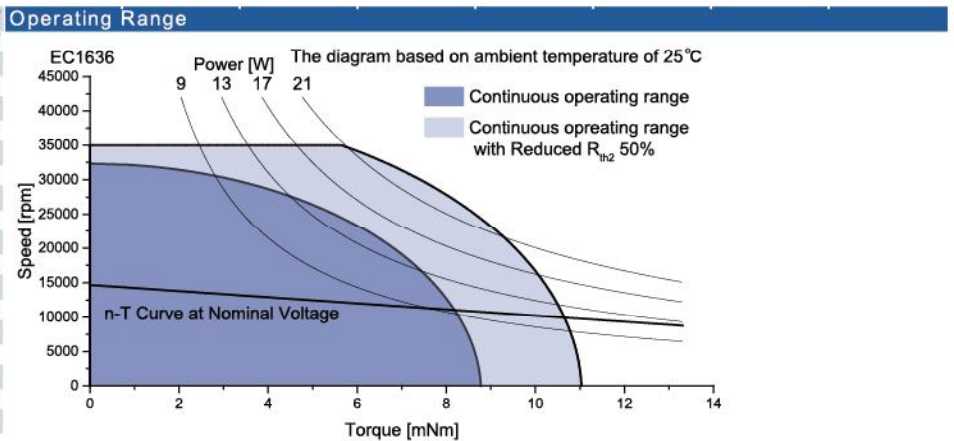


		Sensorless With hall sensor	EC1636L-...	EC1636S-...	0614	0914	1214	2414			
<b>Motor data</b>											
<b>Values at nominal voltage</b>											
1	Nominal voltage	V	6	9	12	24					
2	No load speed	rpm	13835	14533	14460	14668					
3	No load current	mA	150	110	70	50					
4	Nominal speed	rpm	11412	11930	11615	12005					
5	Nominal torque	mNm	6	6	6	6					
6	Nominal current	A	1.62	1.14	0.84	0.44					
7	Stall torque	mNm	34.3	33.5	30.5	33					
8	Stall current	A	8.57	5.88	3.99	2.21					
9	Max. efficiency	%	75.3	74.5	75.3	72.2					
10	Terminal resistance	$\Omega$	0.7	1.53	3.01	10.8					
11	Terminal inductance	mH	0.04	0.08	0.15	0.81					
12	Torque constant	mNm/A	4.07	5.8	7.79	15.3					
13	Speed constant	rpm/V	2347	1646	1227	625					
14	Speed/torque gradient	rpm/mNm	404	434	474	444					
15	Mechanical time constant	ms	2.6	2.8	3.1	2.9					
16	Rotor inertia	gcm <sup>2</sup>	0.62	0.62	0.62	0.62					

17	Thermal resistance housing-ambient	17.1 K/W
18	Thermal resistance winding-housing	5.3 K/W
19	Thermal time constant winding	6 s
20	Thermal time constant motor	252 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	35000 rpm
24	Axial play at axial load <1.8 N	0 mm
	>1.8 N	max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	1.3 N
27	Max. force for press fits (static)	15 N
	(static, shaft supported)	350 N
28	Max. radial loading, 5mm from flange	5 N
29	Number of pole pairs	1
30	Number of phases	3
31	Weight of motor	32 g



Connection		Configuration	
<b>Connection A (Sensor)</b>		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	
Connector		JST PH2.0-8P	
<b>Connection B (Sensorless)</b>		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