**Technical Specification : Vapour Absorption Chiller**

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| **Client** | **a** | **Version** | **1.1.0 Dt : 07-Aug-2021** |
| **Enquiry** | **a** | **Date** | **07-Aug-2021, 14:53** |
| **Project** | **a** | **Model** | **TCH S2 E2** |

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|  | **Description** | **Unit** |  |
|  | **Capacity(+/-3%)** | **TR** | **320** |

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| **A** | **Chilled Water Circuit** |  |  |
| 1. | Chilled water flow | GPM | 849.8 |
| 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 | 15.4 |
| 6. | Chilled water Connection diameter | NPS | 8 |
| 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 |

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| **B** | **Hot Water Circuit** |  |  |
| 1. | Heat Duty | MBH | 96768 |
| 2. | Hot water flow(+/- 3%) | GPM | 21.7 |
| 3. | Hot water inlet temperature | °F | 158 |
| 4. | Hot water outlet temperature | °F | 194 |
| 5. | Side Arm passes | No | 2 |
| 6. | Hot water circuit pressure loss | ftLC | 2.6 |
| 7. | Hot water connection diameter | NPS | 2 |
| 8. | Maximum working pressure | psi(g) | 113.8 |

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| **C** | **Cooling Water Circuit** |  |  |
| 1. | Heat Rejected | MBH | 6624.1 |
| 2. | Cooling water flow | GPM | 1000 |
| 3. | Cooling water inlet temperature | °F | 89.6 |
| 4. | Cooling water outlet temperature | °F | 102.2 |
| 5. | Absorber / Condenser passes | No | 1+1/1 |
| 6. | Cooling water Bypass Flow | GPM | - |
| 7. | Cooling water circuit pressure loss | ftLC | 10.8 |
| 8. | Cooling water Connection diameter | NPS | 10 |
| 9. | Glycol type |  | NA |
| 10. | Cooling water glycol ( % ) | % | 0 |
| 11. | Cooling water fouling factor | ft² Hr °F/BTU | standard |
| 12. | Maximum working pressure | psi(g) | 114 |

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| **D** | **Steam Circuit** |  |  |
| 1. | Heat Input | MBH | 2784.1 |
| 2. | Steam pressure (Dry Saturated) | psi(g) | 113.8 |
| 3. | Steam Consumption (+/-3%) | lb/hr | 2704.4 |
| 4. | Condensate drain temperature | °F | 176 - 212 |
| 5. | Condensate drain pressure | psi(g) | 14.2 |
| 6. | Connection - Inlet diameter | NPS | 4 |
| 7. | Connection - Drain diameter | NPS | 1.6 |
| 8. | Design Pressure | psi(g) | 149.3 |

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| **E** | **Electrical Data** |  |  |
| 1. | Power supply |  | 415 V( ±10%), 50 Hz (±5%), 3 Phase+N |
| 2. | Power consumption | kVA | 12.2 |
| 3. | Absorbent pump rating | kW (A) | 6.6( 12.4 ) |
| 4. | Refrigerant pump rating | kW (A) | 0.3( 1.4 ) |
| 5. | Vacuum pump rating | kW (A) | 0.75( 1.8 ) |

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| **F** | **Physical Data** |  |  |
| 1. | Length | in | 193 |
| 2. | Width | in | 103 |
| 3. | Height | in | 152 |
| 4. | Operating weight | lbs | 35935.3 |
| 5. | Shipping weight | lbs | 33730.7 |
| 6. | Flooded weight | lbs | 53572.3 |
| 7. | Dry weight | lbs | 27337.3 |
| 8. | Tube cleaning space (any one side length-wise) | in | 184.3 |

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

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

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| **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.