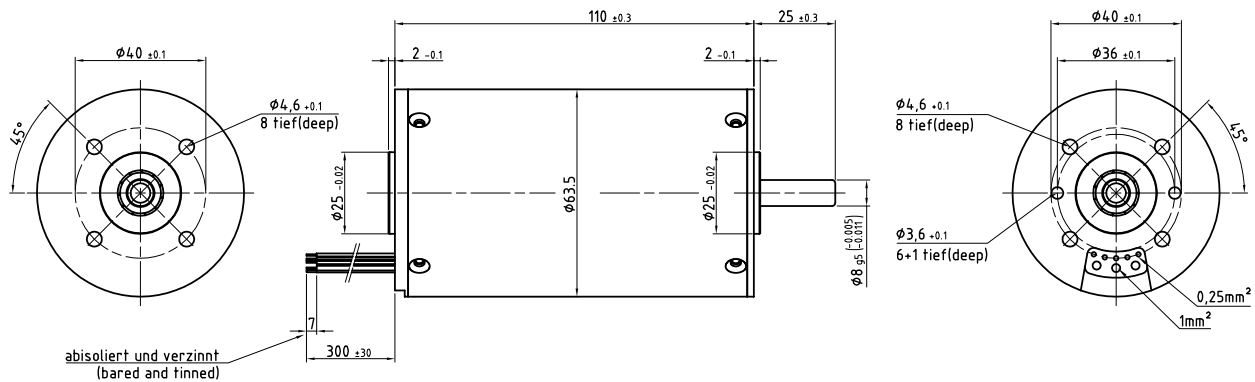


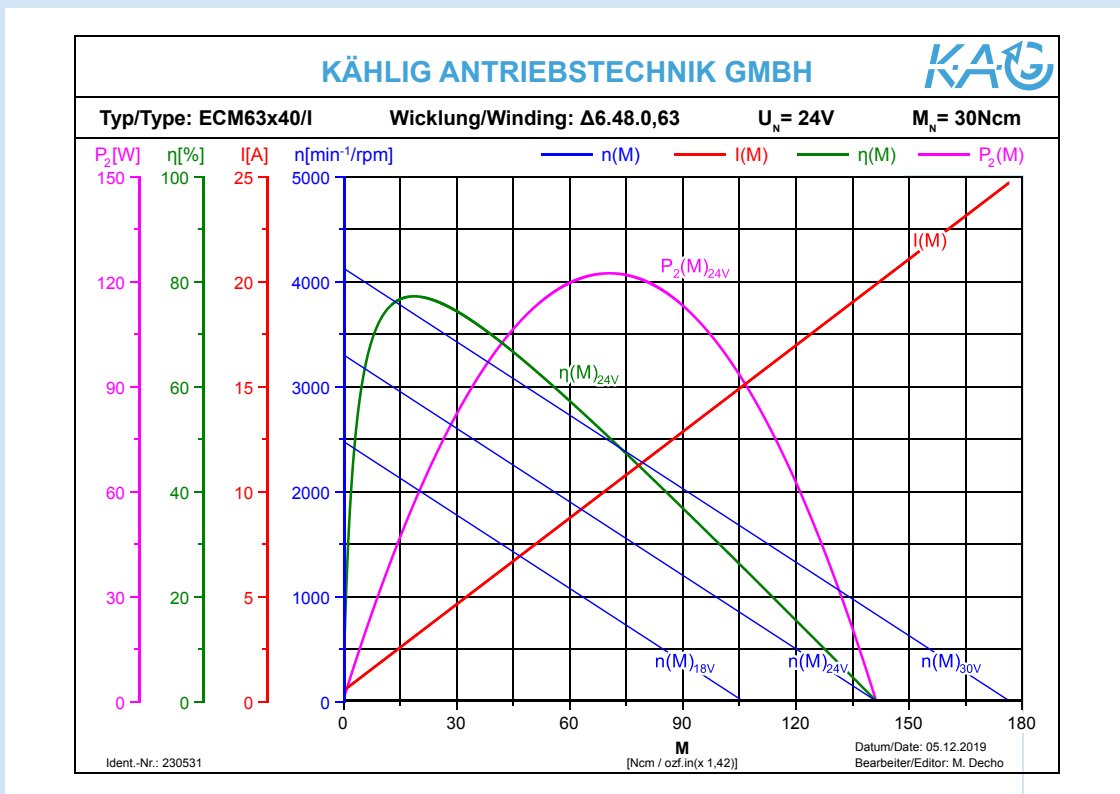
EC-Motor ECM63x40

Id.-Nr. 230531 (24V)

- 4-pole rotor with plastic-bonded magnets NeFeB
- Threefold winding connected in delta
- 3 internal Hall sensors for rotor position detection offset by 120°
- Lead wires (standard), other connections on request
- Closed aluminium housing with aluminium bearing flanges
- Direction of rotation CW / CCW
- Multiple combination possibilities with gears, encoders, brakes and control electronics



Application on request



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Performance

	Sign	Unit	Value	Tolerance
Rated voltage	U_N	V	24	
Rated torque ¹⁾	M_N	Ncm	30	
Rated speed ¹⁾	n_N	min ⁻¹	2600	±10%
Rated current ¹⁾	I_N	A	4.58	±20%
No load speed ¹⁾	n_o	min ⁻¹	3300	±15%
No load current ¹⁾	I_o	A	0.47	±50%
Rated power output ¹⁾	P_{2N}	W	81.68	
Rated power input ¹⁾	P_{IN}	W	109.92	
Rated efficiency ¹⁾	η_N	%	74.3	
Maximum power output ²⁾³⁾	P_{2max}	W	122.19	
Maximum continuous torque ²⁾³⁾	M_{max}	Ncm	30	
Maximum continuous current ²⁾³⁾	I_{max}	A	4.58	
Maximum speed ¹⁾³⁾	n_{max}	min ⁻¹	8000	
Stall torque ¹⁾	M_H	Ncm	141.43	
Stall current ¹⁾	I_H	A	19.85	
Stator resistance ¹⁾	R_A	Ω	0.65	±5%
Stator inductance[1 kHz] ¹⁾	L_A	mH	0.84	
Rise of speed-characteristics ¹⁾	k_D	Ncm/min ⁻¹	-23.333	
Torque constant ¹⁾	k_M	Ncm/A	7.299	
Voltage constant ¹⁾	k_E	V/10 ³ min ⁻¹	7.27	
Friction torque ¹⁾	M_R	Ncm	-3.43	
Mechanical time constant ¹⁾	T_M	ms	2.78	
Electrical time constant ¹⁾	T_e	ms	0.69	
Rotor inertia	J_R	gcm ²	206	
Maximum case temperature ²⁾	ϑ_G	°C	100	
Starting voltage ¹⁾	U_A	V	20	
Permissible axial shaft loads ³⁾	F_{axial}	N	110	
Permissible radial shaft loads ³⁾	F_{radial}	N	300	
Protection class DIN VDE 0530			IP50	
Duty cycle DIN VDE 0530			S1	
Insulation class DIN VDE 0530			F	
Lifetime at rated torque			≥ 20000 h	
Ambient temperature			-30°C to +40°C	
Bearing			2 ball bearings	

1) ϑ_w Winding temperature ≈ 20°C 2) $\Delta\vartheta_w$ allowable = 100K
 3) The operating at maximum levels reduces the lifespan

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