

Table 7-11 1FK7063 CT

Technical data	Code	Unit	-5AF71	
Configuration data				
Rated speed	n_N	RPM	3000	
No. of poles	2p		8	
Rated torque (100 K)	M_N (100 K)	Nm	7.3	
Rated current (100 K)	I_N	A	5.6	
Static torque (60 K)	M_0 (60 K)	Nm	9.1	
Static torque (100 K)	M_0 (100 K)	Nm	11	
Stall current (60 K)	I_0 (60 K)	A	6.6	
Stall current (100 K)	I_0 (100 K)	A	8.0	
Moment of inertia (with brake)	J_{MotBr}	10^{-4} kgm ²	17.3	
Moment of inertia (without brake)	J_{Mot}	10^{-4} kgm ²	15.1	
Optimum operating point				
Optimum speed	n_{opt}	RPM	3000	
Optimum power	P_{opt}	kW	2.29	
Limiting data				
Max. permissible speed (mech.)	$n_{max\ mech}$	RPM	7200	
Max. permissible speed (converter)	$n_{max\ Inv}$	RPM	6600	
Max. torque	M_{max}	Nm	35	
Max. current	I_{max}	A	28	
Physical constants				
Torque constant	k_T	Nm/A	1.37	
Voltage constant	k_E	V/1000 RPM	87.5	
Winding resistance at 20°C	R_{Str}	Ohm	0.65	
Cyclic inductance	L_D	mH	7.7	
Electrical time constant	T_{el}	ms	11.8	
Mechanical time constant	T_{mech}	ms	1.56	
Thermal time constant	T_{th}	min	40	
Shaft torsional stiffness	C_t	Nm/rad	35000	
Weight with brake	m_{MotBr}	kg	12	
Weight without brake	m_{Mot}	kg	11.5	
Recommended motor module 6SL312 - TE21-0AA				
Rated current converter	$I_N\ Inv$	A	9	
Max. current converter	$I_{max\ Inv}$	A	18	
Max. torque at $I_{max\ Inv}$	$M_{max\ Inv}$	Nm	24.5	