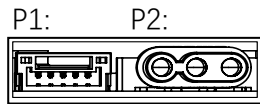


Signal connector: GH1.25-F-5P
Signal cable : GH5P-M-28AWG-15cm
Phase connector : MR30PW-F
Phase cable: MR30-M-18AWG-15cm



Unit : mm

Pin definition(left to right):

P1: 1.HW 2.HV 3.HU 4.5V 5.GND **P2:** 1.W 2.V 3.U

General Characteristics

Motor Configuration	Unit		Unit
Mechanical structure		outrunner	
Number of pole pairs		7	
Number of phases		3	
Winding connection		star	
Total weight	g	300	
Rotor inertia	$\mu\text{Nm}\cdot\text{s}^2$	8.2	
Ingress protection			IP 54
Speed constant	KV		200
Torque constant	mNm/A		44
Single phase resistance	mOhm		200
DQ inductance	mH		1
Friction	$\mu\text{N}\cdot\text{m}\cdot\text{s}$		0.6

Thermal Data

Thermal resistance housing -ambient	3.8K/W
Thermal resistance winding-housing	5.2K/W
Ambient temperature	-20 °C - 60 °C
Maximal winding temperature	120 °C

Sensoric

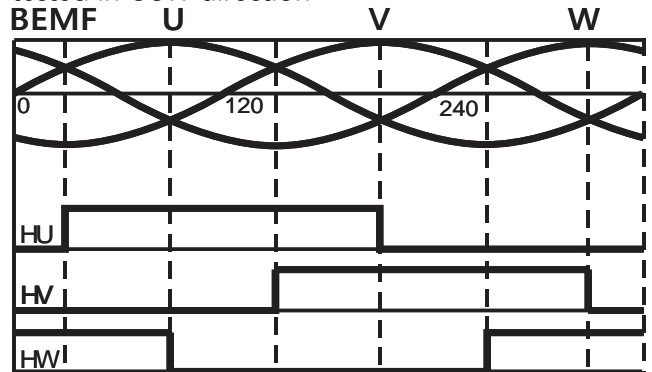
Sensor type	bipolar self-locking hall
Number of halls	3
Supply voltage	5V
Electrical angle	120 degrees

Nominal & Stall

	Unit		
Nominal voltage	V	24	48
No load speed	rpm	4800	9600
No load current	mA	550	700
Nominal speed	rpm	3600	7200
Nominal torque	mNm	500	1000
Nominal current	A	1.2	2.4
Maximal power	W	400	1500
Maximal efficiency		82%	85%
Stall torque	Nm	1.2	2.3
Stall current	A	22	45

Hall sequence regards to back EMF

tested in CCW direction



Pull-up resistance yes

ATTENTION: Stall operation is not recommended, please do necessary protection to avoid irreparable damage.

*In case specific shaft, connector, or any other features need to be customized, please visit www.damoto.tech and contact us.