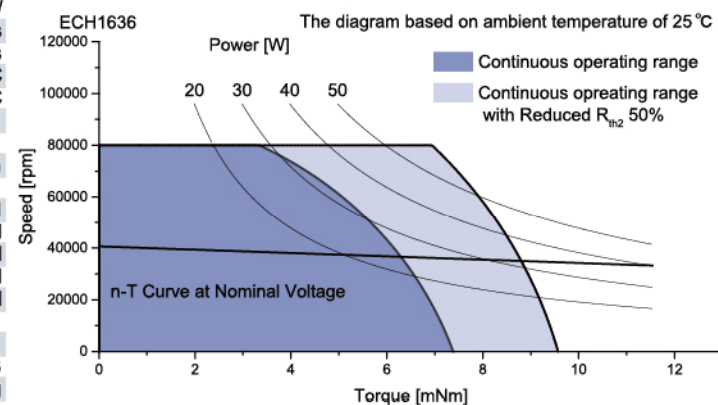


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	Sensorless ECH1636L-...	With hall sensor ECH1636S-...	2440	3040	3640			
Motor data								
Values at nominal voltage								
1	Nominal voltage	V	24	30	36			
2	No load speed	rpm	40273	40225	40760			
3	No load current	mA	90	77	72			
4	Nominal speed	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	-40...+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

Conection A (Sensor)		PTFE
Pin 1	Vhall 3-18 VDC	AWG28 black
Pin 2	Hall sensor HA	AWG28 black
Pin 3	Hall sensor HB	AWG28 black
Pin 4	Hall sensor HC	AWG28 black
Pin 5	GND	AWG28 black
Pin 6	Motor winding MA	AWG28 black
Pin 7	Motor winding MB	AWG28 black
Pin 8	Motor winding MC	AWG28 black
Conector		JST PH2.0-8P

Conection B (Sensorless)		PTFE
Pin 1	Motor winding MA	AWG28 yellow
Pin 2	Motor winding MB	AWG28 green
Pin 3	Motor winding MC	AWG28 blue

Configuration

Performance: Customized within the continuous operating ranget
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