

ANNEXURE-I

Technical specification for Blower for 30 MVA Alternator

- 2.1) Heavy Duty Centrifugal Fan SISW (single inlet single width) type, Horizontal split casing, backward curve impeller-belt driven by TEFC Motor suitable for exhausting 70 Deg C Hot air from AC Alternator situated on floor level to a height of approximately 12 metres and 10 metres distance away by means of GSS Rectangular ducts fabricated as per IS 655.
- 2.2) Capacity=60000 CMH
- 2.3) Centrifugal fan-Backward curve, Horizontal split casing, SISW (single inlet single width)
- 2.4) Wheel Diameter=54" (1372 mm)
- 2.5) Static Pressure=80 mm wg
- 2.6) Total static Pressure=85 mm wg
- 2.7) Operating temperature=70 deg centigrade
- 2.8) Mechanical design temperature=90 deg centigrade
- 2.9) Site elevation Floor mounted
- 2.10) Inlet density = 1.02 kg/m³
- 2.11) Fan RPM approx=600
- 2.12) Bearing arrangement=No.1, V belt driven
- 2.13) Efficiency=75%
- 2.14) BHP @ 80 deg cent=26.89
- 2.15) Motor HP/RPM=40 HP/1450, TEFC
- 2.16) Noise level 85 dbA at 1 metres height with system connected at inlet and outlet both in free field condition
- 2.17) Type of drive Belt drive
- 2.18) Vibration level As per ISO 2372, 4.5 mm/sec (RMS) rigid structure, 7.5 mm/sec (RMS)-metallic structure and 11.2 mm/sec (RMS)-flexible structure. The fan will be Dynamically balanced as per ISO 1940 Gr6.3, with MS channel base frame and vibration isolators (to be fixed & grouted at site) for floor mounting.
- 2.19) MOC
 - i) Casing 5 mm thick, IS 2062
 - ii) Back Plate 8 mm thick, IS 2062
 - iii) Impeller blades 3 mm thick IS 2062
 - iv) Shaft EN8, with self aligning self lubricated roller bearings, pedestal arrangement suitable for exhausting 70 DegC air from Alternator
- 2.20) The blower shall be mounted on the floor.
- 2.21) QTY=01 SET

Electrical starter panel suitable for above blower-

Compartmentalized, Complete with incoming MCCB 50 KA, Outgoing MPCB, with AC contactor, overload relay, LED Lamps, Ammeter, Gland Plate for cable entry -exit at bottom, CRCA Sheet 1.6 mm thick powder coated, 631 shade, as per IP 54 type. The panel shall be wall mounted.

QTY=01 No.