

Technical Specification : Vapour Absorption Chiller

|  |  |  |  |
| --- | --- | --- | --- |
| **Client** | **a** | **Version** | **5.1.2.0** |
| **Enquiry** | **a** | **Date** | **09/23/2019, 03:26 PM** |
| **Project** | **a** | **Model** | **TAC S2 C3** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Description** | **Unit** |  |
|  | **Capacity(+/-3%)** | **TR** | **114** |

|  |  |  |  |
| --- | --- | --- | --- |
| **A** | **CHILLED WATER CIRCUIT** |  |  |
| 1. | Chilled water flow | gallon/min | 302.9 |
| 2. | Chilled water inlet temperature | °F | 53.6 |
| 3. | Chilled water outlet temperature | °F | 44.6 |
| 4. | Evaporate passes | No | 1+1 |
| 5. | Chilled water circuit pressure loss | ftLC | 3.9 |
| 6. | Chilled water Connection diameter | NPS | 5 |
| 7. | Glycol type |  | NA |
| 8. | Chilled water glycol % | % | 0 |
| 9. | Chilled water fouling factor | ft² Hr °F/BTU | standard |
| 10. | Maximum working pressure | psi(g) | 114 |

|  |  |  |  |
| --- | --- | --- | --- |
| **B** | **COOLING WATER CIRCUIT** |  |  |
| 1. | Cooling water flow | gallon/min | 501.9 |
| 2. | Cooling water inlet temperature | °F | 89.6 |
| 3. | Cooling water outlet temperature | °F | 98.8 |
| 4. | Absorber / Condenser passes | No | 1+1/1 |
| 5. | Cooling water Bypass Flow | gallon/min | - |
| 6. | Cooling water circuit pressure loss | ftLC | 7.2 |
| 7. | Cooling water Connection diameter | NPS | 6 |
| 8. | Glycol type |  | NA |
| 9. | Cooling water glycol % | % | 0 |
| 10. | Chilled water fouling factor | ft² Hr °F/BTU | standard |
| 11. | Maximum working pressure | psi(g) | 114 |

|  |  |  |  |
| --- | --- | --- | --- |
| **C** | **Steam Circuit** |  |  |
| 1. | Steam pressure | psi(g) | 113.8 |
| 2. | Steam Consumption(+/-3%) | lb/hr | 883 |
| 3. | Condensate drain temperature | °F | 176 - 212 |
| 4. | Condensate drain pressure | psi(g) | 14.2 |
| 5. | Connection - Inlet diameter | NPS | 2.6 |
| 6. | Connection - Drain diameter | NPS | 1.6 |
| 7. | Design Pressure | psi(g) | 149.3 |

|  |  |  |  |
| --- | --- | --- | --- |
| **D** | **Electrical Data** |  |  |
| 1. | Power supply |  | 415 V( ±10%), 50 Hz (±5%), 3 Phase+N |
| 2. | Power consumption | kVA | 7.6 |
| 3. | Absorbent pump rating | kW (A) | 2.2( 6 ) |
| 4. | Refrigerant pump rating | kW (A) | 0.3( 1.4 ) |
| 5. | Vacuum pump rating | kW (A) | 0.8( 1.8 ) |

|  |  |  |  |
| --- | --- | --- | --- |
| **E** | **Physical Data** |  |  |
| 1. | Length | in | 124 |
| 2. | Width | in | 85 |
| 3. | Height | in | 109 |
| 4. | Operating weight | lbs | 14992 |
| 5. | Shipping weight | lbs | 14110 |
| 6. | Flooded weight | lbs | 20724 |
| 7. | Dry weight | lbs | 12126 |
| 8. | Tube cleaning space (any one side length-wise) | in | 105 |

|  |  |  |  |
| --- | --- | --- | --- |
| **F** | **Tube Metallurgy** |  |  |
| 1. | Evaporator tube material |  | Cu Finned |
| 2. | Absorber tube material |  | Cu MiniFinned |
| 3. | Condenser tube material |  | Cu MiniFinned |

|  |  |  |  |
| --- | --- | --- | --- |
| **G** | **Heat exchanger Type** |  | **Standard** |

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.