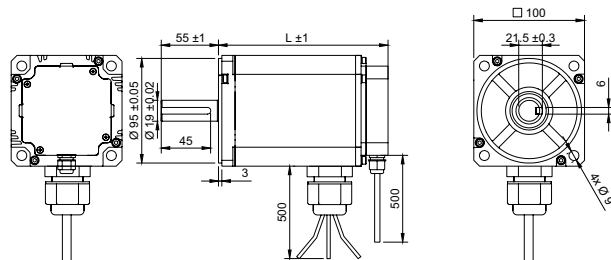


DRAWING (mm)



PHOTO



MODEL NO. DESIGNATION

B100 LENGTH - VOLTAGE - IP65

Example: B100137-220-IP65

ACCESSORIES



C = customizations are offered on demand even for smaller quantities. Typical customizations are indicated with a green dot at column end. Please contact us for any customization request.

BRUSHLESS DC MOTOR DATA	B100137-220-IP65	B100159-220-IP65	C
Nominal voltage <sup>1</sup>	V	220	220
No load speed	rpm	5000	5000
No load current	A	0.8	0.8
Nominal speed	rpm	3000	3000
Nominal torque	Nm	3.2	4.8
Nominal current	A	5	7.5
Peak current	A	11	17
Peak torque	Nm	7	11
Efficiency	%	91	91
Nominal power	W	1000	1500
Terminal resistance <sup>2</sup>	Ω	0.82	0.54
Terminal inductance <sup>3</sup>	mH	7.4	5.2
Insulation resistance <sup>4</sup>	MΩ	100	100
Dielectric strength <sup>5</sup>	V	1800	1800
Back EMF	V/rpm	0.038	0.038
Torque constant	Nm/A	0.63	0.63
Rotor inertia	kgcm <sup>2</sup>	1.3	1.8
Bearing type		Ball bearing	
Axial play <sup>6</sup>	mm	0.08	
Radial play <sup>6</sup>	mm	0.02	
Max. dynamic axial load	N	200	
Max. radial load <sup>7</sup>	N	490	

NOTES

- Frequency 50 Hz.
- Measured at 20°C.
- Measured at 1 kHz.
- Measured at 500 V.
- At a duration of 1 second.
- Max. 4 N.
- 20 mm from flange.
- In storage, relative humidity less than 85%.

OTHER BRUSHLESS DC MOTOR DATA	B100137-220-IP65	B100159-220-IP65	C
Number of pole pairs		10	
Number of phases		3	
Weight	kg	3.7	4.7
Operating temperature	°C	-20 to 50	
Storage temperature <sup>8</sup>	°C	-20 to 85	
Winding type		Star connection	
Motor insulation class		B	
IP rating		IP65	
Hall sensors and power harness length	mm	500	
Power harness		AWG8	
Hall sensors harness			
Motor length	mm	137	159
Shaft length from flange	mm	55	
Shaft diameter	mm	19	
Service life	h	10000	
Manufacturing standard		ISO 9001:2015   ISO 14001   IATF 16949	

CABLE AND PIN CONFIGURATION

Wire	Definition	Color
U		Yellow
V	Power	Red
W		Black
H1		Blue
H2		Green
H3	Hall	White
Vcc		Red
GND		Black