

Torque motor RMI 100

Technical data: size RMIF100-xxxL-1V6S

Characteristics and nominal values:

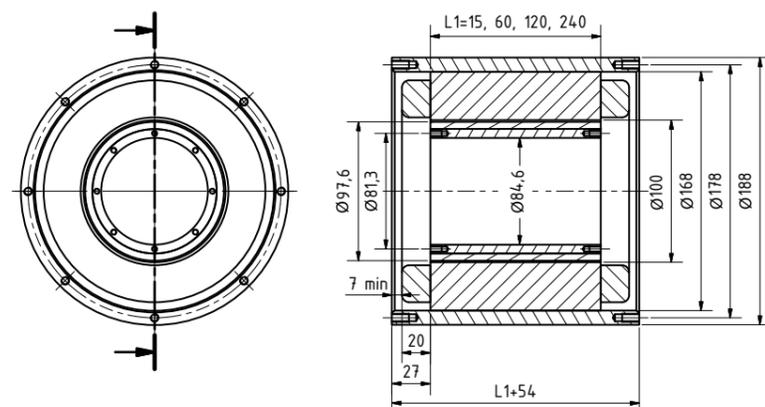
The conditions for the following nominal values are

- 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	5,257	0,615	0,249	0,11
Terminal resistance R_{tt}	Ω	5,400	0,738	0,318	0,146
Maximum power P_{max}	kW	5,500	31,400	64,200	129,800
Maximum torque M_{max}	Nm	26,900	107,700	215,500	430,900
Maximum current I_{max}	A	16,200	64,800	129,600	259,800
Thermal resistance R_{th}	K/W	0,082	0,061	0,048	0,025
Continuous stall torque M_0	Nm	18,000	71,800	143,600	287,300
Continuous stall current I_0	A	10,100	31,600	54,300	111,000
No-load speed n_0	rpm	←			→ 3.420
Number of poles 2p	-	←			→ 40
Rated torque M_n	Nm	12,160	45,310	68,220	139,740
Rated current I_n	A	6,600	24,600	36,400	74,700
Rated speed n_n	rpm	3.960	3.240	3.080	3.000
Motor inertia J	kgcm ²	4,36	17,46	34,91	69,82
Motor mass frameless m	kg	1,82	7,28	14,56	29,12
Dynamic factor $\dot{\omega}$	rad/s ²	←			→ 61.800

Dimensions of the frameless motor:

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



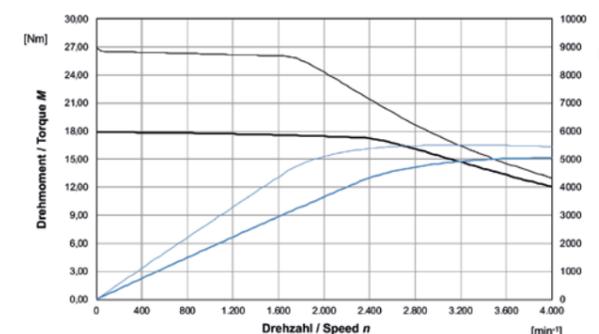
Detailed images:



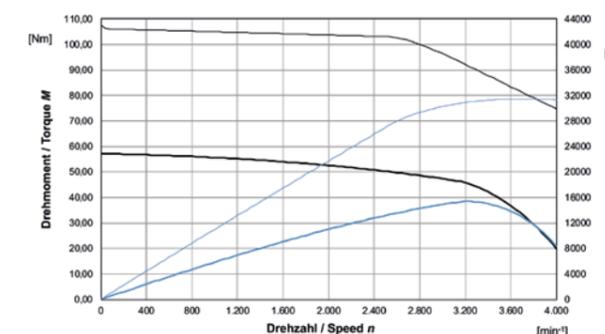
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Options of customization:

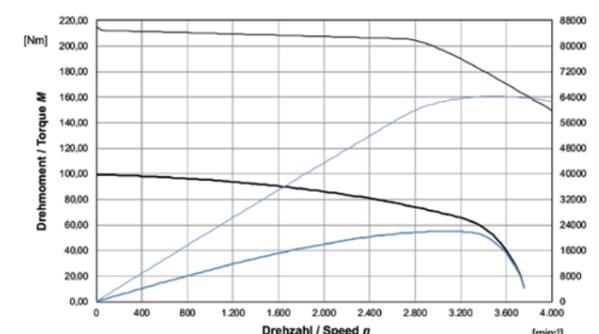
- voltage range from 5 – 750 V
- demand of speed, current and power
- stator frequency up to 2400 Hz
- temperature range -55 °C – +260 °C
- explosion proof increased safety
- vacuum 10⁻⁹ mbar, inert gas atmosphere
- radhard, dose 3 - 10 - 100 MGy-Si
- cooling: liquid, fan, air, oil
- certification on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



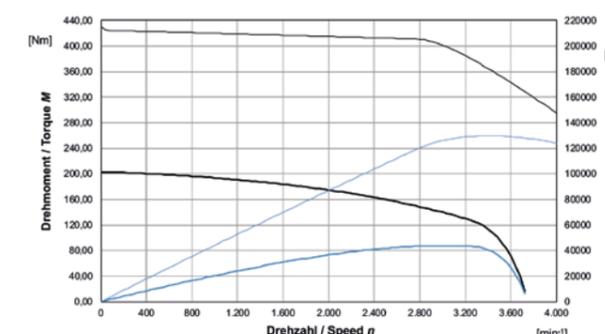
RMIF100-015L-1V6S



RMIF100-060L-1V6S



RMIF100-120L-1V6S



RMIF100-240L-1V6S