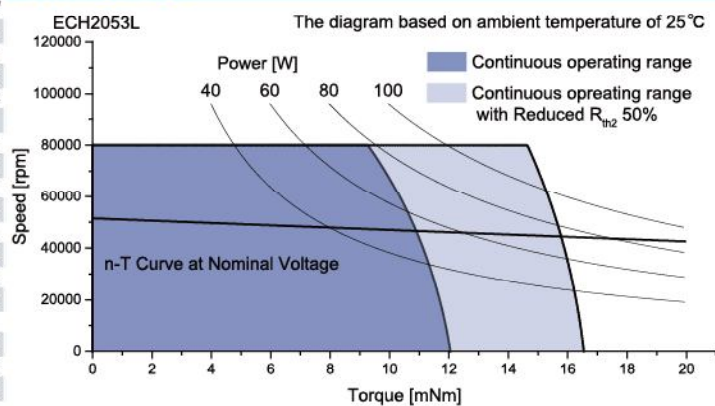


Sensorless EC2053L-...		1850	2450	3650	4850			
<b>Motor data</b>								
<b>Values at nominal voltage</b>								
1	Nominal voltage	V	18	24	36	48		
2	No load speed	rpm	50202	50832	51448	50700		
3	No load current	mA	136	107	81	68		
4	Nominal speed	rpm	45684	46379	46936	46188		
5	Nominal torque	mNm	10	10	10	10		
6	Nominal current	A	3.07	2.33	1.58	1.18		
7	Stall torque	mNm	111	114	114	112		
8	Stall current	A	32.7	25.5	17.2	12.6		
9	Max. efficiency	%	87.5	87.5	86.8	85.8		
10	Terminal resistance	$\Omega$	0.55	0.94	2.09	3.82		
11	Terminal inductance	mH	0.06	0.10	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 <sup>2</sup>	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 Configuration**

**Connection**  
 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