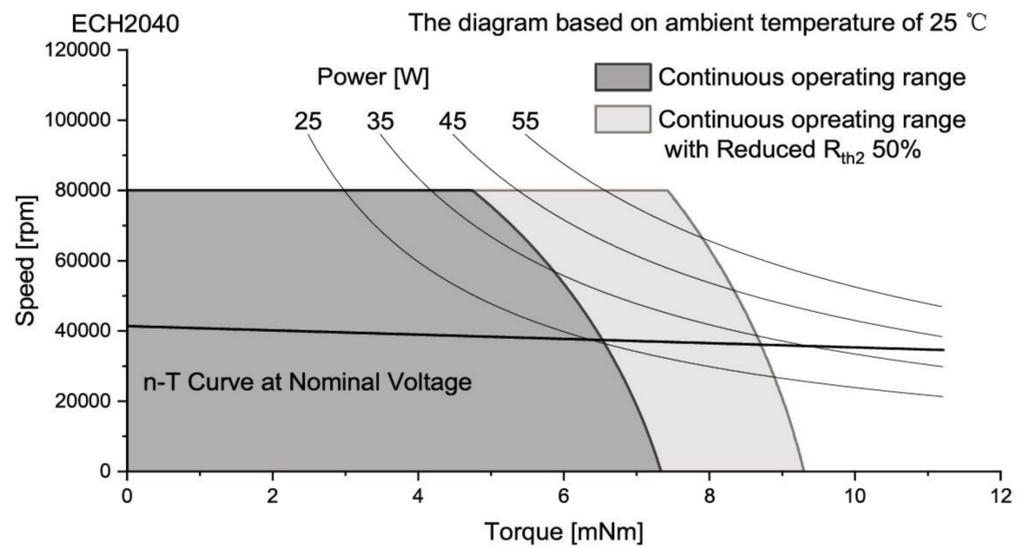


	Sensorless	EC2040L-...	2440	3040	3640				
	With hall sensor	EC2040S-...							
<b>Motor data</b>									
<b>Values at nominal voltage</b>									
1	Nominal voltage	V	24	30	36				
2	No load speed	rpm	41392	40700	40020				
3	No load current	mA	69	60	55				
4	Nominal speed	rpm	37502	36777	36049				
5	Nominal torque	mNm	6.3	6.3	6.3				
6	Nominal current	A	1.21	0.96	0.79				
7	Stall torque	mNm	67.04	65.35	63.48				
8	Stall current	A	12.24	9.40	7.50				
9	Max. efficiency	%	85.6	84.7	83.6				
10	Terminal resistance	$\Omega$	1.96	3.19	4.8				
11	Terminal inductance	mH	0.21	0.47	0.47				
12	Torque constant	mNm/A	5.51	6.99	8.53				
13	Speed constant	rpm/V	1734	1365	1120				
14	Speed/torque gradient	rpm/mNm	617	623	630				
15	Mechanical time constant	ms	4.5	4.5	4.6				
16	Rotor inertia	gcm <sup>2</sup>	0.69	0.69	0.69				

17	Thermal resistance housing-ambient	18.7 K/W
18	Thermal resistance winding-housing	1.9 K/W
19	Thermal time constant winding	5 s
20	Thermal time constant motor	397 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	53 g

**Operating Range**



**Connection**

Conection A (Sensor)		PVC	
Pin 1	Vhall 3-18 VDC	AWG26	black
Pin 2	Hall sensor HA	AWG26	black
Pin 3	Hall sensor HB	AWG26	black
Pin 4	Hall sensor HC	AWG26	black
Pin 5	GND	AWG26	black
Pin 6	Motor winding MA	AWG26	black
Pin 7	Motor winding MB	AWG26	black
Pin 8	Motor winding MC	AWG26	black
Conector JST PH2.0-8P			

Conection B (Sensorless)		PVC	
Pin 1	Motor winding MA	AWG26	yellow
Pin 2	Motor winding MB	AWG26	green
Pin 3	Motor winding MC	AWG26	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