**TECHNICAL SPECIFICATIONS : VAPOUR ABSORPTION CHILLER**

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| --- | --- | --- | --- |
| Client | a | Version | 1.2.0 Dt : 07-Aug-2021 |
| Enquiry | a | Date | 27-Sep-2021, 16:09 |
| Project | aa | Model | TCH S2 M1 |

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| --- | --- | --- | --- |
|  | **Description** | **Unit** |  |
|  | **Capacity ( + 3 %) :** | **TR** | 40 |
|  | | | |
| **A** | **Chilled Water Circuit :** | | |
|  | Chilled water flow | GPM | 106.1 |
|  | Chilled water inlet temperature | °F | 53.6 |
|  | Chilled water outlet temperature | °F | 44.6 |
|  | Evaporate passes | No. | 2+2 |
|  | Chilled water circuit pressure loss | ftLC | 17.4 |
|  | Chilled water Connection diameter | NPS | 3.2 |
|  | Glycol type |  | NA |
|  | Chilled water glycol % | % | 0 |
|  | Chilled water fouling factor | ft² Hr °F/BTU | standard |
|  | Maximum working pressure | psi(g) | 113.8 |
|  | | | |
| **B** | **Hot Water Circuit:** | | | |
|  | Heat Duty | MBH | 12121 |
|  | Hot water flow (+/-3%) | GPM | 2.7 |
|  | Hot water inlet temperature | °F | 158 |
|  | Hot water outlet temperature | °F | 194 |
|  | Side Arm passes | No. | 4 |
|  | Hot water circuit pressure loss | ftLC | 1.9 |
|  | Hot water connection diameter | NPS | 2 |
|  | Maximum working pressure | psi(g) | 113.8 |
|  | | | |
| **C** | **Cooling Water Circuit:** | | | |
| 1. | Heat Rejected | MBH | 832.4 |
| 2. | Cooling water flow | GPM | 211.3 |
| 3. | Cooling water inlet temperature | °F | 89.6 |
| 4. | Cooling water outlet temperature | °F | 97 |
| 5. | Absorber / Condenser passes | No. | 1+1/2 |
| 6. | Cooling water Bypass Flow | GPM | - |
| 7. | Cooling water circuit pressure loss | ftLC | 16.4 |
| 8. | Cooling water Connection diameter | NPS | 4 |
|  | Glycol type |  | NA |
|  | Cooling water glycol % | % | 0 |
|  | Cooling water fouling factor | ft² Hr °F/BTU | standard |
|  | Maximum working pressure | psi(g) | 114 |
|  | | | |
| **D** | **Steam Circuit :** | | |
|  | Heat Input | MBH | 352.4 |
|  | Steam pressure (Dry Saturated) | psi(g) | 113.8 |
|  | Steam Consumption ( + 3 %) | lb/hr | 342.4 |
|  | Condensate drain temperature | °F | 176 – 212 |
|  | Condensate drain pressure | psi(g) | 14.2 |
|  | Connection - Inlet diameter | NPS | 1.6 |
|  | Connection - Drain diameter | NPS | 0.8 |
|  | Design Pressure | psi(g) | 149.3 |
|  | | | |
| **E** | **Electrical Data :** | | |
| 1. | Power supply |  | 415 V( ±10%), 50 Hz (±5%), 3 Phase+N |
| 2. | Power consumption | kVA | 5.5 |
| 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) |
|  | | | |
| **F** | **Physical Data :** | | |
| 1. | Length | in | 111 |
| 2. | Width | in | 67 |
| 3. | Height | in | 106 |
| 4. | Operating weight | lbs | 9479.9 |
| 5. | Dry weight | lbs | 8157.1 |
| 6. | Shipping weight | lbs | 9039 |
| 7. | Flooded weight | lbs | 12566.3 |
| 8. | Tube cleaning space (any one side length-wise) | in | 106.3 |
|  | | | |
| **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.