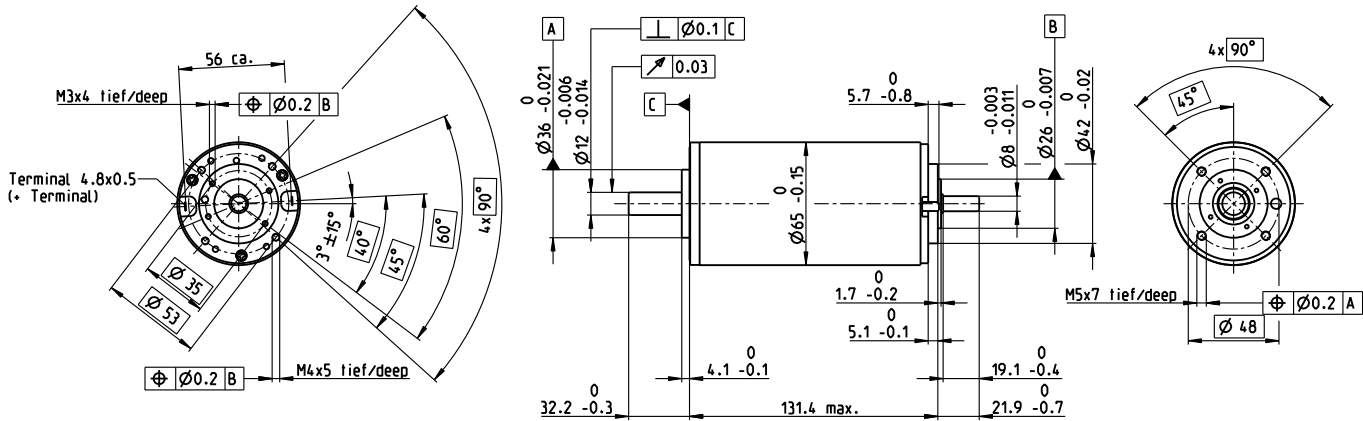


RE 65 Ø65 mm, graphite brushes, 250 watt

RE



M 1:4

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

Part Numbers

353294	353295	353296	353297	353298	353299	353300	353301
388984	388985	388986	388987	388988	388989	388990	388991

Industrial Version IP54*

Motor Data									
Values at nominal voltage									
1 Nominal voltage	V	18	24	36	48	60	70	70	70
2 No load speed	rpm	3520	4090	3970	3670	3680	3440	3190	2690
3 No load current	mA	755	697	437	289	231	179	160	125
4 Nominal speed	rpm	3250	3810	3700	3420	3450	3220	2960	2470
5 Nominal torque (max. continuous torque)	mNm	427	501	751	800	813	832	839	888
6 Nominal current (max. continuous current)	A	10	10	9.32	6.8	5.53	4.51	4.21	3.74
7 Stall torque	mNm	13600	15700	17400	16100	16200	15100	13700	12200
8 Stall current	A	295	292	207	131	106	78.6	66.1	49.7
9 Max. efficiency	%	81	83	87	88	89	89	89	89
Characteristics									
10 Terminal resistance	Ω	0.0609	0.0821	0.174	0.365	0.568	0.891	1.06	1.41
11 Terminal inductance	mH	0.023	0.031	0.076	0.161	0.251	0.393	0.458	0.644
12 Torque constant	mNm/A	46	53.7	84.4	123	153	192	207	245
13 Speed constant	rpm/V	208	178	113	77.8	62.3	49.8	46.1	38.9
14 Speed/torque gradient	rpm/mNm	0.275	0.272	0.234	0.231	0.231	0.231	0.236	0.223
15 Mechanical time constant	ms	3.98	3.68	3.38	3.25	3.19	3.16	3.16	3.13
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 123 s
 - 20 Thermal time constant motor 1060 s
 - 21 Ambient temperature -30...+100°C
 - 22 Max. winding temperature +125°C

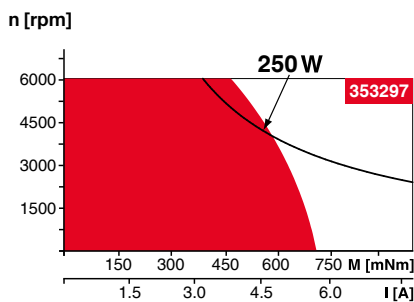
- Mechanical data**
(preloaded ball bearings)
- 23 Max. speed 5500 rpm
 - 24 Axial play at axial load < 25 N 0 mm
 - > 25 N 0.1 mm
 - 25 Radial play preloaded 70 N
 - 26 Max. axial load (dynamic) 420 N
 - 27 Max. force for press fits (static) (static, shaft supported) 12 000 N
 - 28 Max. radial load, 15 mm from flange 350 N

- Other specifications**
- 29 Number of pole pairs 2
 - 30 Number of commutator segments 26
 - 31 Weight of motor 2100 g

Values listed in the table are nominal.
Explanation of the figures on page 82.

* Industrial version with radial shaft seal ring (resulting in increased no load current).
IP54 protection only if mounted on brush side, in compliance with maxon modular system.

Operating Range

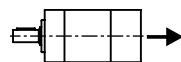


Comments

- **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
Ø81 mm
15.4 - 92.3 Nm
Page 413



- Recommended Electronics:**
- Notes Page 82
 - ESCON Mod. 50/5 501
 - ESCON Mod. 50/8 (HE) 502
 - ESCON 50/5 503
 - ESCON 70/10 503
 - EPOS4 Module 50/8 511
 - EPOS4 Module 50/15 511
 - EPOS4 Comp. 50/8 CAN 513
 - EPOS4 Comp. 50/15 CAN 514
 - EPOS4 70/15 515
 - EPOS4 Disk 60/8 516
 - EPOS4 Disk 60/12 517

Details on catalog page 38

- Encoder HEDS 5540**
500 CPT,
3 channels
Page 487
- Encoder HEDL 5540**
500 CPT,
3 channels
Page 489
- Industrial Version IP54***
Encoder HEDL 9140
Page 494
- Brake AB 44**
Page 540
- End cap**
Page 541