

## Equipment Name: Chiller Unit of 20 KW

### Chiller Unit of 20KW

The chiller unit shall be expected to provide coolant at a minimum temperature of 5° C and to a maximum temperature of 40° c. The Chiller should be a closed loop integrated system that works automatically on a digitally controlled set point temperature at a required mass flow of the coolant. The chiller unit is expected to have easily accessible digital panel to control the flow and temperature requirement. There should be additional options to be able to control the unit operation through a PC as well. The coolant ports should meet up with BSP piping standards. The chiller unit shall be a quiet unit adhering to the sound level up to 60 DBA max. The unit shall be expected to have zero leakage of the coolant and if happens should have an automatic tripping system.

### Operational Specifications

<b>S.No.</b>	<b>Description</b>	
1.	Cooling Capacity at a minimum coolant temperature	20 KW
2.	Minimum Temperature	5° C
3.	Maximum Temperature	40° C
4.	Coolant Flow	0 to 40 GPM at a pressure of 4 bar
5.	Temperature Stability	Within $\pm 0.1^{\circ}$ C
6.	Control	Automatic
7.	Condenser Type	Air or Water Cooled
8.	Coolant Type	MEG
9.	Nominal Coolant Connection Ports Inlet	1 inch BSP standard connection port
10.	Nominal Coolant Connection Ports Outlet	1 inch BSP standard connection port
11.	Automatic Tripping	Yes
12.	Control System	Integrated with digital display
13.	Communication	RS232/RS485
14.	Operation Mode	Through PC as well as on the Panel
15.	Coolant Refilling	Automatic
16.	Tripping system	Automatic tripping for coolant leakage

### Electrical Specifications

<b>S.No.</b>	<b>Description</b>	
1.	Voltage	3 Phase – 220- 240 V
2.	Power	Up to 20 KW
3.	Current	10 - 15 A
4.	Frequency	50-60 Hz

General Conditions:

1. List of Purchase orders or supply references to any institute of National importance, PSU, or premier research institutes to be attached.
2. Quotation for 2 years standard warranty + 1 year optional warranty.
3. Installation/Commissioning to be done at IITM.
4. Should provide list of spares and their cost.
5. Must provide Test certificates for the items and performance report of the item proposed to be supplied.