

# Torque motor RMI 250

Technical data: size RMIF250-2V0L-xxxS

## Characteristics and nominal values:

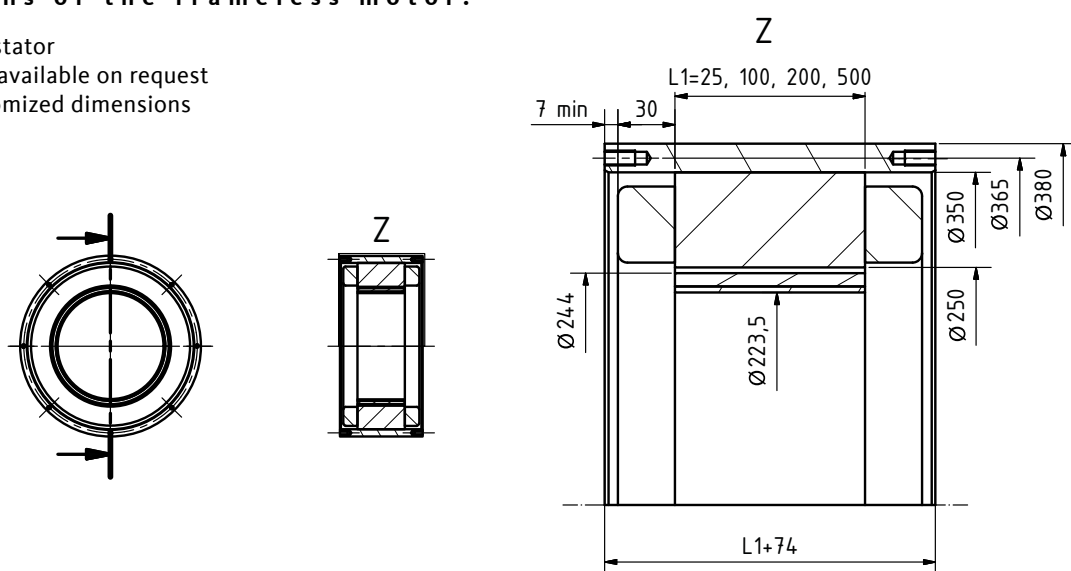
The conditions for the following nominal values are

- DC bus voltage of 750 V (530 V<sub>AC</sub>)
- 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	←			→ 2,442
Voltage constant $k_e$	Vs	←			→ 1,994
Back emf $U_{ipk}$	V <sub>@1000rpm</sub>	←			→ 208
Terminal inductance $L_{tt}$	mH	0,871	0,215	0,108	0,043
Terminal resistance $R_{tt}$	Ω	0,146	0,021	0,009	0,003
Maximum power $P_{max}$	kW	58	240	483	1.211
Maximum torque $M_{max}$	Nm	280	1.120	2.241	5.603
Maximum current $I_{max}$	A	134	536	1.072	2.680
Thermal resistance $R_{th}$	K/W	0,073	0,036	0,018	0,008
Continuous stall torque $M_0$	Nm	139	520	1.131	2.696
Continuous stall current $I_0$	A	65	242	528	1.257
No-load speed $n_0$	rpm	←			→ 3.593
Number of poles 2p	-	←			→ 48
Rated torque $M_n$	Nm	102	358	783	1.667
Rated current $I_n$	A	47,4	166	363	865
Rated speed $n_n$	rpm	3.200	2.360	2.200	2.160
Motor inertia J	kgcm <sup>2</sup>	192	771	1.543	3.858
Motor mass frameless m	kg	10,2	40,6	82	205
Dynamic factor $\dot{\omega}$	rad/s <sup>2</sup>	←			→ 14.342

## Dimensions of the frameless motor:

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



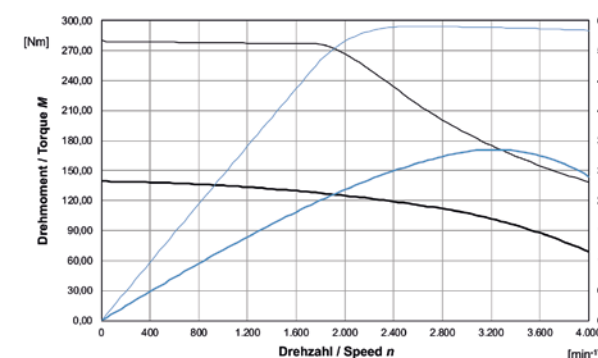
## Detailed images:



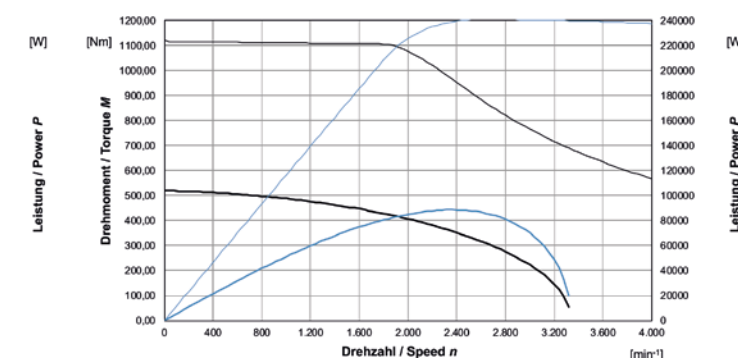
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### Options of customization:

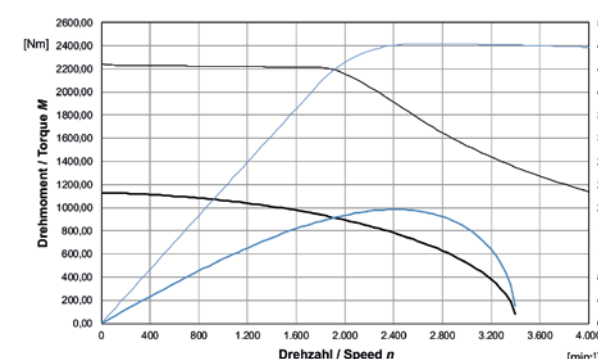
- voltage range from 5 – 750 V
- demand of speed, current and power
- stator frequency up to 2400 Hz
- temperature range -55 °C – +260 °C
- explosion proof increased safety
- vacuum 10<sup>-9</sup> mbar, inert gas atmosphere
- radhard, dose 3 - 10 - 100 MGy-Si
- cooling: liquid, fan, air, oil
- certification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



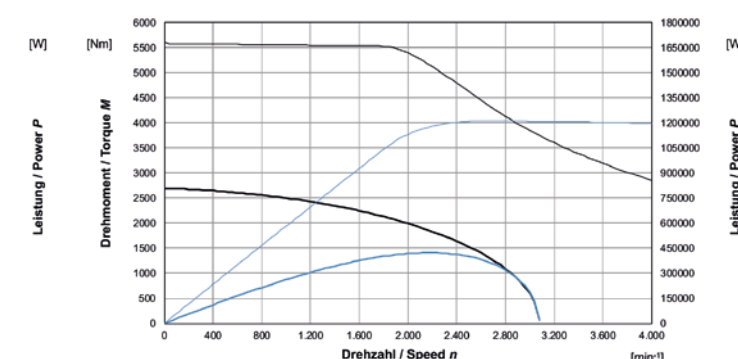
RMIF250-025L-2V0T



RMIF250-100L-2V0T



RMIF250-200L-2V0T



RMIF250-500L-2V0T