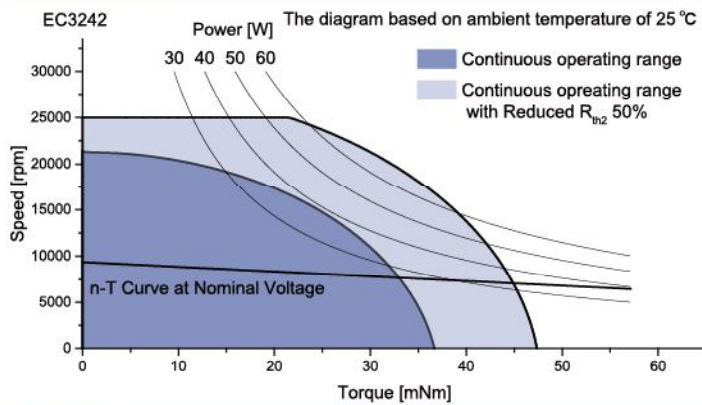


		Sensorless	EC3242L-...	1209	2409	3609	4809			
		With hall sensor	EC3242S-...							
<b>Motor data</b>										
<b>Values at nominal voltage</b>										
1	Nominal voltage	V		12	24	36	48			
2	No load speed	rpm		9319	9516	9269	9389			
3	No load current	mA		380	210	120	90			
4	Nominal speed	rpm		8198	8364	8219	8124			
5	Nominal torque	mNm		25	25	25	25			
6	Nominal current	A		2.46	1.27	0.81	0.61			
7	Stall torque	mNm		208	206	221	186			
8	Stall current	A		17.6	8.99	6.19	3.98			
9	Max. efficiency	%		72.8	71.8	74.1	72.2			
10	Terminal resistance	$\Omega$		0.68	2.67	5.82	12.1			
11	Terminal inductance	mH		0.11	0.40	0.98	1.79			
12	Torque constant	mNm/A		12	23.5	36.4	47.7			
13	Speed constant	rpm/V		794	406	263	200			
14	Speed/torque gradient	rpm/mNm		44.9	46.1	42	50.6			
15	Mechanical time constant	ms		4.4	4.5	4.1	5.0			
16	Rotor inertia	gcm <sup>2</sup>		9.4	9.4	9.4	9.4			

17	Thermal resistance housing-ambient	8.8 K/W
18	Thermal resistance winding-housing	2.7 K/W
19	Thermal time constant winding	23.5 s
20	Thermal time constant motor	560 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	147 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