Department of Mechanical Engineering Indian Institute of Technology Delhi

23-10-2013

Sealed quotations are invited for Reynold Make Chiller Unit for 10TR capacity with following specifications:

Air-cooled Scroll Chiller of 10 TR (5 TR x 2 No.) capacity with scroll type compressors from DANFOSS/EMERSON complete with inbuilt chilled water pump.

TECHNICAL SPECIFICATIONS (10 TR, Air-cooled Scroll Chiller)

- A) CHILLER
- 1. SYSTEM: Industrial Process Chiller
- 2. MODEL NO. : RSIG0035D 3. FLOW RATE : 6048 LPH
- 4. INLET TEMPERATURE TO CHILLER: 15 DEG. C.
- 5. OUTLET TEMPERATURE FROM CHILLER: 10 DEG. C.
- 6. REFRIGERATION LOAD: 10 TR (5 TR x 2 No.)
- 7. COOLING WATER REQUIREMENT: N A, AIR-COOLED
- 8. CHILLER TYPE: TUBE IN TUBE TYPE
- 9. CONDENSOR TYPE: FINNED TUBE TYPE
- 10. REFRIGERANT: R-22
- 11. REFRIGERANTION COMPRESSOR: SCROLL TYPE
- 12. CONTROL: Fully Automatic
- 13. SAFETY INTERLOCKS
 - 1. L.P.SWITCH & GAUGE
 - 2. H.P.SWITCH & GAUGE
 - 3. DIGITAL TEMPERATURE CONTROL
 - 4. CHILLED WATER FLOW FAILURE TRIP (PUMP ELECTRICAL INTERLOCK)
 - 5. COMPRESSOR AND PUMP OVER LOAD TRIP
- B) COMPRESSOR
- 1. MAKE: DANFOSS / EMERSON
- 2. TYPE: SCROLL
- C) ELECTRICAL SPECIFICATION
- 1. POWER SUPPLY: 400 + 10% / 3 / 50 HZ + 5%
- 2. CONNECTED LOAD: 10.6 kW
- 3. PROTECTION: IP 54
 D) GENERAL CONDITION
- 1. DESIGN TEMPERATURE: 450C Ambient
- 2. NOISE LEVEL: Less than 80 db at 1.0 m distance
- 3. CONDENSER FAN CONTROL: Automatic
- 4. CONDENSER FAN TYPE: Axial

MAKE OF ITEMS:

1. COMPRESSOR DANFOSS / EMERSON

- 2. CONDENSOR REYNOLD
- 3. CHILLER REYNOLD
- 4. BASE FRAME REYNOLD
- 5. EXPANSION VALVE DANFOSS (DENMARK) / EQUIVALENT
- 6. LP/HP SWITCH DANFOSS (DENMARK) / EQUIVALENT
- 7. PID HONEYWELL
- 8. CONTROL PANEL REYNOLD
- 9. ELECTRICALS SCHNEIDER / SIEMENS
- 10. GAUGES WIKA (GERMANY)
- 11. VALVE DANFOSS (DENMARK) / EQUIVALENT
- 12. ISOLATION VALVES DANFOSS (DENMARK) / EQUIVALENT
- 13. FILTER / DRYER DANFOSS (DENMARK) / EQUIVALENT
- 14. PUMP CROMPTON

Unloading, positioning and installation of the equipment at their proper place, with due care will be undertaken by the supplier.

Following items/systems will be provided by IIT Delhi and will not be in the scope of the supplier:

- 1. All civil work and overhead shedding and water tank
- 2. Total interconnecting piping and insulation work beyond 10 meter in length, outside the base frames of the supplied equipment.
- 3. Total interconnecting power cabling beyond 5 meter in length and other related electrical work, outside the base frames of the supplied equipment.
- 4. Any other material / work, which is not included within the scope of the supplier and may be required for proper commissioning and operation of the system.

The chiller system supplied should be accredited with ISO 9001:2008 and CE certifications. The vendor should also provide a list of previous customers. After installation, the vendor has to provide a demonstration of the working of the chiller. Quotations with shorter delivery schedule will be preferred. Standard IIT Delhi payment terms apply (No advance payments).

The sealed quotations with technical and price bids in separate sealed envelopes should reach the undersigned on or before November 12, 2013. Sole agent certificate/proprietary product certificate as applicable may be submitted along with the quote.

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