



Brushless Servomotors

TC7-xxxx series



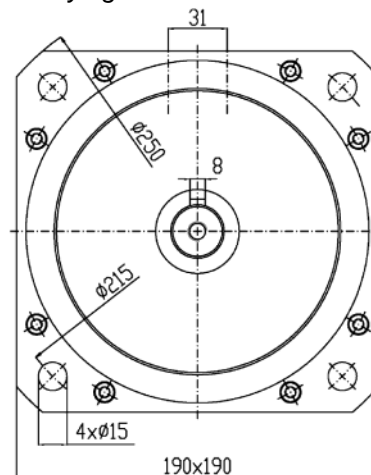
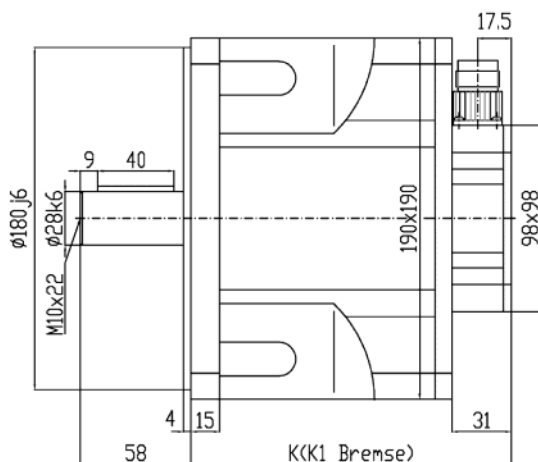
U_{dc} = 320 / 560 VDC

General Description:

Compact Design
Rare Earth Magnets
Resolver Feedback
Intercontec-Connectors

Options:

Holding Brake
Shaft Keyway DIN 6885
Encoder Feedback
Flying Leads



Parameters			TC7-0850		TC7-1250		TC7-1850	
DC Bus Voltage	U _{dc}	V	320	560	320	560	320	560
Rated Torque	M _N	Nm	6,5		10,5		14,0	
Rated AC Current	I _N	A	9,5	5,0	11,9	7,3	17,4	9,1
Stall Torque	M ₀	Nm	8,5		12,5		18,5	
Stall Current	I ₀	A	11,2	5,9	13,0	8,0	21,1	11,0
Peak Torque	M _{max}	Nm	26		38		56	
Peak AC Current	I _{max}	A	44	23	51	31	82	43
Rated Speed*	n _N	min ⁻¹	3000		2500	3000		
Max. Mech. Speed	n _{max}	min ⁻¹	6000					
Torque Constant	K _T	Nm/A	0,76	1,44	0,96	1,57	0,88	1,69
Voltage Constant	K _E	V/1000	46	87	58	95	53	102
Resistance Ph-Ph	R _{Ph}	Ω	0,53	1,92	0,43	1,14	0,23	0,82
Inductance Ph-Ph	L _{Ph}	mH	2,7	9,7	2,9	7,6	1,8	6,6
El. Time Constant	T _{el}	msec	5,1	5,1	6,7	6,7	7,8	11,7
Therm. Constant	T _{th}	min	35		42		52	
Inertia	J	kgcm ²	24		27		30	
Rated Brake Torque	M _{Br}	Nm	18					
Weight w/o brake	m	kg	12,4		15,1		17,9	
Weight with brake	m _{Br}	kg	14,9		17,6		20,4	
Length w/o brake	K	mm	168		183		198	
Length with brake	K1	mm	206		221		236	

* Windings for different rated speeds are available; parameter tolerance +/-10%

Protection Class
Electrical Connections
Thermal Protection
Rated Parameters
Motor Controller
Flange/Shaft

IP64, optional IP65 or IP67
Intercontec-Connectors (2 pcs)
PTC, optional thermal switch (normally closed type) tripping out at 140°C, KTY or NTC
Acc. to EN 60034-1, ambient temperature T_A = 40°C, cooling flange 65°C, temperature rise T_R = 110 K
Standard winding designed for power supply U_{cc} = 320 or 560 VDC, different execution optional
Acc. to DIN 42955 N, optional R