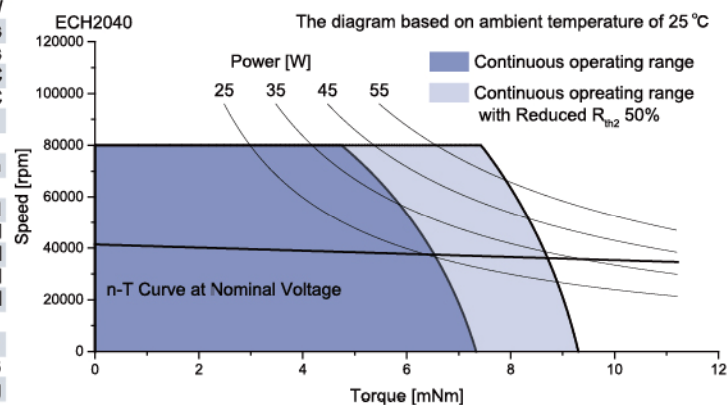


	Sensorless With hall sensor	ECH2040L-...	ECH2040S-...	2440	3040	3640			
Motor data									
Values at nominal voltage									
1	Nominal voltage	V		24	30	36			
2	No load speed	rpm		41392	40700	40020			
3	No load current	mA		69	60	55			
4	Nominal speed	rpm		37500	36777	36049			
5	Nominal torque	mNm		6.3	6.3	6.3			
6	Nominal current	A		1.21	0.96	0.79			
7	Stall torque	mNm		67	65.4	63.5			
8	Stall current	A		12.2	9.4	7.5			
9	Max. efficiency	%		85.5	84.7	83.6			
10	Terminal resistance	Ω		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		618	623	630			
15	Mechanical time constant	ms		4.5	4.5	4.6			
16	Rotor inertia	gcm ²		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	-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	53 g

Operating Range



Connection

Connection A (Sensor)			
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			

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

Configuration

Performance: Customized within 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