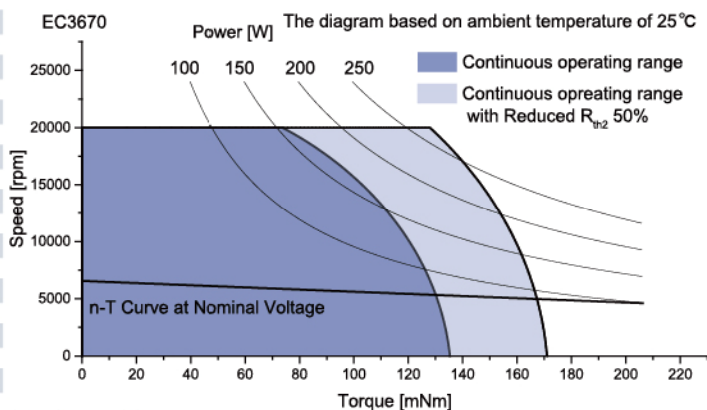


	Sensorless With hall sensor	EC3670L-... EC3670S-...	1206	2406	3606	4806			
<b>Motor data</b>									
<b>Values at nominal voltage</b>									
1	Nominal voltage	V	12	24	36	48			
2	No load speed	rpm	6578	6555	6675	6545			
3	No load current	mA	293	137	101	78			
4	Nominal speed	rpm	5300	5391	5455	5401			
5	Nominal torque	mNm	120	120	120	120			
6	Nominal current	A	7.24	3.59	2.45	1.81			
7	Stall torque	mNm	618	676	657	687			
8	Stall current	A	36	19.6	12.9	9.96			
9	Max. efficiency	%	82.8	84	83.1	83.1			
10	Terminal resistance	$\Omega$	0.33	1.22	2.78	4.82			
11	Terminal inductance	mH	0.09	0.38	0.85	1.52			
12	Torque constant	mNm/A	17.3	34.7	51.1	69.5			
13	Speed constant	rpm/V	553	275	187	137			
14	Speed/torque gradient	rpm/mNm	10.7	9.7	10.2	9.53			
15	Mechanical time constant	ms	2.4	2.2	2.3	2.1			
16	Rotor inertia	gcm <sup>2</sup>	21.5	21.5	21.5	21.5			

17	Thermal resistance housing-ambient	5 K/W
18	Thermal resistance winding-housing	2.3 K/W
19	Thermal time constant winding	46 s
20	Thermal time constant motor	816 s
21	Ambient temperature	-40...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	20000 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	331 g

**Operating Range**



**Connection**

Conection 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
Conector Molex5557-8P			

Conection 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 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/Siliccon/Teflon/UL No/Dimension/length  
Connector: JST/MOLEX/TE