1FK7063 - 2AH7 three-phase servomotor			
Technical data	Character	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	4500
Rated torque (100 K)	$M_{N(100K)}$	Nm	3
Rated current (100 K)	$I_{N(100K)}$	A	3.8
Static torque (100 K)	$M_{0(100K)}$	Nm	11 12
Stall current (100 K)	$I_{0(100K)}$	A	9.1
Static torque (60 K)	$M_{0(60K)}$	Nm	9.7
Stall current (60 K)	$I_{0(60K)}$	A	
Optimum operating point:			
Optimum speed	n_{opt}	rpm	3300
Optimum power	P_{opt}	kW	2.3
Limit data:			
Max. permissible speed (mech.)	$n_{max\ mech}$	rpm	7200
Maximum torque	M_{max}	Nm	35 42
Maximum current	I_{max}	A	
Motor data:			
Number of poles	2p		8
Torque constant (100K)	k_T	Nm/A	0.915
Voltage constant (at 20°C)	k_E	V/1000rpm	60
Winding resistance (at 20°C)	R_{ph}	Ω	0.287
Rotating field inductance	L_D	mH	3.8
Electrical time constant	T_{el}	ms	13.2
Mechanical time constant	T_{mech}	ms	1.51
Thermal time constant	T_{th}	min	40
Moment of inertia	J_{Mot}	10^{-4} kgm^2	14.7
Shaft torsional stiffness	c_t	Nm/rad	34000
Weight	m_{Mot}	kg	11.1
Motor data with integrated brake:			
Moment of inertia (with brake)	$J_{Mot\ withBr}$	10^{-4} kgm^2	15.7
Shaft torsional stiffness (with brake)	$c_{t\ withBr}$	Nm/rad	25000
Weight (with brake)	$m_{Mot\ withBr}$	kg	12.5
Recommended Motor Module:			
Rated converter current	$I_{N\ conv}$	A	18 54
Maximum converter current	$I_{max\ conv}$	A	35
Max. torque (converter operation)	$M_{max\ conv}$	Nm	7200
Max. permissible speed (converter operation)	$n_{max\ conv}$	rpm	

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