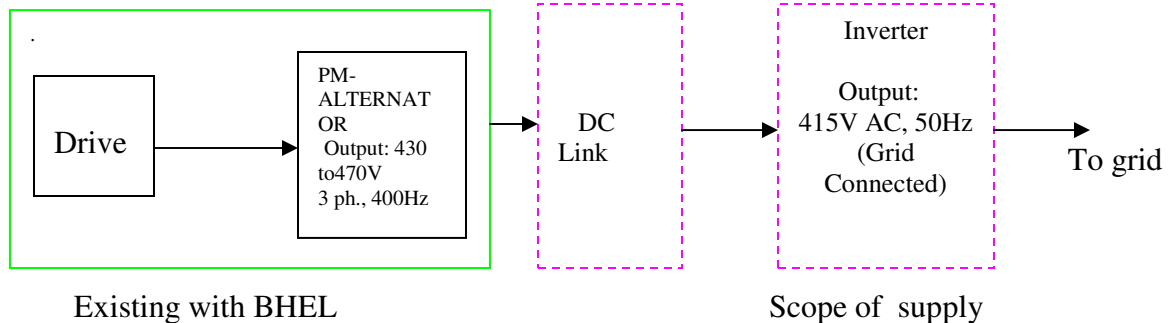


## **Technical Specifications of 200kW AC-DC-AC converter**

**Purchase req. no.-**

**Date- 10/11/10**

1. Function: The function of the voltage regulators are to convert the variable three phase AC voltage & frequency derived from alternator to constant DC voltage for Industrial application. The input and output details of the voltage regulators with load is given below.



### 2. Features

- i) Rated Capacity : 200kW
- ii) Regulator Input voltage Range : 430V to 470V AC , 3 phase
- ii) Frequency Range : 400Hz  $\pm$  3%
- iv) Regulator Output : 415V, 50Hz, 3-phase AC. The output of the converter will be connected to grid.

### 3. Safety features for regulator :

- i) Over voltage trip
- ii) Under voltage trip
- iii) Over Current Trip &
- iv) Input single phasing trip should be provided.

4. Protection features for inverter : All protection features (like over voltage, over current etc.) Should be provided.

### 5. Construction & Maintenance features:

Modular construction shall be adopted wherever considered possible for achieving the above requirements. Easy access for inspection and maintenance requiring minimum attention will be given special consideration in the design.

### 6. Technical Literature Data:

Complete technical literature such as printed catalogs / data sheets of all components like semiconductor devices, capacitors, sensors, other important components used in the quoted supply items shall be provided along with this offer

### 7. Testing/Erection & commissioning

Testing of the equipment and erection & commissioning to be carried out at BHEL R&D, Hyderabad.

P.T.O.

8. Supplier is requested to give weight, size and a drawing indicating the overall dimensions and details.

9 . Warranty: Supplier should give warrantee for a period of 2 years.

10. Spares :

The supplier should be able to supply spares for at least for a minimum period of 5 years after expiry of one year warrantee for reliable operation of the controller. List of spares, with individual price, applicable taxes/ duties should be mentioned.

11. Offer should consist of following:-

11.1. Design, manufacture, testing and supply of 200kW DC voltage Controller (excluding spares).

11.2. Installation and commissioning cost including Service tax, if any.

11.3. Training cost, including Service tax, if any.

11.4. Warranty: 24 months from installation.

11.5. List of recommended spares, such as IGBTs with driver, card control card, D.C. Link capacitor etc. individual price, applicable taxes/ duties.

11.6. Supplier should give in writing that the service of the equipment will be undertaken by him even after warranty period.

12. All the offers shall be evaluated on the basis of points above, 11.1+11.2+11.3+11.4+11.5+11.6. The price bid to be submitted separately in sealed cover should include the main item along with all these price details. Spares will be procured later i.e. after warranty period. The spares price comparison will be made in per unit basis.

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