**Technical Specification : Vapour Absorption Chiller**

|  |  |  |  |
| --- | --- | --- | --- |
| **Client** | **a** | **Version** | **0.9 Dt: 24-May-2021** |
| **Enquiry** | **a** | **Date** | **12-Jul-2021, 14:36** |
| **Project** | **a** | **Model** | **TAC S2 N4** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Description** | **Unit** |  |
|  | **Capacity(+/-3%)** | **TR** | **120** |

|  |  |  |  |
| --- | --- | --- | --- |
| **A** | **Chilled Water Circuit** |  |  |
| 1. | Chilled water flow | m³/hr | 72.4 |
| 2. | Chilled water inlet temperature | °C | 12 |
| 3. | Chilled water outlet temperature | °C | 7 |
| 4. | Evaporate passes | No | 1+1 |
| 5. | Chilled water circuit pressure loss | mLC | 2.7 |
| 6. | Chilled water Connection diameter | DN | 125 |
| 7. | Glycol type |  | NA |
| 8. | Chilled water glycol% | ( % ) | 0 |
| 9. | Chilled water fouling factor | m² hr °C/kcal | standard |
| 10. | Maximum working pressure | kg/cm²(g) | 8 |

|  |  |  |  |
| --- | --- | --- | --- |
| **B** | **Hot Water Circuit** |  |  |
| 1. | Heat Input | kcal/Hr | 338819 |
| 2. | Hot water flow(+/- 3%) | m³/hr | 17.6 |
| 3. | Hot water inlet temperature | °C | 70 |
| 4. | Hot water outlet temperature | °C | 80 |
| 5. | Side Arm passes | No | 0 |
| 6. | Hot water circuit pressure loss | mLC | 1.2 |
| 7. | Hot water connection diameter | DN | 50 |
| 8. | Maximum working pressure | kg/cm²(g) | what is the key |

|  |  |  |  |
| --- | --- | --- | --- |
| **C** | **Cooling Water Circuit** |  |  |
| 1. | Heat Rejected | kcal/Hr | 701699 |
| 2. | Cooling water flow | m³/hr | 120 |
| 3. | Cooling water inlet temperature | °C | 30 |
| 4. | Cooling water outlet temperature | °C | 34.4 |
| 5. | Absorber / Condenser passes | No | 1+1/1 |
| 6. | Cooling water Bypass Flow | m³/hr | - |
| 7. | Cooling water circuit pressure loss | mLC | 3.9 |
| 8. | Cooling water Connection diameter | DN | 150 |
| 9. | Glycol type |  | NA |
| 10. | Cooling water glycol ( % ) | % | 0 |
| 11. | Cooling water fouling factor | m² hr °C/kcal | standard |
| 12. | Maximum working pressure | kg/cm²(g) | 8 |

|  |  |  |  |
| --- | --- | --- | --- |
| **D** | **Steam Circuit** |  |  |
| 1. | Heat Input | kcal/Hr | 338819 |
| 2. | Steam pressure (Dry Saturated) | kg/cm²(g) | 8 |
| 3. | Steam Consumption (+/-3%) | kg/hr | 592.4 |
| 4. | Condensate drain temperature | °C | 80 - 100 |
| 5. | Condensate drain pressure | kg/cm²(g) | 1 |
| 6. | Connection - Inlet diameter | DN | 50 |
| 7. | Connection - Drain diameter | DN | 25 |
| 8. | Design Pressure | kg/cm²(g) | 10.5 |

|  |  |  |  |
| --- | --- | --- | --- |
| **E** | **Electrical Data** |  |  |
| 1. | Power supply |  | 415 V( ±10%), 50 Hz (±5%), 3 Phase+N |
| 2. | Power consumption | kVA | 8.3 |
| 3. | Absorbent pump rating | kW (A) | 3( 7 ) |
| 4. | Refrigerant pump rating | kW (A) | 0.3( 1.4 ) |
| 5. | Vacuum pump rating | kW (A) | 0.75( 1.8 ) |

|  |  |  |  |
| --- | --- | --- | --- |
| **F** | **Physical Data** |  |  |
| 1. | Length | mm | 3920 |
| 2. | Width | mm | 1950 |
| 3. | Height | mm | 3140 |
| 4. | Operating weight | ton | 7.1 |
| 5. | Shipping weight | ton | 6.6 |
| 6. | Flooded weight | ton | 10 |
| 7. | Dry weight | ton | 5.8 |
| 8. | Tube cleaning space (any one side length-wise) | mm | 3600 |

|  |  |  |  |
| --- | --- | --- | --- |
| **G** | **Tube Metallurgy** |  |  |
| 1. | Evaporator |  | name |
| 2. | Absorber tube material |  | Copper |
| 3. | Condenser tube material |  | Copper |

|  |  |  |  |
| --- | --- | --- | --- |
| **H** | **Low Temperature Heat exchanger Type** |  | **Standard** |

|  |
| --- |
| **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.