

1FK7062 - 2AF7 three-phase servomotor			
Technical data	Character	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	3000
Rated torque (100 K)	$M_{N(100K)}$	Nm	6
Rated current (100 K)	$I_{N(100K)}$	A	4
Static torque (100 K)	$M_{0(100K)}$	Nm	8.5
Stall current (100 K)	$I_{0(100K)}$	A	5.3
Static torque (60 K)	$M_{0(60K)}$	Nm	7.1
Stall current (60 K)	$I_{0(60K)}$	A	4.3
Optimum operating point:			
Optimum speed	n_{opt}	rpm	3000
Optimum power	P_{opt}	kW	1.88
Limit data:			
Max. permissible speed (mech.)	$n_{max\ mech}$	rpm	7200
Maximum torque	M_{max}	Nm	26
Maximum current	I_{max}	A	19.2
Motor data:			
Number of poles	2p		8
Torque constant (100K)	k_T	Nm/A	1.605
Voltage constant (at 20°C)	k_E	V/1000rpm	102.5
Winding resistance (at 20°C)	R_{ph}	Ω	1.145
Rotating field inductance	L_D	mH	14.6
Electrical time constant	T_{el}	ms	12.8
Mechanical time constant	T_{mech}	ms	1.49
Thermal time constant	T_{th}	min	35
Moment of inertia	J_{Mot}	$10^{-4}\ kgm^2$	11.2
Shaft torsional stiffness	C_t	Nm/rad	37000
Weight	m_{Mot}	kg	9.1
Motor data with integrated brake:			
Moment of inertia (with brake)	$J_{Mot\ withBr}$	$10^{-4}\ kgm^2$	12.2
Shaft torsional stiffness (with brake)	$C_{t\ withBr}$	Nm/rad	26500
Weight (with brake)	$m_{Mot\ withBr}$	kg	10.5
Recommended Motor Module:			
Rated converter current	$I_{N\ conv}$	A	5
Maximum converter current	$I_{max\ conv}$	A	15
Max. torque (converter operation)	$M_{max\ conv}$	Nm	22.1
Max. permissible speed (converter operation)	$n_{max\ conv}$	rpm	5600