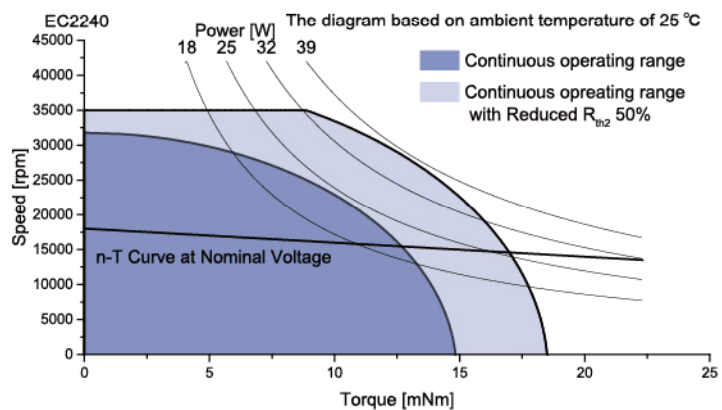


	Sensorless	EC2240L-...	1216	2416	3016	3616			
	With hall sensor	EC2240S-...							
<b>Motor data</b>									
<b>Values at nominal voltage</b>									
1	Nominal voltage	V	12	24	30	36			
2	No load speed	rpm	16748	16768	16713	16679			
3	No load current	mA	183	115	87	73			
4	Nominal speed	rpm	14354	14337	14360	14128			
5	Nominal torque	mNm	12	12	12	12			
6	Nominal current	A	1.96	1.01	0.8	0.67			
7	Stall torque	mNm	83.9	82.8	85.2	78.5			
8	Stall current	A	12.6	6.28	5.15	3.95			
9	Max. efficiency	%	77.4	74.8	75.7	74.7			
10	Terminal resistance	$\Omega$	0.95	3.82	5.83	9.11			
11	Terminal inductance	mH	0.07	0.28	0.44	0.64			
12	Torque constant	mNm/A	6.74	13.4	16.9	20.2			
13	Speed constant	rpm/V	1416	712	567	472			
14	Speed/torque gradient	rpm/mNm	200	203	196	213			
15	Mechanical time constant	ms	4.7	4.8	4.7	5.1			
16	Rotor inertia	gcm <sup>2</sup>	2.3	2.3	2.3	2.3			

17	Thermal resistance housing-ambient	12.7 K/W
18	Thermal resistance winding-housing	5.0 K/W
19	Thermal time constant winding	12s
20	Thermal time constant motor	420 s
21	Ambient temperature	-40...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	35000 rpm
24	Axial play at axial load <4 N	0 mm
	>4 N	max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	3.5 N
27	Max. force for press fits (static)	44 N
	(static, shaft supported)	1200 N
28	Max. radial loading, 5mm from flange	15 N
29	Number of pole pairs	1
30	Number of phases	3
31	Weight of motor	64 g

**Operating Range**



**Connection**

<b>Connection A (Sensor)</b>			
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>			
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