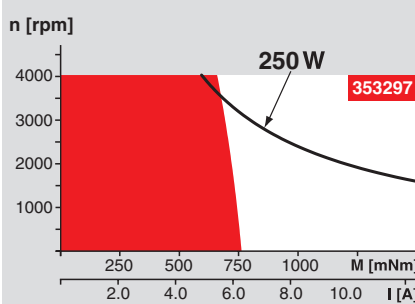
Values at nominal voltage		353294	353295	353296	353297	353298	353299	353300	353301
1 Nominal voltage	V	18.0	24.0	36.0	48.0	60.0	70.0	70.0	70.0
2 No load speed	rpm	3350	3880	3770	3480	3490	3260	3020	2550
3 No load current	mA	714	647	407	271	217	170	153	123
4 Nominal speed	rpm	3100	3640	3550	3270	3290	3060	2820	2350
5 Nominal torque (max. continuous torque)	mNm	452	510	654	746	782	819	830	886
6 Nominal current (max. continuous current)	A	10.0	9.62	7.74	6.02	5.04	4.21	3.94	3.54
7 Stall torque	mNm	14700	16800	18600	17100	17200	16000	14500	12900
8 Starting current	A	302	297	208	132	106	78.8	66.3	49.9
9 Max. efficiency	%	81.6	84.3	87.3	88.5	89.1	89.3	89.1	88.9
Characteristics									
10 Terminal resistance	Ω	0.0596	0.0809	0.173	0.363	0.566	0.888	1.06	1.4
11 Terminal inductance	mH	0.252	0.343	0.848	1.79	2.8	4.38	5.11	7.18
12 Torque constant	mNm / A	48.6	56.7	89.1	130	162	203	219	259
13 Speed constant	rpm / V	196	168	107	73.7	58.9	47.2	43.7	36.8
14 Speed / torque gradient	rpm / mNm	0.241	0.24	0.208	0.206	0.206	0.207	0.211	0.199
15 Mechanical time constant	ms	3.49	3.25	3.0	2.9	2.85	2.83	2.83	2.8
16 Rotor inertia	gcm ²	1380	1290	1380	1340	1320	1310	1280	1340

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 1.3 K / W
 - 18 Thermal resistance winding-housing 1.85 K / W
 - 19 Thermal time constant winding 127 s
 - 20 Thermal time constant motor 991 s
 - 21 Ambient temperature -30 ... +100°C
 - 22 Max. permissible winding temperature +125°C
- Mechanical data (preloaded ball bearings)**
- 23 Max. permissible speed 4000 rpm
 - 24 Axial play at axial load < 25 N 0 mm
 - 24 Axial play at axial load > 25 N 0.1 mm
 - 25 Radial play preloaded
 - 26 Max. axial load (dynamic) 70 N
 - 27 Max. force for press fits (static) 420 N
 - 27 Max. force for press fits (static) (static, shaft supported) 12000 N
 - 28 Max. radial loading, 15 mm from flange 350 N
- Other specifications**
- 29 Number of pole pairs 2
 - 30 Number of commutator segments 26
 - 31 Weight of motor 2480 g

Values listed in the table are nominal.
Explanation of the figures on page 49.

Operating Range



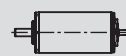
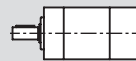
Comments

- 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

Overview on page 16 - 21

Planetary Gearhead
 $\varnothing 81$ mm
20 - 120 Nm
Page 250



Encoder HEDS 5540
500 CPT,
3 channels
Page 263

Encoder HEDL 5540
500 CPT,
3 channels
Page 265

- Recommended Electronics:**
- ADS 50/5 Page 276
 - ADS 50/10 277
 - ADS_E 50/5 277
 - ADS_E 50/10 277
 - EPOS2 50/5 295
 - EPOS 70/10 295
 - Notes 18