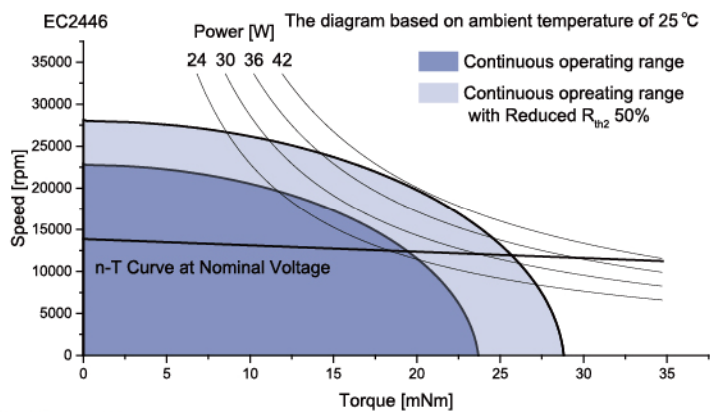


	Sensorless	EC2446L-...	1214	2414	3614	4814			
	With hall sensor	EC2446S-...							
<b>Motor data</b>									
<b>Values at nominal voltage</b>									
1	Nominal voltage	V	12	24	36	48			
2	No load speed	rpm	14150	13872	13920	13870			
3	No load current	mA	249	124	106	79			
4	Nominal speed	rpm	12678	12487	12662	12446			
5	Nominal torque	mNm	18	18	18	18			
6	Nominal current	A	2.5	1.23	0.84	0.63			
7	Stall torque	mNm	173	180	199	175			
8	Stall current	A	21.9	11.2	8.28	5.46			
9	Max. efficiency	%	79.8	80	78.6	77.4			
10	Terminal resistance	$\Omega$	0.55	2.15	4.35	8.79			
11	Terminal inductance	mH	0.07	0.29	0.62	1.14			
12	Torque constant	mNm/A	8.01	16.3	24.4	32.6			
13	Speed constant	rpm/V	1193	584	392	293			
14	Speed/torque gradient	rpm/mNm	81.8	76.9	69.9	79.1			
15	Mechanical time constant	ms	3.6	3.4	3.1	3.5			
16	Rotor inertia	gcm <sup>2</sup>	4.2	4.2	4.2	4.2			

17	Thermal resistance housing-ambient	11.6 K/W
18	Thermal resistance winding-housing	5.6 K/W
19	Thermal time constant winding	30 s
20	Thermal time constant motor	557 s
21	Ambient temperature	-40...+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	92 g

### Operating Range



### Connection

Connection A (Sensor)		PVC	
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)		PTFE	
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