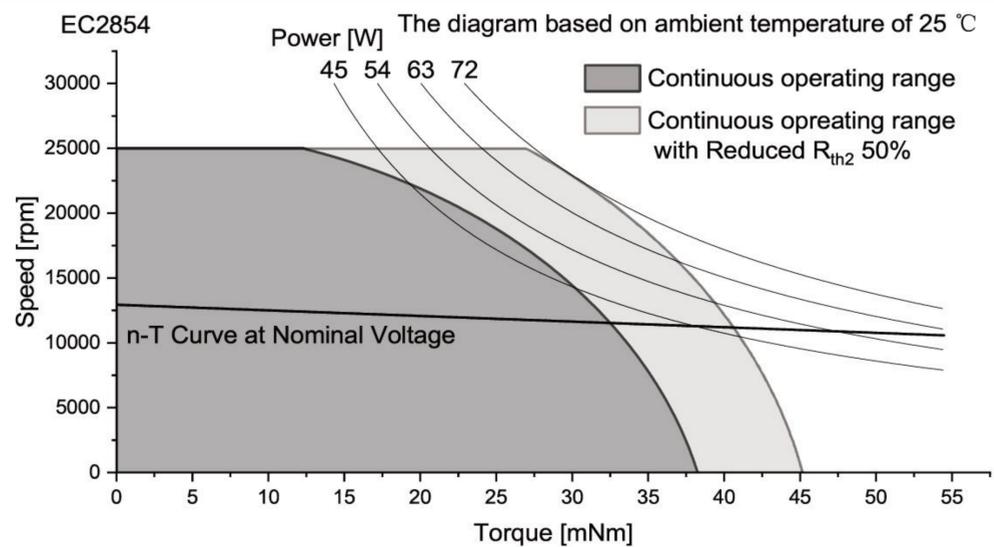


M 1:1.5

	Sensorless	EC2854L-...	1212	2412	3612	4812			
	With hall sensor	EC2854S-...							
Motor data									
Values at nominal voltage									
1	Nominal voltage	V	12	24	36	48			
2	No load speed	rpm	12039	12238	12100	12066			
3	No load current	mA	410	190	125	90			
4	Nominal speed	rpm	10716	10874	10961	10693			
5	Nominal torque	mNm	35	35	35	35			
6	Nominal current	A	4.13	2.08	1.37	1.02			
7	Stall torque	mNm	318.59	313.96	371.75	307.58			
8	Stall current	A	34.29	17.14	13.33	8.28			
9	Max. efficiency	%	79.3	80.1	81.6	80.2			
10	Terminal resistance	Ω	0.35	1.4	2.7	5.8			
11	Terminal inductance	mH	0.16	0.61	1.41	2.56			
12	Torque constant	mNm/A	9.40	18.52	28.14	37.58			
13	Speed constant	rpm/V	1015	516	339	254			
14	Speed/torque gradient	rpm/mNm	38	39	33	39			
15	Mechanical time constant	ms	3.4	3.5	2.9	3.5			
16	Rotor inertia	gcm ²	8.5	8.5	8.5	8.5			

17	Thermal resistance housing-ambient	7.1 K/W
18	Thermal resistance winding-housing	5 K/W
19	Thermal time constant winding	51 s
20	Thermal time constant motor	552 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)	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	156 g

Operating Range



Connection

Connection A (Sensor)		
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
Conector JST PH2.0-8P		

Connection B (Sensorless)		
Pin 1	Motor winding MA	AWG26 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