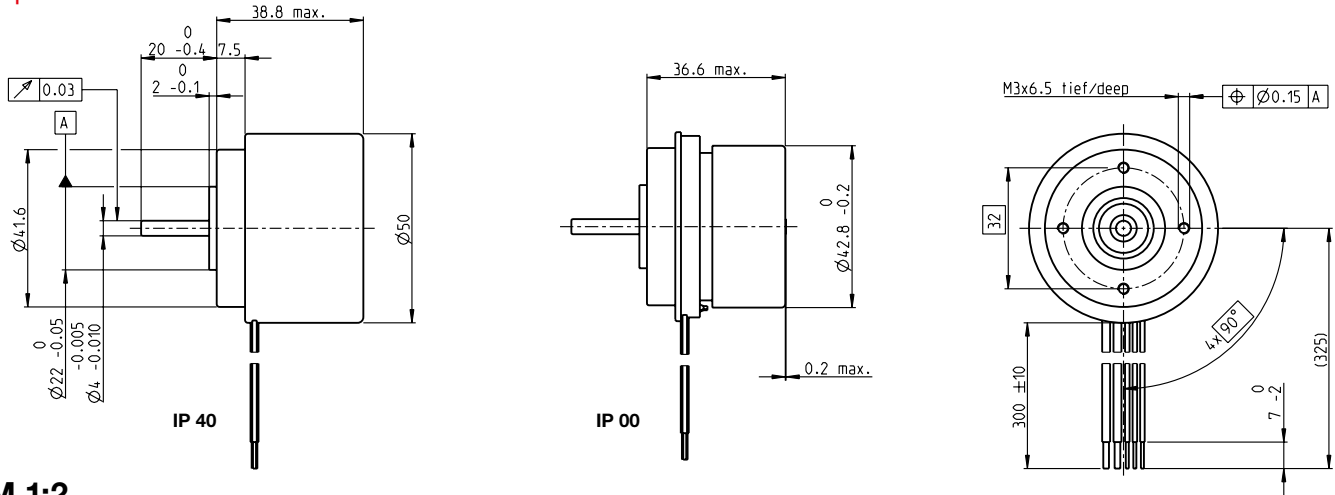


EC 45 flat brushless, 50 Watt, with integrated electronics

1-Q-Speed Controller



M 1:2

- Stock program
- Standard program
- Special program (on request)

		Part Numbers				
		2 wire version		5 wire version		
				Enable	Direction	
IP 40 (with cover)		353526		350910		370427
IP 00 (without cover)			353524		352887	370426

Motor Data (provisional)							
Values at nominal voltage							
1 Nominal voltage	V	24	24	24	24	24	24
2 No load speed	rpm	3000	3000	4500	4500	4500	4500
3 No load current	mA	114	114	192	192	192	192
4 Nominal speed	rpm	3000	3000	4500	4500	4500	4500
5 Nominal torque (max. continuous torque)	mNm	89.9	130	82.8	131	82.8	131
6 Nominal current (max. continuous current)	A	1.61	2.41	2.15	3.45	2.15	3.45
33 Max. torque	mNm	150	150	149	149	149	149
34 Max. current	A	2.83	2.83	3.86	3.86	3.86	3.86
9 Max. efficiency	%	74	74	76	76	76	76
Characteristics							
35 Type of control		Speed	Speed	Speed	Speed	Speed	Speed
36 Supply voltage +V _{CC}	V	10...28	10...28	10...28	10...28	10...28	10...28
37 Speed set value input	V	= V _{CC}	= V _{CC}	0.33...10.8	0.33...10.8	0.33...10.8	0.33...10.8
38 Scale speed set value input	rpm/V	125	125	600	600	600	600
39 Speed range	rpm	1250...3500	1250...3500	200...6480	200...6480	200...6480	200...6480
40 Max. acceleration	rpm/s	3000	3000	6000	6000	6000	6000

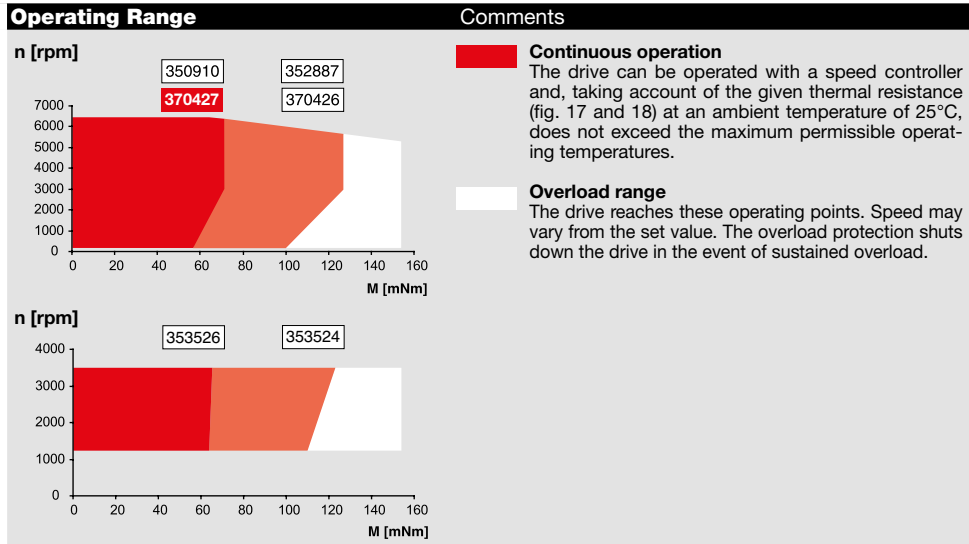
Specifications		
Thermal data		
17 Thermal resistance housing-ambient	5.1 (2.5) K/W	
18 Thermal resistance winding-housing	6.7 (3.3) K/W	
19 Thermal time constant winding	45.1 (22.1) s	
20 Thermal time constant motor	256 (124) s	
21 Ambient temperature	-40...+85°C	
22 Max. winding temperature	+125°C	
41 Max. temperature of electronics	+105°C	
Mechanical data (preloaded ball bearings)		
16 Rotor inertia	181 gcm ²	
24 Axial play at axial load < 7.0 N	0 mm	
	> 7.0 N	0.14 mm
25 Radial play	preloaded	
26 Max. axial load (dynamic)	6.8 N	
27 Max. force for press fits (static) (static, shaft supported)	95 N	
28 Max. radial load, 5 mm from flange	1000 N	
	63 N	
Other specifications		
31 Weight of motor	260 g	
32 Direction of rotation	Clockwise (CW)	

Values listed in the table are nominal.

Protective functions
 Overload protection, blockage protection, inverse-polarity protection, thermal overload protection, low/high voltage cut-off

Connection 2 wire version (Cable AWG 18)
 red +V_{CC} 10...28 VDC
 black GND

Connection 5 wire version (Cable AWG 18/24)
 red +V_{CC} 10...28 VDC
 black GND
 white Speed set value input
 green Monitor n (6 pulses per revolution)
 grey Disable (Type Enable) or sense of direction (Type Direction)



maxon Modular System Details on catalog page 36

