

## synchronous servomotor



**Ordering data**                                 **1FK7022-5AK21-1PA3**  
 :

Client order no. / :  
 Order no. / :  
 Offer no. / :  
 Remarks / :

Item no. / :  
 Consignment no. / :  
 Project / :

<b>Engineering data / :</b>		<b>Physical constants / :</b>	
Rated speed :	6000 1/min	Torque constant :	0.46 Nm/A
Number of poles :	6	Voltage constant at 20° C :	29.0 V/1000*min <sup>-1</sup>
Rated torque (100 K) :	0.6 Nm	Winding resistance at 20° C :	4.20 Ω
Rated motor current :	1.4 A	Rotating field inductance :	9.1 mH
Static torque (60 K) :	0.70 Nm	Electrical time constant :	2.20 ms
Static torque (100 K) :	0.8 Nm	Mechanical time constant :	1.70 ms
Stall current (60 K) :	1.5 A	Thermal time constant :	18 min
Stall current (100 K) :	1.8 A	Shaft torsional stiffness :	3000 Nm/rad
Rotor moment of inertia :	0.0000280 kgm <sup>2</sup>	Net weight of the motor :	1.8 kg
Efficiency :	86.0 %		

<b>Mechanical data :</b>		<b>Optimum operating point :</b>	
Design of the motor type :	Compact	Optimum speed :	6000 1/min
Shaft height :	28 mm	Optimum power :	0.4 kW
Sensor design :	Resolver 14 bit		
Cooling :	Natural cooling	<b>Recommended motor module / :</b>	
Holding brake type :	no break	Rated inverter current :	2 A
Shaft end type :	Fitted key and keyway	Maximum inverter current :	5 A
Radial runout tolerance :	N	Maximum torque :	2.00 Nm
Vibration severity grade :	Grade A		
Degree of protection :	IP64	<i>Special design /</i>	
Design acc. to Code I :	IM B5 (IM V1, IM V3)		
Arrangement of electrical connectors :	Connectors for signals and power rotatable		
Color of the housing :	Anthracite RAL 7016		