**Technical Specifications : Vapour Absorption CHILLER**

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| --- | --- | --- | --- |
| Client | a | Version | 1.2.0 Dt : 07-Aug-2021 |
| Enquiry | a | Date | 17-Aug-2021, 13:05 |
| Project | a | Model | TCH S2 M1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Description** | | **Unit** |  |
|  | **Capacity ( + 3 %) :** | | **TR** | 40 |
|  | | | | |
| **A** | **Chilled Water Circuit :** | | | |
|  | Chilled water flow | | m³/hr | 21.9 |
|  | Chilled water inlet temperature | | °C | 12.2 |
|  | Chilled water outlet temperature | | °C | 6.7 |
|  | Evaporate passes | | No. | 2+2 |
|  | Chilled water circuit pressure loss | | mLC | 4.4 |
|  | Chilled water Connection diameter | | DN | 80 |
|  | Glycol type | |  | NA |
|  | Chilled water glycol % | | % | 0 |
|  | Chilled water fouling factor | | m² hr °C/kcal | 0.00002 |
|  | Maximum working pressure | | kg/cm²(g) | 8 |
|  | | | | |
| **B** | | **Hot Water Circuit:** | | | |
|  | Heat Duty | | kcal/Hr | 12096 |
|  | Hot water flow (+/-3%) | | m³/hr | 0.6 |
|  | Hot water inlet temperature | | °C | 70 |
|  | Hot water outlet temperature | | °C | 90 |
|  | Side Arm passes | | No. | 4 |
|  | Hot water circuit pressure loss | | mLC | 0.8 |
|  | Hot water connection diameter | | DN | 50 |
|  | Maximum working pressure | | kg/cm²(g) | 8 |
|  | | | | |
| **C** | | **Cooling Water Circuit:** | | | |
| 1. | Heat Rejected | | kcal/Hr | 211067.8 |
| 2. | Cooling water flow | | m³/hr | 48 |
| 3. | Cooling water inlet temperature | | °C | 29.4 |
| 4. | Cooling water outlet temperature | | °C | 33.6 |
| 5. | Absorber / Condenser passes | | No. | 1+1/2 |
| 6. | Cooling water Bypass Flow | | m³/hr | - |
| 7. | Cooling water circuit pressure loss | | mLC | 5 |
| 8. | Cooling water Connection diameter | | DN | 100 |
|  | Glycol type | |  | NA |
|  | Cooling water glycol % | | % | 0 |
|  | Cooling water fouling factor | | m² hr °C/kcal | 0.00005 |
|  | Maximum working pressure | | kg/cm²(g) | 8 |
|  | | | | |
| **D** | **Steam Circuit :** | | | |
|  | Heat Input | | kcal/Hr | 90107.8 |
|  | Steam pressure (Dry Saturated) | | kg/cm²(g) | 8 |
|  | Steam Consumption ( + 3 %) | | kg/hr | 157.6 |
|  | Condensate drain temperature | | °C | 80 – 100 |
|  | Condensate drain pressure | | kg/cm²(g) | 1 |
|  | Connection - Inlet diameter | | DN | 40 |
|  | Connection - Drain diameter | | DN | 20 |
|  | Design Pressure | | kg/cm²(g) | 10.5 |
|  | | | | |
| **E** | **Electrical Data :** | | | |
| 1. | Power supply | |  | 460 V( ±10%), 60 Hz (±5%), 3 Phase+N |
| 2. | Power consumption | | kVA | 6 |
| 3. | Absorbent pump rating | | kW (A) | 1.1 (3.4) |
| 4. | Refrigerant pump rating | | kW (A) | 0.2 (1.1) |
| 5. | Vacuum pump rating | | kW (A) | 0.75 (1.8) |
| 6. | MOP | |  | 12 |
| 7. | MCA | |  | 9 |
|  | | | | |
| **F** | **Physical Data :** | | | |
| 1. | Length | | mm | 2800 |
| 2. | Width | | mm | 1700 |
| 3. | Height | | mm | 2670 |
| 4. | Operating weight | | ton | 4.4 |
| 5. | Dry weight | | ton | 3.8 |
| 6. | Shipping weight | | ton | 4.2 |
| 7. | Flooded weight | | ton | 5.8 |
| 8. | Tube cleaning space (any one side length-wise) | | mm | 2700 |
|  | | | | |
| **G** | **Tube Metallurgy :** | | | |
| 1. | Evaporator | |  | name |
| 2. | Absorber tube material | |  | Copper |
| 3. | Condenser tube material | |  | Copper |
|  | | | | |

Caption Notes:

1. This selection is valid for insulated chiller only.

2. For non-insulated chiller, the Capacity and Heat source consumption will vary.

3. Plant Room Temperature should be from +5 deg C to +45 deg C

4. Please contact Thermax representative / Office for customised specifications.