

Torque motor RMI 080

Technical data: size RMIF080-xxxL-1V6S

Characteristics and nominal values:

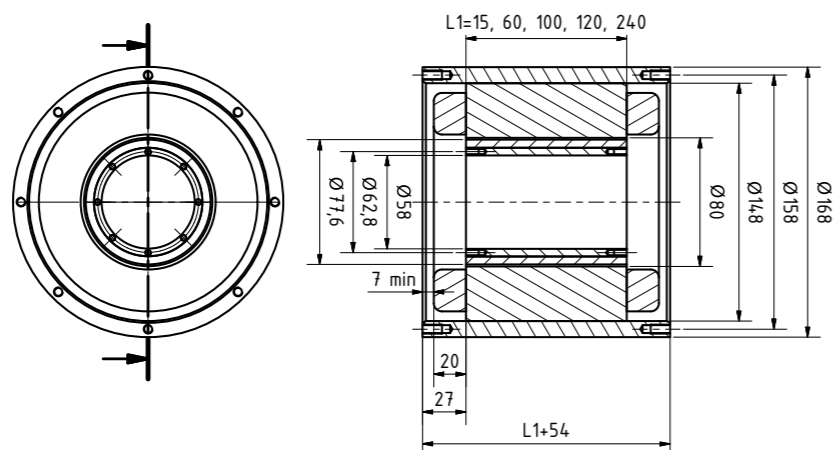
The conditions for the following nominal values are

- DC bus voltage of 560 V (400 V_{AC})
- maximum winding temperature of 140 °C (In.CL.F)
- ambient temperature of 40 °C
- liquid cooling with water-antifreeze

Stack length L1	Unit	015L	060L	120L	240L
Torque constant k_m	Nm/A	←			→ 1,915
Voltage constant k_e	Vs	←			→ 1,564
Back emf U_{ipk}	V _{@1000rpm}	←			→ 165
Terminal inductance L_{tt}	mH	8,213	0,961	0,389	0,172
Terminal resistance R_{tt}	Ω	9,292	1,269	0,546	0,251
Maximum power P_{max}	kW	3,939	19,430	39,828	80,950
Maximum torque M_{max}	Nm	16,900	67,610	135,220	270,430
Maximum current I_{max}	A	9,500	38,000	76,000	152,000
Thermal resistance R_{th}	K/W	0,127	0,096	0,076	0,063
Continuous stall torque M_0	Nm	11,300	36,050	73,900	101,620
Continuous stall current I_0	A	6,200	19,300	36,900	79,700
No-load speed n_0	rpm	←			→ 3.420
Number of poles 2p	-	←			→ 32
Rated torque M_n	Nm	8,910	28,420	55,990	69,640
Rated current I_n	A	4,8	15,000	29,600	59,100
Rated speed n_n	rpm	3.400	3.200	3.000	2.200
Motor inertia J	kgcm ²	2,08	8,37	16,70	33,39
Motor mass frameless m	kg	1,53	6,13	12,27	24,74
Dynamic factor $\dot{\omega}$	rad/s ²	←			→ 81.500

Dimensions of the frameless motor:

- with potted stator
- user manual available on request
- option: customized dimensions



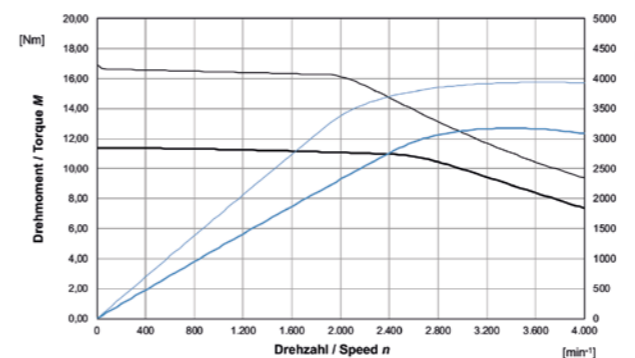
Detailed images:



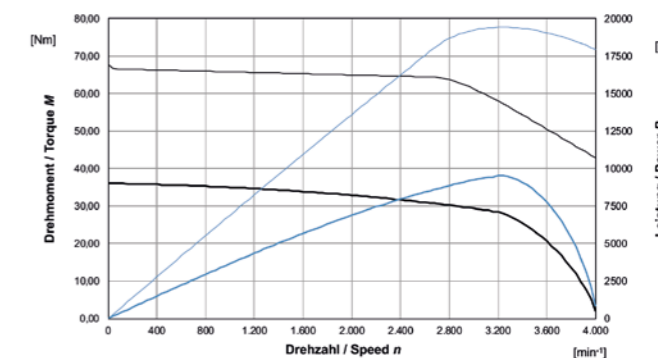
Motor characteristic: size RMIF080-xxxL-1V6S

Options of customization:

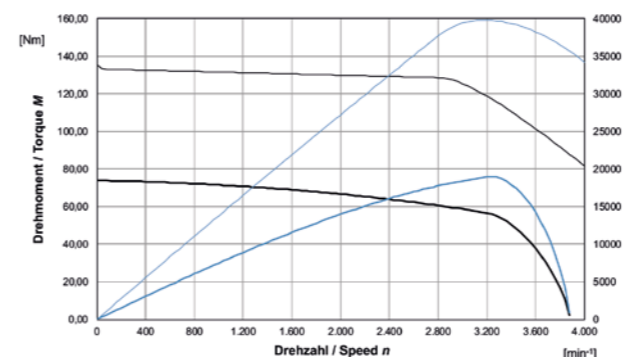
- voltage range from 5 – 750 V
- demand of speed, current and power
- stator frequency up to 2400 Hz
- temperature range -55 °C – +260 °C
- explosion proof increased safety
- vacuum 10⁻⁹ mbar, inert gas atmosphere
- radhard, dose 3 - 10 - 100 MGy-Si
- cooling: liquid, fan, air, oil
- certification on demand UL, Ex, CE
- motor with housing, encoder and brake



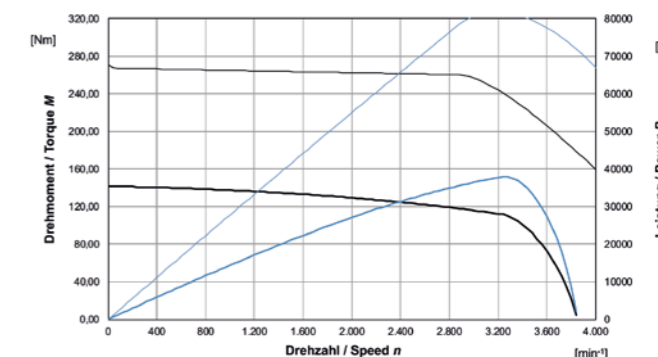
RMIF080-015L-1V6S



RMIF080-060L-1V6S



RMIF080-120L-1V6S



RMIF080-240L-1V6S