**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, 15:12** |
| **Project** | **a** | **Model** | **TAC E2 M1** |

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|  | **Description** | **Unit** |  |
|  | **Capacity(+/-3%)** | **TR** | **40** |

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| **A** | **Chilled Water Circuit** |  |  |
| 1. | Chilled water flow | GPM | 106.1 |
| 2. | Chilled water inlet temperature | °F | 53.6 |
| 3. | Chilled water outlet temperature | °F | 44.6 |
| 4. | Evaporate passes | No | 2+2 |
| 5. | Chilled water circuit pressure loss | ftLC | 17.4 |
| 6. | Chilled water Connection diameter | NPS | 3.2 |
| 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** | **Cooling Water Circuit** |  |  |
| 1. | Heat Rejected | MBH | 811.5 |
| 2. | Cooling water flow | GPM | 211.3 |
| 3. | Cooling water inlet temperature | °F | 89.6 |
| 4. | Cooling water outlet temperature | °F | 97.3 |
| 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 |
| 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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| **C** | **EXHAUST GAS CIRCUIT** |  |  |
| 1. | Heat Input | MBH | 331.5 |
| 2. | Engine Type | - | gas |
| 3. | Exhaust Gas Flow (+/-3%) | lb/hr | 2866 |
| 4. | Exhaust Gas inlet temperature | °F | 932 |
| 5. | Exhaust Gas Outlet temperature | °F | 495.6 |
| 6. | Exhaust Connection Diameter(Indicative) | NPS | 10 |
| 7. | Exhaust Gas Sp.Heat Capacity | BTU/lb°F | 0.3 |
| 8. | Exhaust Gas Flow | lb/hr | 1300 |
| 9. | Percentage Engine Load considered | % | 2866 |
| 10. | Allowable Pressure Drop in VAM - EG Furnace | ftWC | 0.5 |

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| **D** | **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 ) |

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

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| **G** | **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.