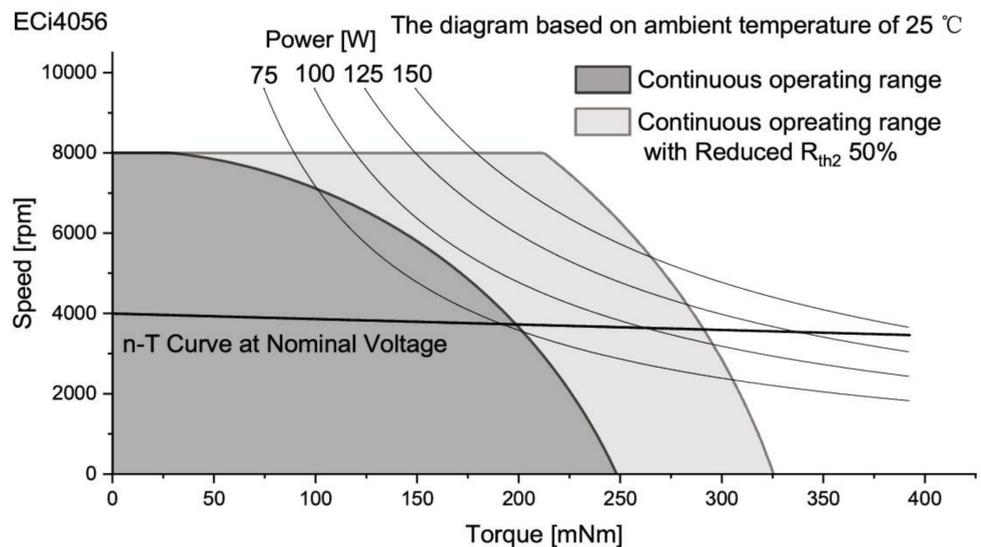


	Sensorless	ECi4056L-...	3604	4804					
	With hall sensor	ECi4056S-...							
Motor data									
Values at nominal voltage									
1	Nominal voltage	V	36	48					
2	No load speed	rpm	4082	4033					
3	No load current	mA	180	140					
4	Nominal speed	rpm	3820	3758					
5	Nominal torque	mNm	175	175					
6	Nominal current	A	2.27	1.69					
7	Stall torque	mNm	2725.96	2566.08					
8	Stall current	A	32.73	22.86					
9	Max. efficiency	%	85.7	85.0					
10	Terminal resistance	Ω	1.1	2.1					
11	Terminal inductance	mH	0.64	1.16					
12	Torque constant	mNm/A	83.75	112.96					
13	Speed constant	rpm/V	114	85					
14	Speed/torque gradient	rpm/mNm	1	2					
15	Mechanical time constant	ms	0.6	0.6					
16	Rotor inertia	gcm ²	36.7	36.7					

17	Thermal resistance housing-ambient	7.9 K/W
18	Thermal resistance winding-housing	1.5 K/W
19	Thermal time constant winding	23 s
20	Thermal time constant motor	1438 s
21	Ambient temperature	-30...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	8000 rpm
24	Axial play at axial load	<10N: 0 mm >10N: max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	9 N
27	Max. force for press fits (static)	170 N
	(static, shaft supported)	4500 N
28	Max. radial loading, 5mm from flange	80 N
29	Number of pole pairs	7
30	Number of phases	3
31	Weight of motor	358 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 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