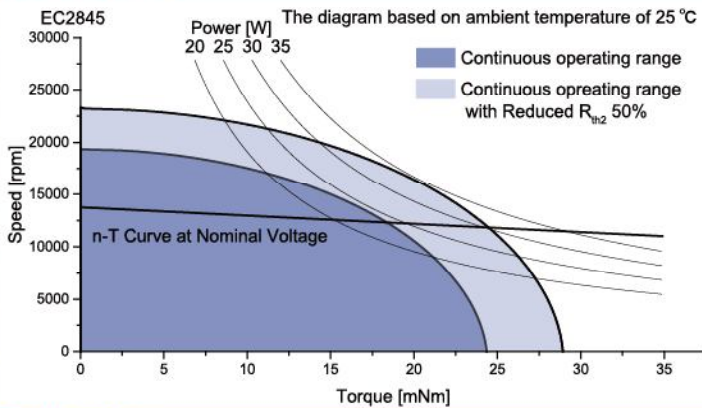


Φ ∇ M 1:1.5

	Sensorless With hall sensor	EC2845L-... EC2845S-...	1213	2413	3613	4813			
Motor data									
Values at nominal voltage									
1	Nominal voltage	V	12	24	36	48			
2	No load speed	rpm	13737	13756	13783	13400			
3	No load current	mA	202	128	84	79			
4	Nominal speed	rpm	12232	12342	12432	11903			
5	Nominal torque	mNm	18	18	18	18			
6	Nominal current	A	2.38	1.22	0.81	0.61			
7	Stall torque	mNm	164	175	184	161			
8	Stall current	A	20.1	10.8	7.53	4.87			
9	Max. efficiency	%	81	79.4	80	76.1			
10	Terminal resistance	Ω	0.6	2.23	4.78	9.86			
11	Terminal inductance	mH	0.08	0.34	0.73	1.47			
12	Torque constant	mNm/A	8.26	16.5	24.7	33.7			
13	Speed constant	rpm/V	1156	580	387	284			
14	Speed/torque gradient	rpm/mNm	83.6	78.6	75	83.1			
15	Mechanical time constant	ms	4.5	4.3	4.1	4.5			
16	Rotor inertia	gcm ²	5.2	5.2	5.2	5.2			

17	Thermal resistance housing-ambient	9.6 K/W
18	Thermal resistance winding-housing	6.3 K/W
19	Thermal time constant winding	37 s
20	Thermal time constant motor	584 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	25000 rpm
24	Axial play at axial load <8 N	0 mm
	>8 N	max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	7.5 N
27	Max. force for press fits (static) (static, shaft supported)	100 N 2000 N
28	Max. radial loading, 5mm from flange	25 N
29	Number of pole pairs	1
30	Number of phases	3
31	Weight of motor	120 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