

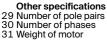
Stock program Standard program

Special program (on request)

		369146	393023	393024	393025	J
Motor Data (provisional)						l
Values at nominal voltage						
1 Nominal voltage	V	15	24	42	48	
2 No load speed	rpm	9840	9840	10100	9840	
3 No load current	mA	654	408	243	204	
4 Nominal speed	rpm	9090	9130	9380	9150	
5 Nominal torque (max. continuous torque)	mNm	169	163	160	163	
6 Nominal current (max. continuous current)	Α	12.1	7.35	4.21	3.67	
7 Stall torque	mNm	2620	2660	2740	2760	
8 Stall current	Α	181	115	69.1	59.6	
9 Max. efficiency	%	89	89	89	89	
Characteristics						
10 Terminal resistance phase to phase	Ω	0.0829	0.209	0.608	0.806	
11 Terminal inductance phase to phase	mH	0.0329	0.0843	0.246	0.337	
12 Torque constant	mNm/A	14.5	23.2	39.6	46.4	
13 Speed constant	rpm/V	659	412	241	206	
14 Speed/torque gradient rp	m/mNm	3.77	3.71	3.7	3.57	
15 Mechanical time constant	ms	2.12	2.09	2.08	2.01	
16 Rotor inertia	gcm ²	53.8	53.8	53.8	53.8	

Part Numbers

Thermal data 5.21 K/W 1.05 K/W 18.7 s 1910 s 17 Thermal resistance housing-ambient 18 Thermal resistance winding-housing 19 Thermal time constant winding 20 Thermal time constant motor 21 Ambient temperature 22 Max. winding temperature -40...+100°C +155°C Mechanical data (preloaded ball bearing 23 Max. speed 24 Axial play at axial load < 9 N > 9 N 18000 rpm 0 mm max. 0.14 mm 25 Radial play 26 Max. axial load (dynamic) preloaded 23 N 106 N 5500 N



Max. force for press fits (static) (static, shaft supported)

28 Max. radial load, 5 mm from flange

Values listed in the table are nominal.

Connection motor (Cable AWG 16) Pin 1 Pin 2 Pin 3 Pin 4 Motor winding 1 Motor winding 2 red black Motor winding 3 N.C. white Part number 39-01-2040 Connector Molex sensors (Cable AWG 26)
Hall sensor 1 Pin 1
Hall sensor 2 Pin 2
Hall sensor 3 Pin 3
GND Pin 4 Connection yellow brown grey blue V_{Hall} 3...24 VDC N.C. Part number areen Connector 430-25-0600 Wiring diagram for Hall sensors see p. 57

Operating Range n [rpm] 170 W 18000 369146 12000 6000 50 100 150 200 M [mNm] 10 15 20 I[A]

Continuous operation

In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.

= Thermal limit.

Short term operation

The motor may be briefly overloaded (recurring).

Assigned power rating

