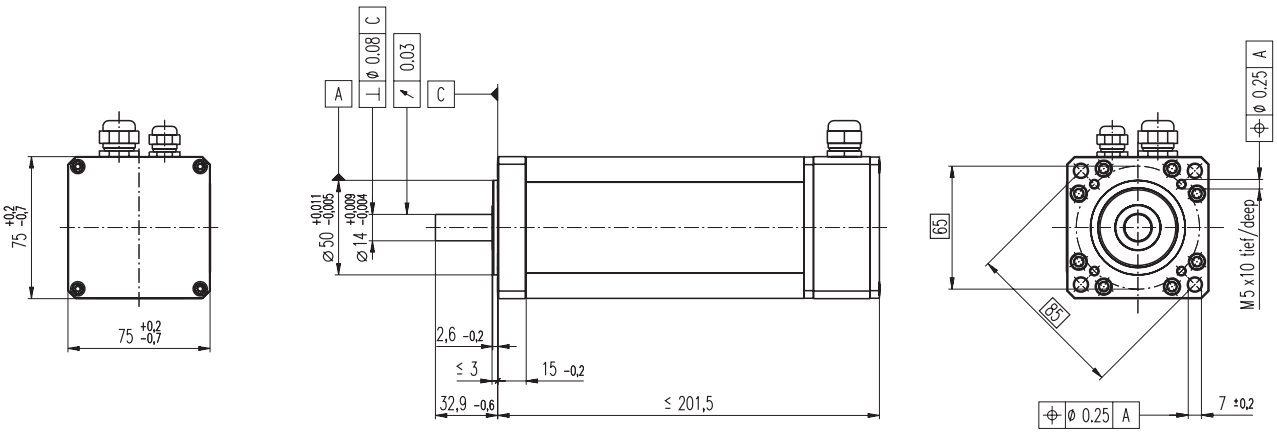
RE 75 □75 mm, Graphite Brushes, 250 Watt, IP54



M 1:4

Stock program
Standard program
Special program (on request)

Order Number

			118854	118855	118856	118857	118858	118859	118860	118861	118862	118863	118864
Motor Data													
	Values at nominal voltage												
1	Nominal voltage	V	24.0	30.0	48.0	60.0	72.0	80.0	96.0	120	140	160	180
2	No load speed	rpm	3750	3450	3850	3870	3720	3830	3890	3900	3720	3860	3840
3	No load current	mA	1440	1020	723	580	458	428	363	291	234	214	190
4	Nominal speed	rpm	3560	3260	3680	3700	3550	3670	3730	3740	3550	3690	3680
5	Nominal torque (max. continuous torque)	mNm	371	477	507	535	574	565	589	601	622	612	614
6	Nominal current (max. continuous current)	A	7.79	6.97	5.07	4.26	3.61	3.30	2.89	2.36	1.98	1.77	1.57
7	Stall torque	mNm	13500	13600	15300	15300	14700	14900	16000	15800	14600	15200	14900
8	Starting current	A	233	170	132	106	80.7	75.7	68.6	54.4	41.0	38.7	33.6
9	Max. efficiency	%	79	80	83	84	84	84	85	85	85	85	85
	Characteristics												
10	Terminal resistance	Ω	0.103	0.176	0.365	0.569	0.892	1.06	1.40	2.20	3.41	4.14	5.35
11	Terminal inductance	mH	0.0402	0.076	0.161	0.251	0.393	0.458	0.643	1.01	1.51	1.83	2.34
12	Torque constant	mNm / A	58.1	79.9	116	145	182	196	233	291	356	392	443
13	Speed constant	rpm / V	164	119	82.1	65.7	52.6	48.7	41.1	32.9	26.8	24.3	21.5
14	Speed / torque gradient	rpm / mNm	0.291	0.264	0.258	0.257	0.258	0.262	0.247	0.249	0.257	0.257	0.260
15	Mechanical time constant	ms	4.36	4.15	3.94	3.89	3.86	3.85	3.78	3.77	3.78	3.77	3.78
16	Rotor inertia	gcm²	1430	1500	1460	1450	1430	1400	1460	1450	1400	1400	1390

Specifications

Thermal data

17	Thermal resistance housing-ambient	1.3 K / W
18	Thermal resistance winding-housing	1.6 K / W
19	Thermal time constant winding	106 s
20	Thermal time constant motor	1820 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 < 18 N	0 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	70 N
27	Max. force for press fits (static)	420 N
	(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	2800 g
	Protection to	IP54

Connection

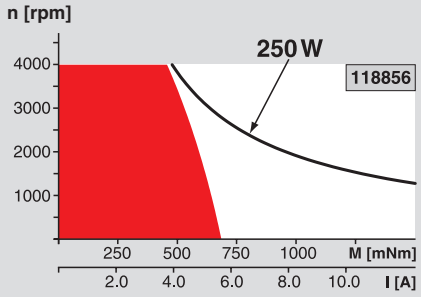
Ring terminals	∅ 6 mm
Screw fitting for cable	PG 13
Diameter of opening	∅ 8 - 15 mm
Recommended cable size	2 x 4 mm²

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

Option
Output shaft with feather key A5 (5 x 5 x 25 DIN 6885)
Brush monitoring system
Output signal that is free of potential, SPST, N.C.

Contact load	max. 3 Watt
Switching voltage	max. 150 VDC
Switching current	max. 0.25 ADC
Screw fitting for cable	PG 7
Diameter of opening	∅ 5 - 7 mm

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

Recommended Electronics:

ADS 50/10	Page 277
ADS_E 50/10	277
Notes	**18**