SIEMENS

synchronous servomotor

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

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

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

Engineering data / :

Rated speed :	6000 1/min
Number of poles :	6
Rated torque (100 K) :	0.6 Nm
Rated motor current :	1.4 A
Static torque (60 K) :	0.70 Nm
Static torque (100 K) :	0.8 Nm
Stall current (60 K) :	1.5 A
Stall current (100 K) :	1.8 A
Rotor moment of inertia :	0.0000280 kgm²
Efficiency :	86.0 %

Physical constants / :

Torque constant :	0.46 Nm/A
Voltage constant at 20º C :	29.0 V/1000*min⁻¹
Winding resistance at 20º C :	4.20 Ω
Rotating field inductance :	9.1 mH
Electrical time constant :	2.20 ms
Mechanical time constant :	1.70 ms
Thermal time constant :	18 min
Shaft torsional stiffness :	3000 Nm/rad
Net weight of the motor :	1.8 kg

Mechanical data :

Design of the motor type :	Compact
Shaft height :	28 mm
Sensor design :	Resolver 14 bit
Cooling :	Natural cooling
Holding brake type :	no break
Shaft end type :	Fitted key and keyway
Radial runout tolerance :	N
Vibration severity grade :	Grade A
Degree of protection :	IP64
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

Optimum operating point :

Optimum speed :	6000 1/min
Optimum power :	0.4 kW

Recommended motor module / :

Rated inverter current :	2 A
Maximum inverter current :	5 A
Maximum torque :	2.00 Nm

Special design /