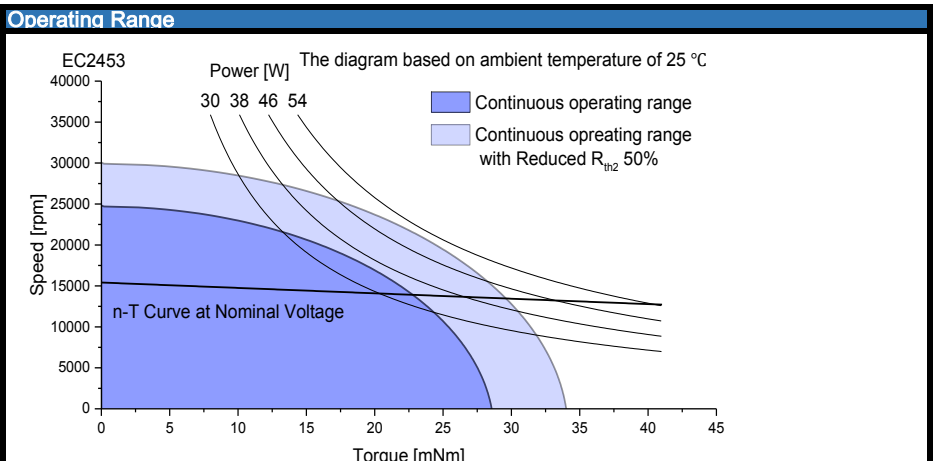


Sensorless	EC2453L-...	1215	2415	3615	4815			
With hall sensor	EC2453S-...							

Motor Data								
1	Nominal voltage	V	12	24	36	48		
2	No load speed	rpm	15083	15398	15202	15310		
3	No load current	mA	308	156	115	94		
4	Nominal speed	rpm	13938	14347	14211	14263		
5	Nominal torque	mNm	20	20	20	20		
6	Nominal current	A	2,96	1,51	1,01	0,77		
7	Stall torque	mNm	263	293	307	293		
8	Stall current	A	35,3	20	13,8	9,96		
9	Max. efficiency	%	82,2	83,1	82,6	81,5		

10	Terminal resistance	Ω	0,34	1,2	2,61	4,82		
11	Terminal inductance	mH	0,05	0,19	0,44	0,76		
12	Torque constant	mNm/A	7,53	14,8	22,4	29,7		
13	Speed constant	rpm/V	1268	647	426	322		
14	Speed/torque gradient	rpm/mNm	57,2	52,5	49,6	52,3		
15	Mechanical time constant	ms	3,5	3,2	3,1	3,23		
16	Rotor inertia	gcm ²	5,9	5,9	5,9	5,9		

17	Thermal resistance housing-ambient	10.2 K/W
18	Thermal resistance winding-housing	6.4 K/W
19	Thermal time constant winding	36 s
20	Thermal time constant motor	555 s
21	Ambient temperature	-40...+100°C
22	Max. permissible winding temperature	+150°C
23	Max. permissible speed	30000 rpm
24	Axial play at axial load	<4 N 0 mm >4 N max. 0.3 mm
25	Radial play	preloaded
26	Max. axial load (dynamic)	3.5 N
27	Max. force for press fits (static)	44 N
	(static, shaft supported)	1200 N
28	Max. radial loading, 5mm from flange	15 N
29	Number of pole pairs	1
30	Number of phases	3
31	Weight of motor	110 g



Connection	
Connection A (Sensor)	
	PVC
Pin 1	Vhall 3-18 VDC
Pin 2	Hall sensor HA
Pin 3	Hall sensor HB
Pin 4	Hall sensor HC
Pin 5	GND
Pin 6	Motor winding MA
Pin 7	Motor winding MB
Pin 8	Motor winding MC
Connector	
JST PH2.0-8P	
Connection B (Sensorless)	
	PTFE
Pin 1	Motor winding MA
Pin 2	Motor winding MB
Pin 3	Motor winding MC

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