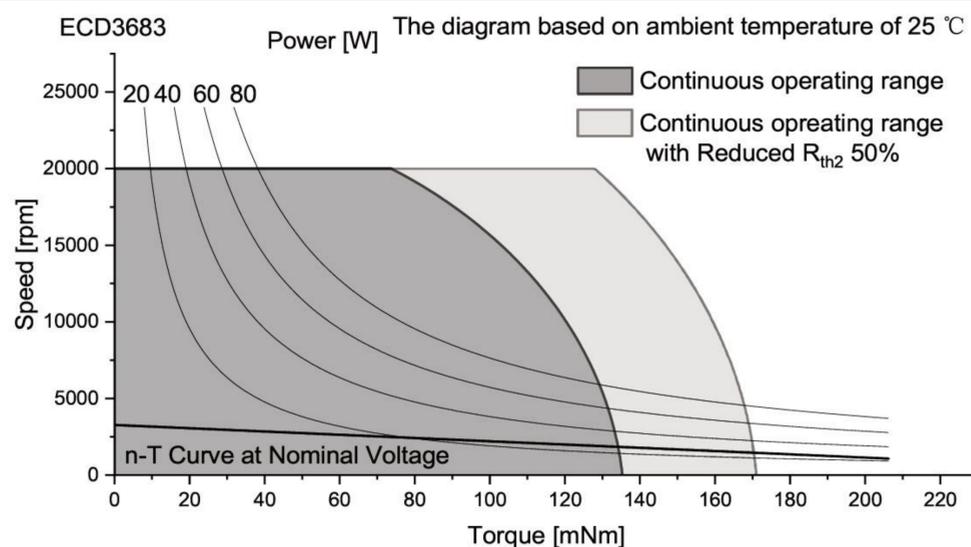


Motor data	With hall sensor	ECD3683S-...	1203	2403				
<b>Values at nominal voltage</b>								
1	Nominal voltage	V	12	24				
2	No load speed	rpm	3278	3273				
3	No load current	mA	137	78				
4	Nominal speed	rpm	2543	2546				
5	Nominal torque	mNm	75	75				
6	Nominal current	A	2.31	1.17				
7	Stall torque	mNm	334.34	337.82				
8	Stall current	A	9.84	4.98				
9	Max. efficiency	%	77.8	76.5				
10	Supply voltage +Vcc	V	10..28	10..28				
11	Direction of rotation		CW	CW				
12	Torque constant	mNm/A	34.47	68.93				
13	Speed constant	rpm/V	277	139				
14	Speed/torque gradient	rpm/mNm	10	10				
15	Mechanical time constant	ms	2.2	2.2				
16	Rotor inertia	gcm <sup>2</sup>	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	-30...+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	366 g

**Operating Range**



Controller features	
Sensor, Open loop, $I_{max} < 4A$	
Overload protection, Stall protection	
Max. temperature of electronics	+105°C

**Connection**

Conection			
Pin 1	+VCC	PTFE	
		AWG20	red
Pin 2	GND	AWG20	black

**Caution:**

Incorrect lead connection will damage the controller!

**Configuration**

Function: On&Off/Direction/Speed control/Brake  
 Speed closed&open-loop Control/Speed feedback  
 Performance: Customized in the continuous operating range  
 Ball bearing: Preload  
 Flange: Standard frange front&back/customize the frange  
 Shaft: Length/Diameter/Cut face  
 Leadwire: PVC/Silicon/Teflon/UL No/Dimension/length  
 Connector: JST/MOLEX/TE

More:  
 Please contact our sales engineers