

Specifications for BLDC Motor Controller

Sr.No.	Particulars	Specifications
1	Rated Capacity	60KW
2	Input Voltage	380 - 415V AC,3 Φ ,50Hz
3	Rated Current (Max.)	100 Amp
4	Starting current	Not exceeding 2 times of nominal current
5	Overcurrent Limit	20% of nominal
6	Speed Range	3000 RPM(\pm --%)
7	Overvoltage Limit	10% of nominal voltage.
8	Motor feedback	Hall effect sensors
9	Commutation	Trapezoidal
10	Mode of operation	Velocity mode(closed loop control)
11	Features	Solid state type, Soft switching, Alarm/Status monitoring, EMI/EMC compatible.
12	Input signals	Run/Stop,Emergency stop.
13	Display/Indications	LCD display for voltage,current, frequency & speed.
14	Operating temp./Humidity	0 - 55°C/ 95(+/-3%)
15	Vibration levels	1/3 rd octave band levels not to exceed the straight line joining the coordinates 25Hz – 55AdB, 8Hz – 85AdB.
16	Airborne noise	\leq 75dbA

17	Approx Size	$\leq 1000 \times 500 \times 500(\text{HxWxD})$
18	Cooling for Inverter	Heat pipe to make controller compact
19	Miscell.	Erection & commissioning, AMC for 2 years, List of spare items.

- PM motor will have 16 poles and its operating frequency is 400Hz with input voltage of $400\text{V} \pm 4\%$, 3Φ , 50Hz.
- Starting torque required is 30% of rated torque.

Terms & Conditions

- 1) Supplier should give guarantee for period of 2 years.
- 2) Supplier should mention the price in case of regular procurement(repeat order).
- 3) All drawings, operationg manuals, logics, schematic diagrams and component details should be enclosed in form of technical manual.
- 4) In case supplier required a PM machine for testing controller at his works the same can be spared by BHEL with a bank guarantee of Rs.2.5 Lakhs.
- 5) Technical offer and price offer should be submitted in two separate covers.
- 6) Erection & commissioning to be carried out at BHEL R&D, Hyderabad.
- 7) Supplier should extend free service even if the controller is put to use in site.

For any technical clarifications, please contact :

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