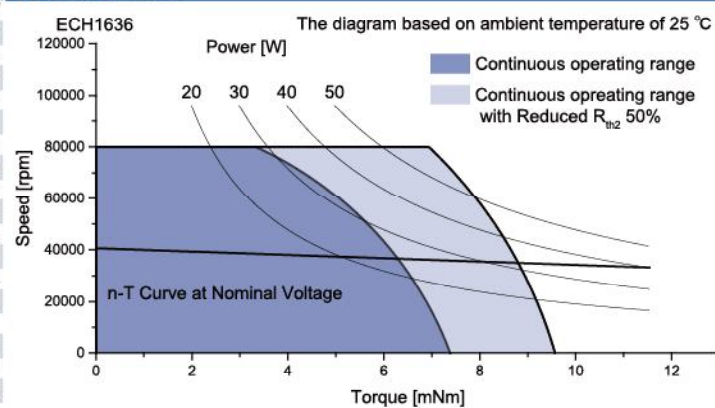


		Sensorless With hall sensor	ECH1636L-...	ECH1636S-...	2440	3040	3640			
Motor data										
Values at nominal voltage										
1	Nominal voltage	V	24	30	36					
2	No load speed	rpm	40273	40225	40760					
3	No load current	mA	90	77	72					
4	Nominal speed	rpm	37067	36958	37406					
5	Nominal torque	mNm	5	5	5					
6	Nominal current	A	0.98	0.79	0.67					
7	Stall torque	mNm	62.8	61.6	60.8					
8	Stall current	A	11.2	8.8	7.35					
9	Max. efficiency	%	82.9	82.2	81.2					
10	Terminal resistance	Ω	2.14	3.41	4.9					
11	Terminal inductance	mH	0.11	0.17	0.24					
12	Torque constant	mNm/A	5.65	7.06	8.35					
13	Speed constant	rpm/V	1692	1353	1143					
14	Speed/torque gradient	rpm/mNm	641	653	671					
15	Mechanical time constant	ms	3.7	3.8	3.9					
16	Rotor inertia	gcm ²	0.55	0.55	0.55					

17	Thermal resistance housing-ambient	18.6 K/W
18	Thermal resistance winding-housing	3.44 K/W
19	Thermal time constant winding	6 s
20	Thermal time constant motor	298 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	32 g

Operating Range



Connection

Connection A (Sensor)		
Pin 1 Vhall 3-18 VDC	PVC	
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	

Connection B (Sensorless)		
Pin 1 Motor winding MA	PVC	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