

# SBL17-18

Electronically commutated sensorless motor, slotless stator design

8 terminals      No. 8 ← No. 1 Terminal order

No	Sym	Dia
H1	Coil W	φ0.7
H2	Hall W	φ0.5
H3	Hall Vcc	φ0.5
H4	Coil U	φ0.7
H5	Hall V	φ0.5
H6	Hall GND	φ0.5
H7	Coil V	φ0.7
H8	Hall U	φ0.5

Dimension in mm

Ordering number	SBL17-1802	SBL17-1803	SBL17-1807	SBL17-1822
1 Nominal volatage	6	6	8	12 V
2 Terminal resistance	1.70	3.26	7.46	22.37 Ω
3 Output power	4.98	2.51	1.89	1.32 W
4 Efficiency	67.8	61.3	56.1	47.7 %
5 No load speed	20500	16400	16700	18200 rpm
6 No load current	0.110	0.087	0.068	0.051 A
7 Stall torque	9.26	5.83	4.30	2.77 mNm
8 Friction torque	0.30	0.29	0.29	0.29 mNm
9 Back EMF	0.284	0.348	0.448	0.597 mV/rpm
10 Torque constant	2.708	3.325	4.275	5.701 mNm/A
11 Slope of N-T curve	2214	2817	3895	6573 rpm/mNm
12 Mechanical time constant	7.08	9.01	12.46	21.02 ms
13 Roter inertia	0.305	0.305	0.305	0.305 gcm <sup>2</sup>

