**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, 19:08 |
| Project | a | Model | TAC G2 M1 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Description** | **Unit** |  |
|  | **Capacity ( + 3 %) :** | **TR** | 45 |
|  | | | |
| **A** | **Chilled Water Circuit :** | | |
|  | Chilled water flow | m³/hr | 24.7 |
|  | 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 | 5.6 |
|  | 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 Input | kcal/Hr | 13608 |
|  | Hot water flow | m³/hr | 0.7 |
|  | 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 | 240854.7 |
| 2 | Cooling water flow | m³/hr | 53 |
| 3 | Cooling water inlet temperature | °C | 29.4 |
| 4 | Cooling water outlet temperature | °C | 33.7 |
| 5 | Absorber / Condenser passes | No. | 1+1/1 |
| 6 | Cooling water Bypass Flow | m³/hr | - |
| 7 | Cooling water circuit pressure loss | mLC | 2.5 |
| 8 | Cooling water Connection diameter | DN | 100 |
| 9 | Glycol type |  | NA |
| 10 | Cooling water glycol % | % | 0 |
| 11 | Cooling water fouling factor | m² hr °C/kcal | 0.00005 |
| 12 | Maximum working pressure | kg/cm²(g) | 8 |
|  | | | |
| **D** | **DIRECT FIRED CIRCUIT :** | | |
|  | Heat Input | kcal/Hr | 111219.9 |
|  | Fuel Type |  | NaturalGas |
|  | Calorific value type | GCV | Normal |
|  | Calorific Value | kcal/Nm³ | 9000 |
|  | Fuel consumption ( + 3% ) | GCV | 11.9 |
|  | Exhaust Gas duct size | DN | 125 |
|  | Gas Pressure | mbar | 100 |
|  | | | |
| **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. | Burner Rating | kW (A) | 0.25 (1.7) |
| 7. | MOP |  | 14 |
| 8. | MCA |  | 12 |
|  | | | |
| **F** | **Physical Data :** | | |
| 1. | Length | mm | 3170 |
| 2. | Width | mm | 2180 |
| 3. | Height | mm | 2760 |
| 4. | Operating weight | ton | 5.2 |
| 5. | Dry weight | ton | 4.4 |
| 6. | Shipping weight | ton | 5 |
| 7. | Flooded weight | ton | 6.5 |
| 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.

5. Burner Selection is valid upto 100m above mean Sea level.