

Article No. : 1FK2203-2AK00-2MA0-Z
C21+M01+R10



Figure similar

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

Item no. :
Consignment no. :
Project :

Basic data of geared motor	
Motor type	Permanent-magnet synchronous motor, Planetary gearbox, Natural cooling, Degree of protection IP64/IP65
Motor type	Compact
Static torque at output $M_{2,0}$	4.80 Nm
Static current I_0	1.1 A
Maximum torque at output $M_{2,max}^{1)}$	17.30 Nm
Maximum output speed $n_{2,max}$	720 rpm
Moment of inertia motor + gearbox (related to the input) J_1	0.269 kgcm ²
Mass m	2.73 kg
Lubrication	Standard

Rated data of geared motor	
SINAMICS S210, 3AC 400V	
Rated speed related to the gear output n_{2N}	250 rpm
Rated torque related to the gear output M_{2N}	2.55 Nm
Rated power P_N	0.067 kW

Basic data of gearbox	
Gearbox type and size	Planetary gearbox NLC060
Transmission ratio i	1 : 10 (Output to input)
Number of gear stages z	1
Output torque (fatigue strength) $M_{2N,G}^{2)}$	15.0 Nm
Maximum permissible output torque (short-time, end of fatigue strength) $M_{2,max,G}$	24.0 Nm
Emergency off output moment (1000 cycles) $M_{2Em,Off}$	80.0 Nm
Torsional backlash related to the output φ_2	10 '
Torsional stiffness related to the output c_{T2}	3.0 Nm/'
Maximum static radial force $F_{R,max}$	3,200 N
Max. average radial force for 20000 h $F_{Req}^{3)}$	3,200 N
Maximum static axial force $F_{A,max}$	4,400 N
Max. average axial force for 20000 h $F_{Aeq}^{4)}$	4,400 N
Max. average breakdown torque M_K	Nm
Max. bending moment on the flange to the motor M_B	8 Nm
Efficiency η_G	0.93
Degree of protection gearbox	IP65
Gearbox shaft end	Fitted key

Basic motor data	
Maximum average torque (incl. derating due to mounted gearing) $M_{0,M}$	0.48 Nm
Maximum average continuous current (incl. derating due to mounted gearing) $I_{0,M}$	0.79 A
Maximum acceleration torque $M_{max,M}^{2)}$	1.73 Nm
Maximum short-time permissible current $I_{max,M}$	3.40 A
Degree of protection motor	IP64
Connection type	OCC for S210
Connector size	M17
Encoder system	Encoder AM22DQC: Absolute encoder 22 bit + 12 bit multitrans
Color of the housing	Standard (Anthracite, similar to RAL 7016)

¹⁾Fatigue limit range - utilization only with service life calculation
²⁾The maximum acceleration torque $M_{max,M}$ x of transmission ratio i is greater than the output torque (fatigue strength) $M_{2N,G}$. Depending on the load conditions, a service life calculation may be necessary.
³⁾based on an output speed of 100 rpm and a force application point in the center of the shaft
⁴⁾based on an output speed of 100 rpm