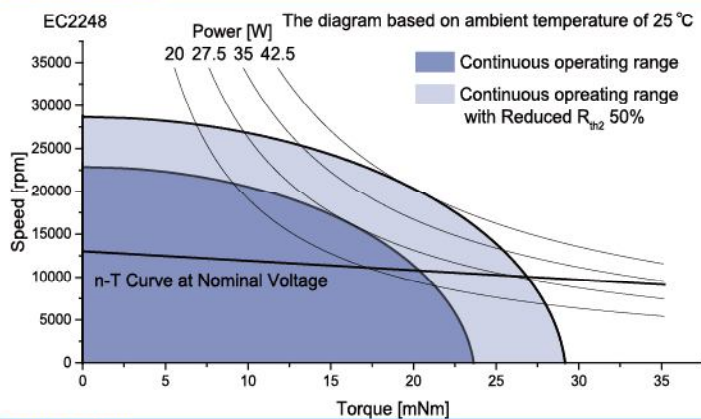


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		Sensorless With hall sensor	EC2248L-...	EC2248S-...	1213	2413	3613	4813				
Motor data												
Values at nominal voltage												
1	Nominal voltage	V	12	24	36	48						
2	No load speed	rpm	13004	12930	13390	13641						
3	No load current	mA	179	102	82	69						
4	Nominal speed	rpm	11426	11413	11749	12159						
5	Nominal torque	mNm	18	18	18	18						
6	Nominal current	A	2.24	1.13	0.79	0.61						
7	Stall torque	mNm	148	153	147	166						
8	Stall current	A	17.2	8.86	5.88	5.07						
9	Max. efficiency	%	80.6	79.7	77.8	78						
10	Terminal resistance	Ω	0.7	2.71	6.12	9.47						
11	Terminal inductance	mH	0.07	0.28	0.58	0.97						
12	Torque constant	mNm/A	8.72	17.5	25.3	33.1						
13	Speed constant	rpm/V	1095	545	377	288						
14	Speed/torque gradient	rpm/mNm	87.7	84.3	91.2	82.3						
15	Mechanical time constant	ms	2.9	2.8	3.0	2.7						
16	Rotor inertia	gcm ²	3.1	3.1	3.1	3.1						

17	Thermal resistance housing-ambient	11.8 K/W
18	Thermal resistance winding-housing	4.7 K/W
19	Thermal time constant winding	21 s
20	Thermal time constant motor	504 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	30000 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	85 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