

Agni 119R_Data		
Current model limited to about 90V but version to be introduced shortly with improved reinforcement of the armature will be safe to 108V.		
Overall Specifications		
Peak Power (for 5s)		48v 16.2KW @ 400A 72v 25.6KW @400A 96v 35.0KW @ 400A 108v 39.6KW @400A
Nominal Mechanical Power (@175A)		7.65 kW @ 48V 11.65 kW @72V 15.64 kW @ 96V 17.55 kW @108V
Peak Torque (for 5s)		68 Nm @ 400A
Nominal Mechanical Torque (@175A)		29.5Nm @48V 29.3Nm @72V 29.3Nm @96V 29.0Nm @108V
Max speed/rated speed		2635rpm max (no load)/ 2475rpm rated (with load) @48V 3955rpm max (no load)/ 3795rpm rated (with load) @72V 5275rpm max (no load)/ 5115rpm rated (with load) @96V 5930rpm max (no load)/ 5780rpm rated (with load) @108V
Peak efficiency		> 93%
Dimensions		diameter: 206mm height: 137mm (excluding shaft)
Weight		11.6 kg
Technical Data		
Ingress protection		IP 20 (occasional water splashes tolerable)
Cooling, air velocity and temperature		air cooled ambient temperature 45°C
Maximum peak motor current (for 5 s)		400A
Maximum continuous motor current		175A above 2400rpm (also at lower speeds if separately driven fan provided)
Nm/A and rpm/V		0.1736 Nm/A and 55 rpm/V (typical)
Max temperature of copper strips and magnets		120°C
Thermistor		NTC LE100E3333JB0
Number of pole pairs		4
Rotor inertia		0.021 kg.m2
Inductance		20 µH (typical)
Internal Resistance		10 mΩ (typical)
Standard bearing spec		Bearing: 2x SKF 6304-RS
No load current at differing voltages		See "No load current @ V" sheet

No Load Current and Speed @V (approximate)

Speed	Voltage	Current
<i>rpm</i>	<i>V</i>	<i>A</i>
655	12	3
1315	24	3
1975	36	4
2635	48	5
3290	60	5
3950	72	6
4610	84	6
5270	96	7
5930	108	8