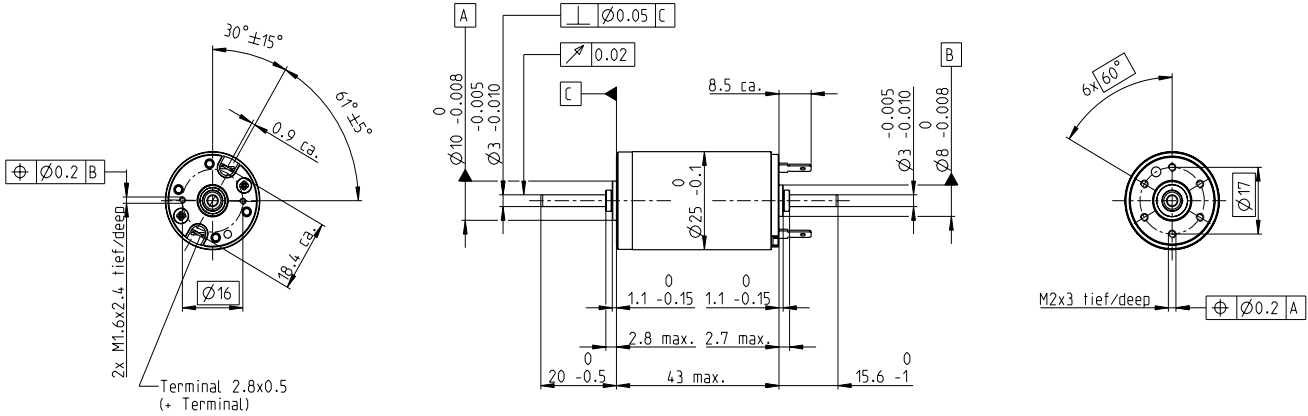


# RE 25 $\varnothing 25$ mm, graphite brushes, 20 watt

RE



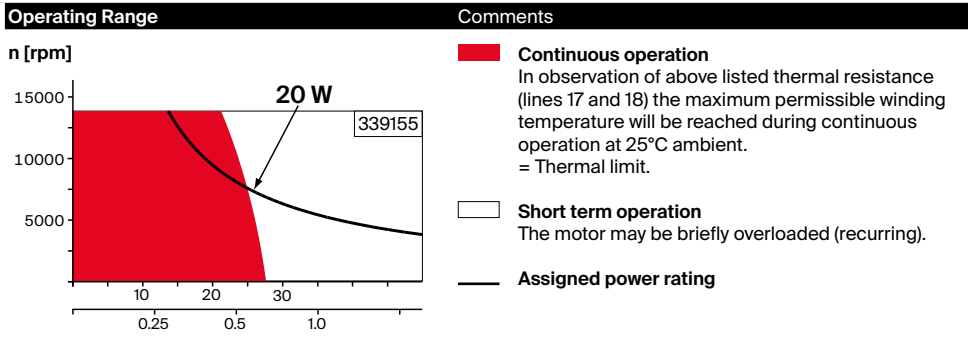
M 1:2

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

Part Numbers											

Motor Data	302534	339149	339150	339151	339152	339153	339154	339155	339156	339157	339158
<b>Values at nominal voltage</b>											
1 Nominal voltage	V	7.2	9	12	18	24	30	36	48	48	48
2 No load speed	rpm	10500	9710	9620	10400	10900	9210	10100	9540	8450	6720
3 No load current	mA	133	93.2	68.1	50.6	40.2	25	23.7	16.4	13.7	9.89
4 Nominal speed	rpm	8970	8260	8310	9190	9690	8010	8860	8360	7270	5530
5 Nominal torque	mNm	21.9	24.4	27.5	29.1	30.4	31.4	30.7	31.7	32.3	32.9
6 Nominal current (max. continuous current)	A	3.68	2.97	2.45	1.85	1.5	1.04	0.931	0.68	0.614	0.495
7 Stall torque	mNm	259	238	268	297	325	265	279	270	243	192
8 Stall current	A	42.1	28.1	23.2	18.4	15.6	8.61	8.24	5.67	4.51	2.84
9 Max. efficiency	%	79	81	84	86	88	88	88	89	88	86
<b>Characteristics</b>											
10 Terminal resistance	$\Omega$	0.171	0.32	0.517	0.98	1.53	3.49	4.37	8.47	10.6	16.9
11 Terminal inductance	mH	0.016	0.031	0.057	0.112	0.186	0.407	0.493	0.979	1.25	1.97
12 Torque constant	mNm/A	6.15	8.46	11.5	16.1	20.8	30.8	33.8	47.7	53.8	67.7
13 Speed constant	rpm/V	1550	1130	828	591	460	311	282	200	177	141
14 Speed/torque gradient	rpm/mNm	43.2	42.8	371	35.9	34	35.2	36.5	35.6	35.1	35.2
15 Mechanical time constant	ms	6.52	6.06	5.62	5.36	5.24	5.17	5.16	5.13	5.12	5.12
16 Rotor inertia	gcm <sup>2</sup>	14.4	13.5	14.5	14.3	14.7	14	13.5	13.8	13.9	13.3

Specifications	Operating Range	Comments
<b>Thermal data</b>		
17 Thermal resistance housing-ambient	14.4 K/W	<div style="background-color: red; width: 15px; height: 10px; display: inline-block; margin-right: 5px;"></div> <b>Continuous operation</b> 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.
18 Thermal resistance winding-housing	5.1 K/W	
19 Thermal time constant winding	27.7 s	
20 Thermal time constant motor	543 s	
21 Ambient temperature	-30...+100°C	
22 Max. winding temperature	+155°C	
<b>Mechanical data (ball bearings)</b>		
23 Max. speed	14 000 rpm	<div style="border: 1px solid black; width: 15px; height: 10px; display: inline-block; margin-right: 5px;"></div> <b>Short term operation</b> The motor may be briefly overloaded (recurring).
24 Axial play	0.05 - 0.15 mm	
25 Radial play	0.025 mm	
26 Max. axial load (dynamic)	20 N	
27 Max. force for press fits (static) (static, shaft supported)	60 N	
28 Max. radial load, 5 mm from flange	1000 N	
<b>Other specifications</b>		
29 Number of pole pairs	1	<div style="background-color: red; width: 15px; height: 10px; display: inline-block; margin-right: 5px;"></div> <b>Assigned power rating</b>
30 Number of commutator segments	11	
31 Weight of motor	115 g	
Values listed in the table are nominal. Explanation of the figures on page 90.		



Modular System			Details on catalog page 44
<b>Gear</b>	<b>Sensor</b>	<b>Motor Control</b>	
414_GP 22 HD	510_Encoder MR 128-1000 CPT	532_ESCON Module 24/2	
416_GP 26 A	519_Encoder HEDS 5540	532_ESCON 36/2 DC	
418_GP 32 BZ	520_Encoder HEDL 5540	533_ESCON Module 50/5	
419_GP 32 A	527_DC-Tacho DCT 22	535_ESCON 50/5	
422_GP 32 C		541_EPOS4 Micro 24/5	
429_KD 32		542_EPOS4 Module 24/1.5	
452-460_GP 32 S		542_EPOS4 Module 50/5	
		543_EPOS4 Compact 24/5 3-axes	
		544_EPOS4 Compact 24/1.5	
		545_EPOS4 Compact 50/5	
		547_EPOS4 50/5	
	<b>Accessories</b>		
	565_Brake AB 28		