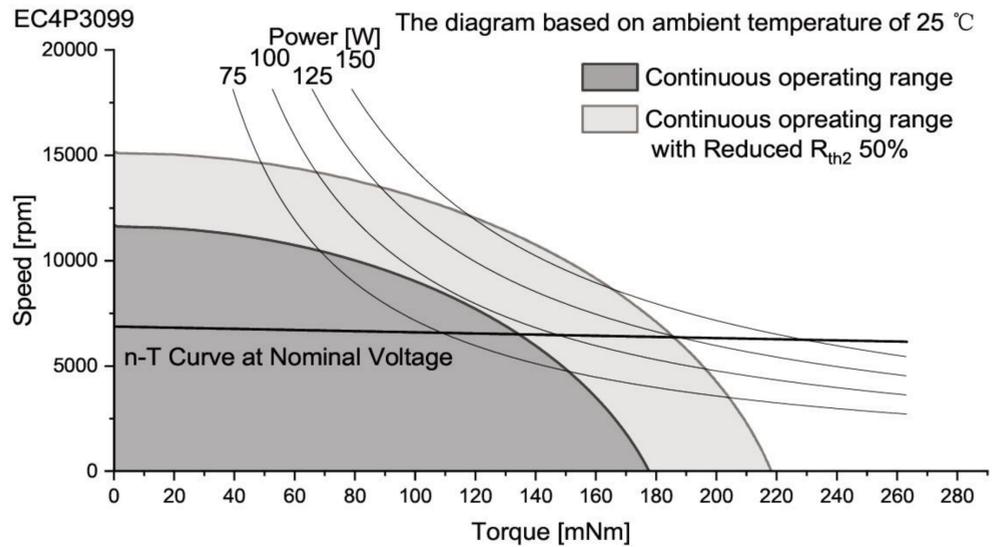


M 1:1.8

	Sensorless	EC4P3099L-...	2407	3607	4807				
	With hall sensor	EC4P3099S-...							
Motor data									
Values at nominal voltage									
1	Nominal voltage	V	24	36	48				
2	No load speed	rpm	6812	6983	7064				
3	No load current	mA	330	240	140				
4	Nominal speed	rpm	6458	6600	6690				
5	Nominal torque	mNm	130	130	130				
6	Nominal current	A	4.21	2.89	2.15				
7	Stall torque	mNm	2501.15	2371.41	2453.77				
8	Stall current	A	75.00	48.65	38.10				
9	Max. efficiency	%	87.2	86.4	88.2				
10	Terminal resistance	Ω	0.32	0.74	1.26				
11	Terminal inductance	mH	0.048	0.113	0.182				
12	Torque constant	mNm/A	33.50	48.99	64.65				
13	Speed constant	rpm/V	285	195	148				
14	Speed/torque gradient	rpm/mNm	3	3	3				
15	Mechanical time constant	ms	1.6	1.7	1.7				
16	Rotor inertia	gcm ²	54.8	54.8	54.8				

17	Thermal resistance housing-ambient	5.6 K/W
18	Thermal resistance winding-housing	2.7 K/W
19	Thermal time constant winding	42 s
20	Thermal time constant motor	1275 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	20000 rpm
24	Axial play at axial load	<8 N 0 mm >8 N max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	7.5 N
27	Max. force for press fits (static)	100 N
	(static, shaft supported)	2700 N
28	Max. radial loading, 5mm from flange	25 N
29	Number of pole pairs	2
30	Number of phases	3
31	Weight of motor	432 g

Operating Range



Connection

Connection A (Sensor)		PTFE
Pin 1	Motor winding MA	AWG20 yellow
Pin 2	Motor winding MB	AWG20 green
Pin 3	Motor winding MC	AWG20 blue
Pin 4	Vhall 3-18 VDC	AWG26 red
Pin 5	GND	AWG26 black
Pin 6	Hall sensor HA	AWG26 white
Pin 7	Hall sensor HB	AWG26 orange
Pin 8	Hall sensor HC	AWG26 gray

Connection B (Sensorless)		PVC
Pin 1	Motor winding MA	AWG20 yellow
Pin 2	Motor winding MB	AWG20 green
Pin 3	Motor winding MC	AWG20 blue

Configuration

Performance: Customized in the continuous operating range
 Ball bearing: Preload
 Flange: Standard frange front&back/customize the frange
 Shaft: Length/Diameter/Cut face/double shaft/hollow shaft
 Leadwire: PVC/Silicon/Teflon/UL No/Dimension/length
 Connector: JST/MOLEX/TE