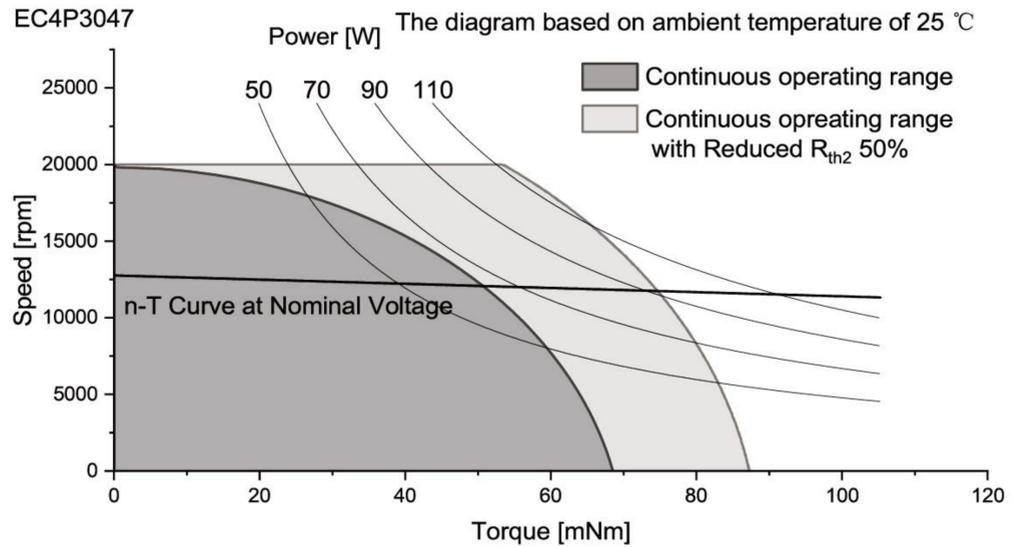


M 1:1.8

	Sensorless	EC4P3047L-...	2412	3612	4812				
	With hall sensor	EC4P3047S-...							
Motor data									
Values at nominal voltage									
1	Nominal voltage	V	24	36	48				
2	No load speed	rpm	11890	12600	12338				
3	No load current	mA	330	249	170				
4	Nominal speed	rpm	11239	11868	11661				
5	Nominal torque	mNm	48	48	48				
6	Nominal current	A	2.84	2.02	1.47				
7	Stall torque	mNm	876.95	825.97	874.60				
8	Stall current	A	46.15	30.77	23.88				
9	Max. efficiency	%	83.8	82.8	83.8				
10	Terminal resistance	Ω	0.52	1.17	2.01				
11	Terminal inductance	mH	0.056	0.098	0.23				
12	Torque constant	mNm/A	19.14	27.06	36.89				
13	Speed constant	rpm/V	499	353	259				
14	Speed/torque gradient	rpm/mNm	14	15	14				
15	Mechanical time constant	ms	3.1	3.5	3.2				
16	Rotor inertia	gcm ²	21.9	21.9	21.9				

17	Thermal resistance housing-ambient	9.5 K/W
18	Thermal resistance winding-housing	2.8 K/W
19	Thermal time constant winding	17 s
20	Thermal time constant motor	903 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	207 g

Operating Range



Connection

Conection 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

Conection 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