

Torque motor RMI 640

Technical data: size RMIF640-xxxL-xxxS

Characteristics and nominal values:

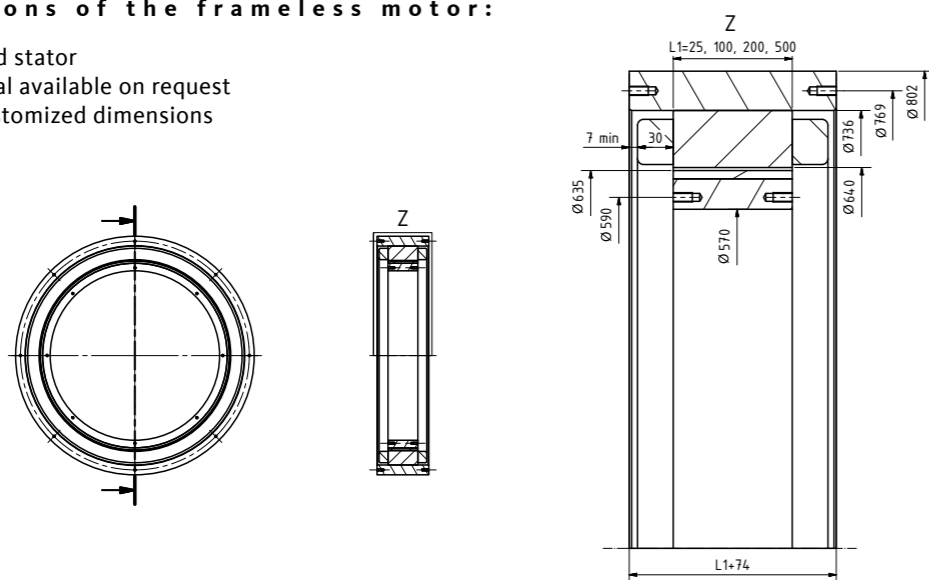
The conditions for the following nominal values are

- DC bus voltage of 750 V (530 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	025L	100L	200L	500L
Torque constant k_m	Nm/A	←	4,395	←	8,790 →
Voltage constant k_e	Vs	←	3,558	←	7,177 →
Back emf U_{ipk}	V _{@1000rpm}	←	375	←	750 →
Terminal inductance L_{tt}	mH	0,1330	0,0328	0,0656	0,0262
Terminal resistance R_{tt}	Ω	0,034	0,0049	0,0086	0,0032
Maximum power P_{max}	kW	314	1.286	1.291	3.240
Maximum torque M_{max}	Nm	1.898	7.595	15.190	37.976
Maximum current I_{max}	A	470	1.880	1.880	4.700
Thermal resistance R_{th}	K/W	0,016	0,0067	0,0032	0,0016
Continuous stall torque M_0	Nm	1.254	5.129	11.170	26.594
Continuous stall current I_0	A	285	1.167	1.270	3.035
No-load speed n_0	rpm	2.000	2.000	1.000	1.000
Number of poles 2p	-	←			120 →
Rated torque M_n	Nm	912	3.477	8.339	19.750
Rated current I_n	A	207	791	948	2.246
Rated speed n_n	rpm	1.824	1.488	1.056	1.032
Motor inertia J	kgm ²	0,416	1,664	3,329	8,321
Motor mass frameless m	kg	19,68	95,10	190,10	475,80
Dynamic factor $\dot{\omega}$	rad/s ²	←			4.552 →

Dimensions of the frameless motor:

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



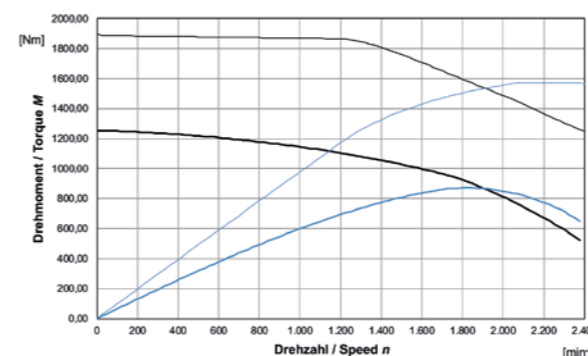
Detailed images:



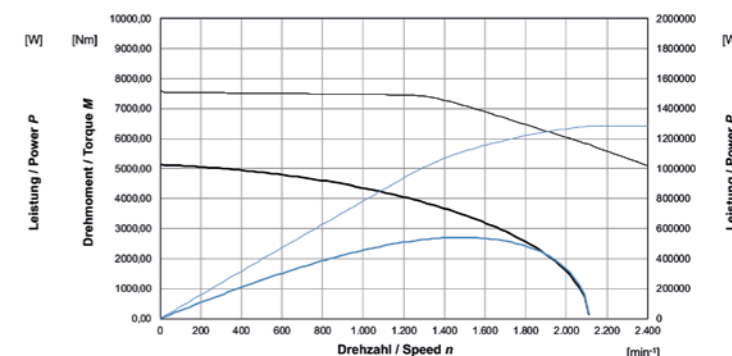
Motor characteristic: size RMIF640-xxxL-xxxS

Options of customization:

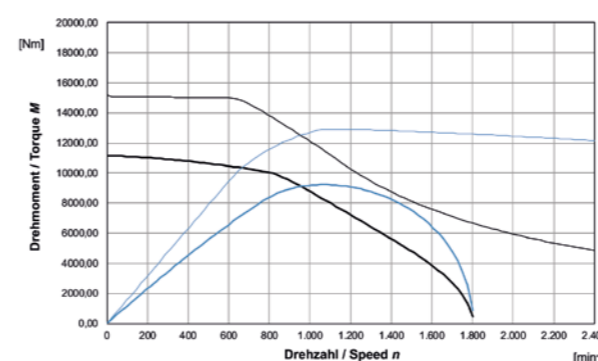
- voltage range from 5 – 750 V
- demand of speed, current and power
- stator frequency up to 2400 Hz
- temperature range -55 °C – +260 °C
- explosion proof increased safety
- vacuum 10⁻⁹ mbar, inert gas atmosphere
- radhard, dose 3 - 10 - 100 MGy-Si
- cooling: liquid, fan, air, oil
- certification on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



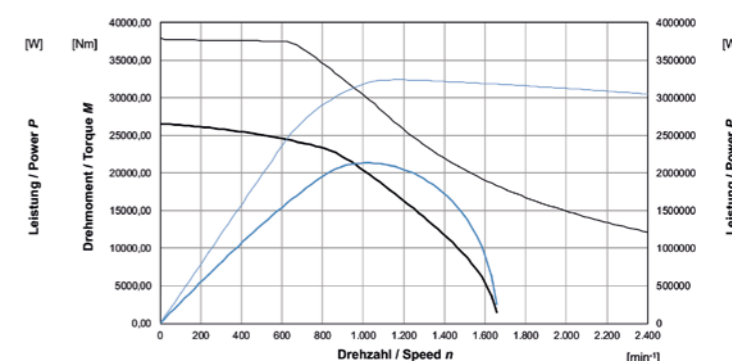
RMIF640-025L-3V6T



RMIF640-100L-3V6T



RMIF640-200L-7V2T



RMIF640-500L-7V2T