APPENDIX – VI

ELECTRICAL SYSTEM REQUIREMENTS FOR MOTOR SELECTION

A. Supply	
Voltage	415 +/- 10% V
Frequency	50 +/- 5% Hz
Fault Level	50 Ka For 1 Second
Comb. Variation	+/- 10%
Phases	3
Wires	4
B. Site	
Ambient For Design	50^0c
Area Classification	Dusty
C. Motor	
Type	3 Phase Squirrel Cage Induction Motors To Is 325
Enclosure	Tefc For All Motors
Protection	Ip – 55
Method Of Starting	All Boiler Fans, Fuel Feeders & Feed Water Pumps Will Be With Vfd. All Motors Above 22 Kw Will Have Star Delta Starters.
No. Of Starts	One Hot Successive / Two Cold Successive / Three Equally Spread Per Hour.
Min. Voltage Permissible For Starting	85% Rated Voltage
Class Of Insulation	F Temp Rise Limited To B
Accessories	Thermistors To Be Provided For Motors Above 50 Kw, Rtd's & Btd's To Be Provided. Acvfd Motor Winding Shall Be Vpi Treated & Two Coat Enameled.
Sp. Heater	Required For 30 Kw & Above Motors (Supply 240 V 1 Ph)
Terminal Box	Separate Tb To Be Provided For Sp Heater, Thermistor & For Power. Power Tb Shall Be Suitable For Rotating In Steps Of 90 Degrees.
Cable Entry	Bottom /Side
Direction Of Rotation	Bi-Directional
Performance/ Construction	As Per Is-325 & Ie-2 As Per Is 12615

Cable Gland	Double Compression Type, Brass With Nickle / Cadmium Plating
Lugs	Crimping Type, Tinned Copper