

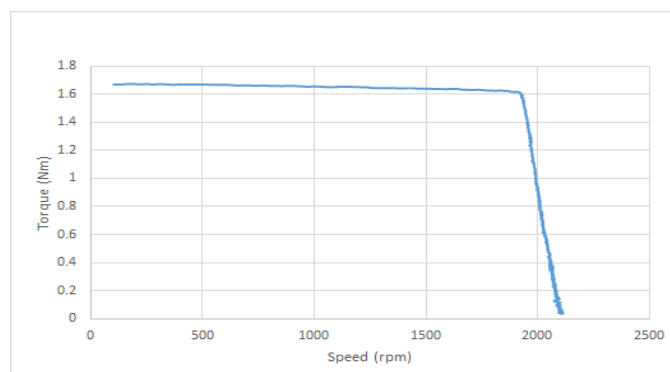
Rangehood Motor Specification

Motor Model Number
MK1.5R

PARAMETER	NOMINAL VALUE	COMMENT
GENERAL		
Type	3-phase brushless permanent-magnet Internal rotor	10 stator poles, 12 rotor poles Sinusoidal Back-EMF wave shape Copper wire & Ferrite magnet
Rotor position sensor	N/A	Vector sensorless control (RPS – optional)
Ambient temperature	Operating temp > 0°C to 60°C at <95% RH Storage temp > -20°C to 65°C at <95% RH	
Ingress protection	IP44	
Total motor mass	2.75 kg	
MOTOR FUNDAMENTALS		
K_e - BEMF constant	0.37 V/rad.s-1	Line to neutral, RMS Voltage
K_t – Torque constant	1.1 Nm/A	
K_m - Motor constant	0.30 Nm / \sqrt{Watt}	
Inductance	59 mH	Line to neutral inductance (includes self and mutual inductance)
INDICATIVE PERFORMANCE * / ** AT NOMINAL 310V_{HVDC}		
Speed – maximum	2,100 rpm	
Torque at 1,000 rpm	1.66 Nm	
Torque at 2,000 rpm	0.8 Nm	
Power output – at 1,000 rpm	176 W	
Power output – at 2,000 rpm	196 W	
Efficiency at 1,000 rpm	79%	
Efficiency at 2,000 rpm	89%	

* Reference values using Fisher & Paykel motor control at 22 °C. Values may vary using different control board and different tests conditions

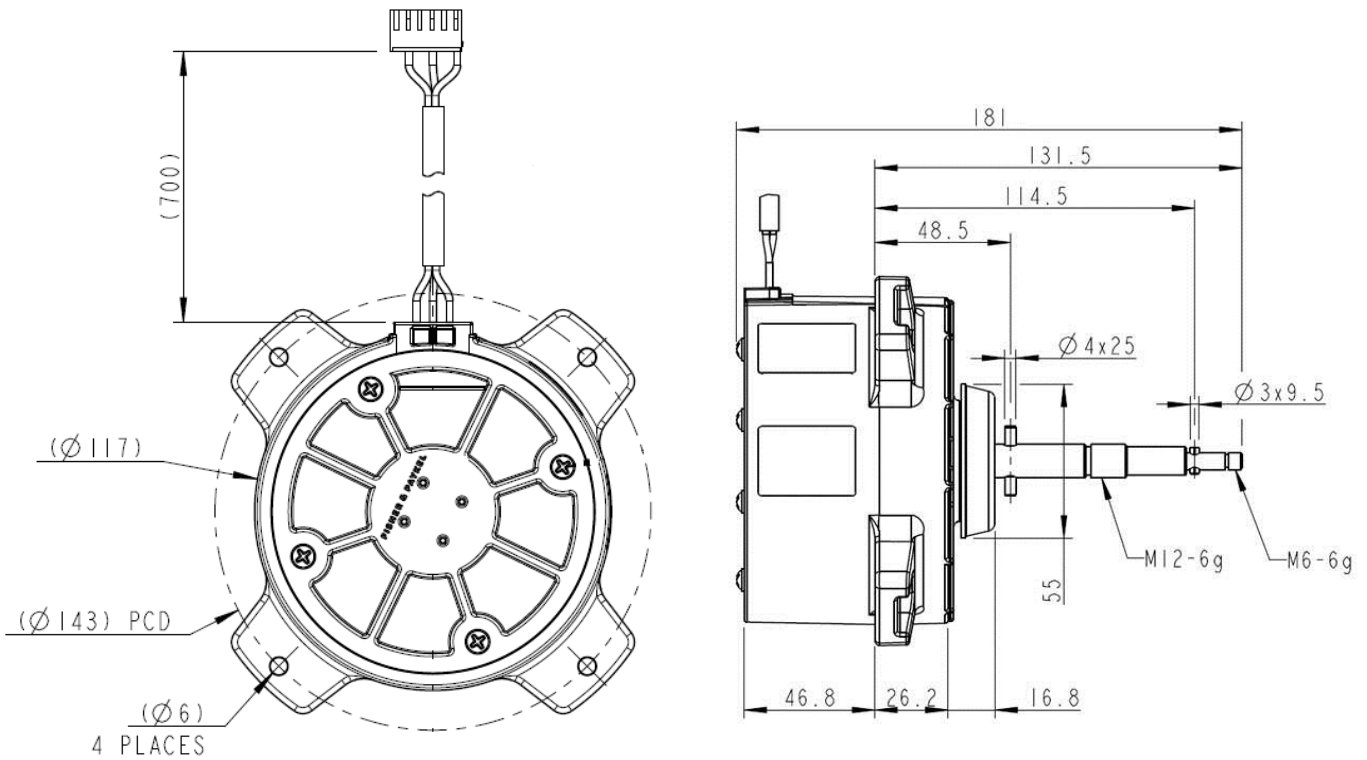
** Different performance levels might be achieved through motor customization to other applications.



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OVERALL DIMENSIONS ***



*** All dimensions in mm