FAST CHANGE LINE

Fast Change

24V BRUSHLESS SERVOMOTOR FOR FORMAT CHANGES

MOTOR: brushless three-phase 4-pole sinusoidal motor, totally enclosed. Rotor with NdFeB magnets. Thermal cutoff. Winding Class F. Thermal cutoff. Protection IP65 in compliance with IEC/EN 60529 standards. Bearings with reduced backlash and special grease for high temperatures.

DRIVE: Power 24 and/or 48 Vdc • Magnetic absolute encoder SSI (12bit single-turn / 20bit multi-turn) with internal buffer battery• USB port for parametrisation • Torque, speed, position and homing control • Fieldbus supported: Canopen, Modbus RTU, EtherCAT, EthernetIP, Powerlink, Profinet.

GEAR UNIT: with die-cast aluminium body (UNI 5076). 20 mm centre distance. CARO bronze crown, hardness of 120÷160 HB. Fluorocarbon polymer sealing rings (FPM). Lubrication with synthetic oil (EP).

SERVICE: Duty S3 25% over 10 minutes at nominal torque.

Technical Characteristics		
	FC3	**FC6**
Nominal Supply Voltage	24Vdc	
Nominal Supply Current	5,56A in S3 service (25% of 10 minutes)	
	4,65A in S2 service (5 minutes)	
	3,1A in S1 service	
Nominal Speed	125rpm	72rpm
Nominal Torque	3,6Nm in S3 service (25% of 10 minutes)	6Nm in S3 service (25% of 10 minutes)
	3,2Nm in S2 service (5 minutes)	5Nm in S2 service (5 minutes)
	2,2Nm in S1 service	3,7Nm in S1 service
Motor power output	72W in S3 service (25% of 10 minutes)	
	63W in S2 service (5 minutes)	
	45W in S1 service	
Motor rated current	11Apk in S3 service (25% of 10 minutes)	
	10Apk in S2 service (5 minutes)	
	7,3Apk in S1 service	
PWM Frequency	4/8/12 kHz	
Motor Control Algorithm	Sinusoidal Brushless Magnetic multi turn absolute encoder (12bit single turn 20bit multi turn) 4096 pulses/rev	
Fieldbus operative mode	Velocity, Torque, position, Homing control	
Service communication	USB	
Communication fieldbus	EtherCAT EtherNet/IP Powerlink ProfiNET Modbus RTU CANopen	
(Main) protection features	Polarity inversion, overcurrent, overvoltage, under voltage, overheating, overload, memory error, communications error	
Cooling	Natural	
Standard ingress protection	IP65	
Ambient operating temperature	[0 ÷ 40]°C	
Installation environment	Pollution class 3 Free from direct sunlight, vibrations, dust, corrosive or inflammable gases, oil vapour, fogs, water and humidity with or without a high salinity level	
Humidity	[20 - 90]% RH (not condensing - not corrosive)	
Installation Position	Maximum altitude 1000m asl	
Storage temperature	[-20 ÷60]°C (transient temperatures during transport only)	
Conformity	CE, complies with EMC directive 2008/104/CE [1]	

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[1] Class C3, installation in second environment category.

ø14 G8 (+0,033 / +0,006)

M6

11

3

25

70

55

30

70

55,5

4x M4

8

10

180

158,5

87

77

22,5

ø35

ø45