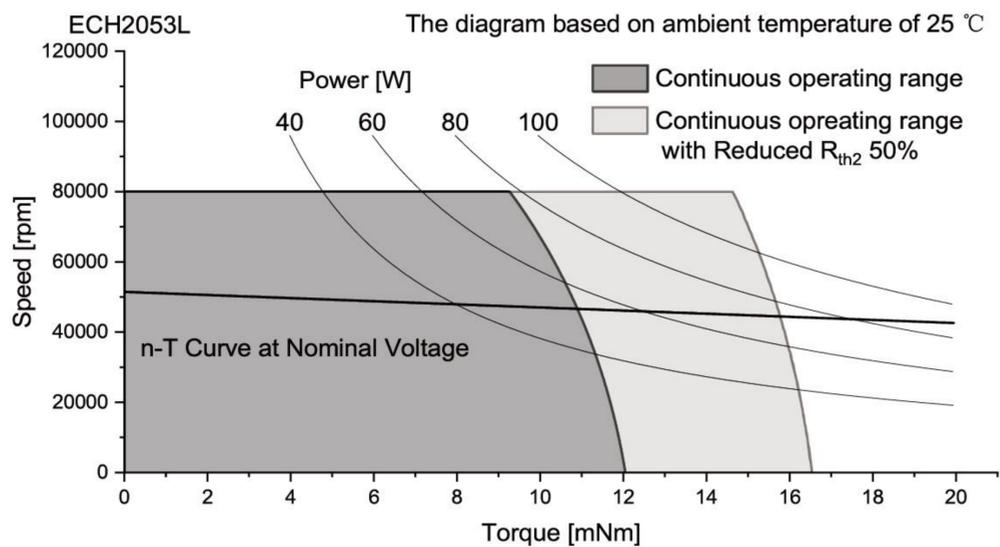


Sensorless		EC2053L-...	1850	2450	3650	4850
Motor data						
Values at nominal voltage						
1	Nominal voltage	V	18	24	36	48
2	No load speed	rpm	50202	50832	51448	50700
3	No load current	mA	136	107	81	68
4	Nominal speed	rpm	45684	46379	46936	46188
5	Nominal torque	mNm	10	10	10	10
6	Nominal current	A	3.07	2.33	1.58	1.18
7	Stall torque	mNm	111.13	114.15	114.02	112.37
8	Stall current	A	32.73	25.53	17.22	12.57
9	Max. efficiency	%	87.5	87.5	86.8	85.8
10	Terminal resistance	Ω	0.55	0.94	2.09	3.82
11	Terminal inductance	mH	0.06	0.1	0.23	0.38
12	Torque constant	mNm/A	3.41	4.49	6.65	8.99
13	Speed constant	rpm/V	2801	2127	1436	1062
14	Speed/torque gradient	rpm/mNm	452	445	451	451
15	Mechanical time constant	ms	3.9	3.9	3.9	3.9
16	Rotor inertia	gcm ²	0.83	0.83	0.83	0.83

17	Thermal resistance housing-ambient	11.8 K/W
18	Thermal resistance winding-housing	0.8 K/W
19	Thermal time constant winding	2 s
20	Thermal time constant motor	386 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	80000 rpm
24	Axial play at axial load	<3 N 0 mm >3 N max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	2.5 N
27	Max. force for press fits (static)	44 N
	(static, shaft supported)	1200 N
28	Max. radial loading, 5mm from flange	11 N
29	Number of pole pairs	1
30	Number of phases	3
31	Weight of motor	63 g

Operating Range



Connection

Conection
special connector
please contact sales engineer

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