SIEMENS

Data sheet for SIMOTICS S-1FT2

Figure similar

Article No. : 1FT2103-2AH00-2MA0-Z
C26+M00+Q92+R05

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 $M_{2,0}$	1.95 Nm
Static current I_0	1.1 A
Maximum torque at output M_{2max}	8.50 Nm
Maximum output speed n_{2max}	1,600 rpm
Moment of inertia motor + gearbox (related to the input) J_1	0.346 kgcm²
Mass m	3.44 kg
Lubrication	Standard

Rated data of geared motor	
SINAMICS S210, 3AC 400V	
Rated speed related to the gear output n_{2N}	300 rpm
Rated torque related to the gear output M_{2N}	1.20 Nm
Rated power P_N	0.038 kW

Basic data of gearbox	
Gearbox type and size	Planetary gearbox NLCW060
Transmission ratio i	1 : 5 (Output to input)
Number of gear stages z	1
Output torque (fatigue strength) $M_{2N,G}$	24.0 Nm
Maximum permissible output torque (short-time, end of fatigue strength) $M_{2max,G}$	38.0 Nm
Emergency off output moment (1000 cycles) $M_{2Em.Off}$	80.0 Nm
Torsional backlash related to the output φ_2	16 '
Torsional stiffness related to the output c_{T2}	3.3 Nm/'
Maximum static radial force $F_{R\,max}$	3,200 N
Max. average radial force for 20000 h $F_{R\,eq\,20k}$ [3]	3,200 N
Maximum static axial force $F_{A\,max}$	4,400 N
Max. average axial force for 20000 h $F_{A\,eq\,20k}$ [4]	4,400 N
Max. average breakdown torque M_K	Nm
Max. bending moment on the flange to the motor M_B	5 Nm
Efficiency η_G	0.92
Degree of protection gearbox	IP65
Gearbox shaft end	Plain shaft

Basic motor data	
Maximum average torque (incl. derating due to mounted gearing) $M_{0,M}$	0.39 Nm
Maximum average continuous current (incl. derating due to mounted gearing) $I_{0,M}$	0.64 A
Maximum acceleration torque $M_{max,M}$	1.70 Nm
Maximum short-time permissible current $I_{max,M}$	4.00 A
Degree of protection motor	IP64
Connection type	OCC for S210
Connector size	M17
Encoder system	Encoder AM22DQC: Absolute encoder 22 bit + 12 bit multiturn
Color of the housing	Standard (Anthracite, similar to RAL 7016)

[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