



Figure similar

Article No. : **1FT2105-4AF00-0SA0-Z**
C31+M01+R10

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	High Dynamic
Static torque at output $M_{2,0}$	38.00 Nm
Static current I_0	3.9 A
Maximum torque at output $M_{2max}^{1)}$	61.00 Nm
Maximum output speed n_{2max}	700 rpm
Moment of inertia motor + gearbox (related to the input) J_1	2.08 kgcm ²
Mass m	8.66 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}	30.00 Nm
Rated power P_N	0.785 kW

Basic data of gearbox

Gearbox type and size	Planetary gearbox NLC080
Transmission ratio i	1 : 10 (Output to input)
Number of gear stages z	1
Output torque (fatigue strength) $M_{2N,G}$	38.0 Nm
Maximum permissible output torque (short-time, end of fatigue strength) $M_{2max,G}^{2)}$	61.0 Nm
Emergency off output moment (1000 cycles) $M_{2Em,Off}$	200.0 Nm
Torsional backlash related to the output φ_2	7'
Torsional stiffness related to the output c_{T2}	8.5 Nm/l
Maximum static radial force $F_{R,max}$	5,500 N
Max. average radial force for 20000 h $F_{R,eq}^{20k^3)}$	5,500 N
Maximum static axial force $F_{A,max}$	6,400 N
Max. average axial force for 20000 h $F_{A,eq}^{20k^4)}$	6,400 N
Max. average breakdown torque M_K	Nm
Max. bending moment on the flange to the motor M_B	16 Nm
Efficiency η_G	0.94
Degree of protection gearbox	IP65
Gearbox shaft end	Fitted key

Basic motor data

Maximum average torque (incl. derating due to mounted gearing) $M_{0,M}$	4.66 Nm
Maximum average continuous current (incl. derating due to mounted gearing) $I_{0,M}$	4.36 A
Maximum acceleration torque $M_{max,M}^{2)}$	14.60 Nm
Maximum short-time permissible current $I_{max,M}$	18.00 A
Degree of protection motor	IP64
Connection type	OCC for S210
Connector size	M17
Encoder system	Encoder AS22DQC: Absolute encoder single turn 22 bit
Color of the housing	Standard (Anthracite, similar to RAL 7016)

¹⁾ Fatigue limit range - for max. 30 000 revolutions of the output shaft, utilization only with service life calculation

²⁾ The maximum acceleration torque $M_{max,M} \times$ of transmission ratio i is greater than the maximum permitted output torque (short-time fixed) $M_{2max,G}$. Depending on the load conditions, a torque limitation and 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