

Technical Specification : Vapour Absorption Chiller

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| **Client** | **a** | **Version** | **5.1.2.0** |
| **Enquiry** | **a** | **Date** | **01/06/2020, 02:57 PM** |
| **Project** | **a** | **Model** | **TAC H2 C3** |

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

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| **A** | **CHILLED WATER CIRCUIT** |  |  |
| 1. | Chilled water flow | m³/hr | 68.8 |
| 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 | 1.2 |
| 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 |

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| **B** | **COOLING WATER CIRCUIT** |  |  |
| 1. | Cooling water flow | m³/hr | 114 |
| 2. | Cooling water inlet temperature | °C | 32 |
| 3. | Cooling water outlet temperature | °C | 37 |
| 4. | Absorber / Condenser passes | No | 1+1/1 |
| 5. | Cooling water Bypass Flow | m³/hr | - |
| 6. | Cooling water circuit pressure loss | mLC | 2.2 |
| 7. | Cooling water Connection diameter | DN | 150 |
| 8. | Glycol type |  | NA |
| 9. | Cooling water glycol % | % | 0 |
| 10. | Chilled water fouling factor | m² hr °C/kcal | standard |
| 11. | Maximum working pressure | kg/cm²(g) | 8 |

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| **C** | **Hot Water Circuit** |  |  |
| 1. | Hot water flow(+/- 3%) | m³/hr | 24.3 |
| 2. | Hot water inlet temperature | °C | 180 |
| 3. | Hot water outlet temperature | °C | 170 |
| 4. | Generator passes | kg/cm²(g) | 4 |
| 5. | Hot water circuit pressure loss | mLC | 2 |
| 6. | Hot water connection diameter | DN | 80 |
| 7. | Maximum working pressure | kg/cm²(g) | 13.2 |

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| **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) | 0.75( 1.8 ) |

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| **E** | **Physical Data** |  |  |
| 1. | Length | mm | 3140 |
| 2. | Width | mm | 2140 |
| 3. | Height | mm | 2750 |
| 4. | Operating weight | ton | 6.9 |
| 5. | Shipping weight | ton | 6.5 |
| 6. | Flooded weight | ton | 9.5 |
| 7. | Dry weight | ton | 5.6 |
| 8. | Tube cleaning space (any one side length-wise) | mm | 2560 |

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

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

1. Note----Please refer to Engg team for increase in weight & cost due to higher working pressure in Hot water

2. This selection is valid for insulated chiller only.

3. For non-insulated chiller, the Capacity and Heat source consumption will vary.

4. Plant Room Temperature should be from +5 deg C to +45 deg C

5. Please contact Thermax representative / Office for customised specifications.