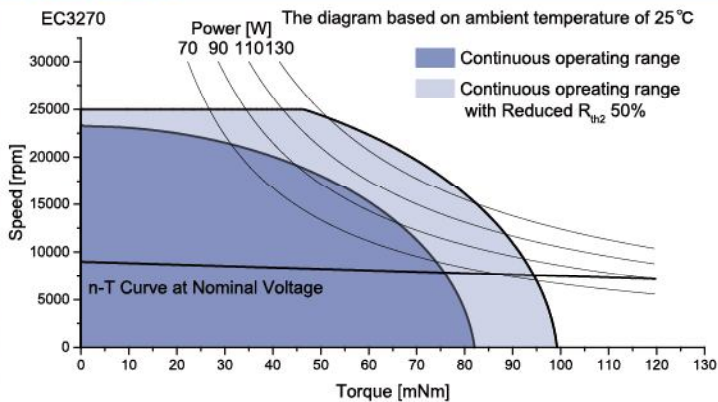


		Sensorless With hall sensor	EC3270L-...	EC3270S-...	1209	2409	3609	4809			
<b>Motor data</b>											
<b>Values at nominal voltage</b>											
1	Nominal voltage	V	12	24	36	48					
2	No load speed	rpm	8998	9055	9252	9080					
3	No load current	mA	450	180	100	90					
4	Nominal speed	rpm	7991	7963	8129	8077					
5	Nominal torque	mNm	70	70	70	70					
6	Nominal current	A	6	2.97	2	1.49					
7	Stall torque	mNm	625	581	577	634					
8	Stall current	A	50	23.3	15.7	12.7					
9	Max. efficiency	%	81.9	83.2	84.7	83.9					
10	Terminal resistance	$\Omega$	0.24	1.03	2.29	3.77					
11	Terminal inductance	mH	0.09	0.35	0.75	1.33					
12	Torque constant	mNm/A	12.6	25.1	36.9	50.1					
13	Speed constant	rpm/V	757	380	259	191					
14	Speed/torque gradient	rpm/mNm	14.4	15.6	16	14.3					
15	Mechanical time constant	ms	2.8	3.0	3.1	2.8					
16	Rotor inertia	gcm <sup>2</sup>	18.5	18.5	18.5	18.5					

17	Thermal resistance housing-ambient	4.7 K/W
18	Thermal resistance winding-housing	2.9 K/W
19	Thermal time constant winding	38 s
20	Thermal time constant motor	568 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)	100 N
	(static, shaft supported)	2700 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	256 g

**Operating Range**



**Connection**

Connection A (Sensor)		PTFE	
Pin 1	Motor winding MB	AWG20	Green
Pin 2	Vhall 3-18 VDC	AWG26	Red
Pin 3	Hall sensor HA	AWG26	Yellow
Pin 4	Hall sensor HC	AWG26	Blue
Pin 5	Motor winding MA	AWG20	Yellow
Pin 6	Motor winding MC	AWG20	Blue
Pin 7	GND	AWG26	Black
Pin 8	Hall sensor HB	AWG26	Green
Connector Molex5557-8P			

Connection B (Sensorless)		PTFE	
Pin 1	Motor winding MA	AWG20	Yellow
Pin 2	Motor winding MB	AWG20	Green
Pin 3	Motor winding MC	AWG20	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