



Figure similar

Article No. : **1FK2204-5AK00-2MA0-Z**
A21+M01+R08

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
Motor type	Compact
Static torque at output $M_{2,0}$	18.00 Nm
Static current I_0	4.3 A
Maximum torque at output $M_{2max}^{1)}$	29.00 Nm
Maximum output speed n_{2max}	1,000 rpm
Moment of inertia motor + gearbox (related to the input) J_1	1.318 kgcm ²
Mass m	3.78 kg
Lubrication	Standard
Gearbox orientation	-

Rated data of geared motor

SINAMICS S210, 3AC 400V

Rated speed related to the gear output n_{2N}	375 rpm
Rated torque related to the gear output M_{2N}	12.60 Nm
Rated power P_N	0.495 kW

Basic data of gearbox

Gearbox type and size	Planetary gearbox NRB060
Transmission ratio i	1 : 8 (Output to input)
Number of gear stages z	1
Output torque (fatigue strength) $M_{2N,G}$	18.0 Nm
Maximum permissible output torque (short-time, end of fatigue strength) $M_{2max,G}^{2)}$	29.0 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}	2.2 Nm/°
Maximum static radial force F_{Rmax}	700 N
Max. average radial force for 20000 h $F_{Req}^{3)}$	400 N
Maximum static axial force F_{Amax}	800 N
Max. average axial force for 20000 h $F_{Aeq}^{4)}$	500 N
Max. bending moment on the flange to the motor M_B	12 Nm
Efficiency η_G	0.97
Degree of protection gearbox	IP64
Gearbox shaft end	Fitted key

Basic motor data

Maximum average torque (incl. derating due to mounted gearing) $M_{0,M}$	2.27 Nm
Maximum average continuous current (incl. derating due to mounted gearing) $I_{0,M}$	4.17 A
Maximum acceleration torque $M_{max,M}^{2)}$	6.95 Nm
Maximum short-time permissible current $I_{max,M}$	14.20 A
Degree of protection motor	IP64
Connection type	OCC for S210
Connector size OCC	M17
Encoder system	Encoder AM22DQC: Absolute encoder 22 bit + 12 bit multiturn
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