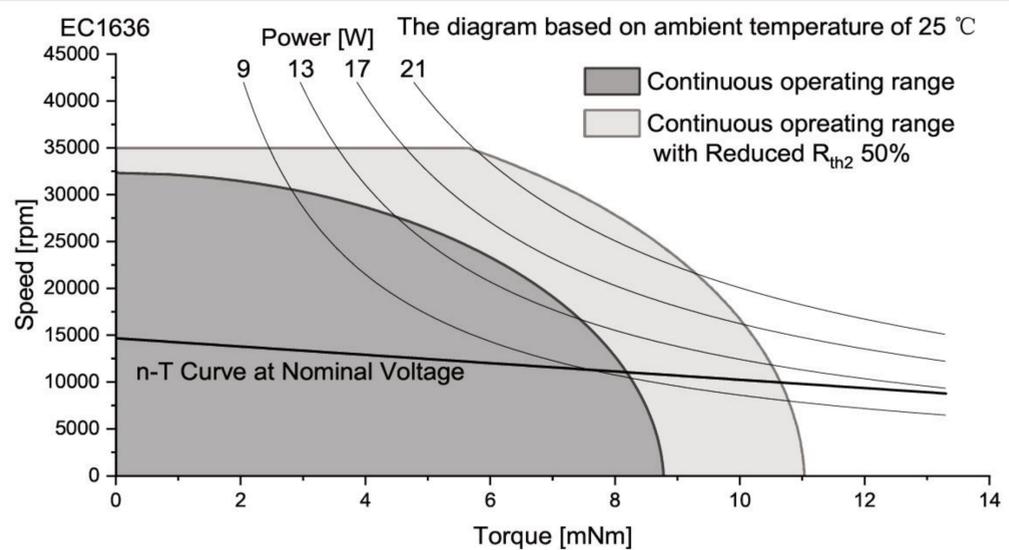


M 1:1.2

	Sensorless	EC1636L-...	0614	0914	1214	2414			
	With hall sensor	EC1636S-...							
Motor data									
Values at nominal voltage									
1	Nominal voltage	V	6	9	12	24			
2	No load speed	rpm	13835	14533	14460	14688			
3	No load current	mA	150	110	70	50			
4	Nominal speed	rpm	11412	11930	11615	12028			
5	Nominal torque	mNm	6	6	6	6			
6	Nominal current	A	1.62	1.14	0.84	0.44			
7	Stall torque	mNm	34.27	33.50	30.49	33.13			
8	Stall current	A	8.57	5.88	3.99	2.22			
9	Max. efficiency	%	75.3	74.5	75.3	72.3			
10	Terminal resistance	Ω	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	5.80	7.79	15.25			
13	Speed constant	rpm/V	2347	1646	1227	626			
14	Speed/torque gradient	rpm/mNm	404	434	474	443			
15	Mechanical time constant	ms	2.6	2.8	3.1	2.9			
16	Rotor inertia	gcm ²	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

Operating Range



Connection

Connection A (Sensor)		PTFE	
Pin 1	Vhall 3-18 VDC	AWG30	black
Pin 2	Hall sensor HA	AWG30	black
Pin 3	Hall sensor HB	AWG30	black
Pin 4	Hall sensor HC	AWG30	black
Pin 5	GND	AWG30	black
Pin 6	Motor winding MA	AWG30	black
Pin 7	Motor winding MB	AWG30	black
Pin 8	Motor winding MC	AWG30	black
Conector		JST PH2.0-8Y	

Connection 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