

## synchronous servomotor



### Ordering data

**1FK7063-5AH71-1AH0**

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

Item no. :  
Consignment no. :  
Project :

Engineering data		Physical constants	
Rated speed	4500 rpm	Torque constant	0.91 Nm/A
Number of poles	8	Voltage constant at 20° C	58.0 V/1000*min <sup>-1</sup>
Rated torque (100 K)	3.0 Nm	Winding resistance at 20° C	0.29 Ω
Rated motor current	3.8 A	Rotating field inductance	3.2 mH
Static torque (60 K)	9.10 Nm	Electrical time constant	11.00 ms
Static torque (100 K)	11.0 Nm	Mechanical time constant	1.58 ms
Stall current (60 K)	9.9 A	Thermal time constant	40 min
Stall current (100 K)	12.0 A	Shaft torsional stiffness	35000 Nm/rad
Rotor moment of inertia	0.0017300 kgm <sup>2</sup>	Net weight of the motor	12.0 kg
Efficiency	90.0 %		
Mechanical data		Optimum operating point	
Motor type	Compact	Optimum speed	3300 rpm
Shaft height	63 mm	Optimum power	2.3 kW
Encoder system	Encoder IC2048S/R: incremental encoder sin/cos 1 Vpp 2048 S/R with C and D track		
Cooling	Natural cooling		
Holding brake	Permanent-magnet brake instead of spring-loaded brake (only for		
Shaft extension	Plain shaft		
Radial runout tolerance	N		
Vibration severity grade	Grade A		
Connector size	1		
Degree of protection	IP64		
Design acc. to Code I	IM B5 (IM V1, IM V3)		
Electrical connectors	Connectors for signals and power rotatable		
Color of the housing	Unpainted		
		Recommended motor module	
		Rated inverter current	18 A
		Maximum inverter current	36 A
		Maximum torque	31.20 Nm