**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, 14:45** |
| **Project** | **a** | **Model** | **TAC G2 E2** |

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|  | **Description** | **Unit** |  |
|  | **Capacity(+/-3%)** | **TR** | **350** |

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| **A** | **Chilled Water Circuit** |  |  |
| 1. | Chilled water flow | GPM | 929.4 |
| 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 | 18.4 |
| 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 | 105840 |
| 2. | Hot water flow(+/- 3%) | GPM | 23.8 |
| 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 | 3.9 |
| 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 | 7283.9 |
| 2. | Cooling water flow | GPM | 1080 |
| 3. | Cooling water inlet temperature | °F | 89.6 |
| 4. | Cooling water outlet temperature | °F | 102.4 |
| 5. | Absorber / Condenser passes | No | 1+1/1 |
| 6. | Cooling water Bypass Flow | GPM | - |
| 7. | Cooling water circuit pressure loss | ftLC | 12.5 |
| 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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| **C** | **DIRECT FIRED CIRCUIT** |  |  |
| 1. | Heat Input | MBH | 3272.9 |
| 2. | Fuel Type |  | NaturalGas |
| 3. | Calorific value type | GCV | Normal |
|  | Gas Pressure | mbar | 100 |
| 4. | Calorific Value | BTU/Ncu.ft | 1011.3 |
| 5. | Fuel consumption ( + 3 % ) | GCV | 3116 |
| 6. | Exhaust Gas duct size | NPS | 300 |

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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 ) |
| 6. | Burner Rating | kW (A) | 4( 8.7 ) |

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| **F** | **Physical Data** |  |  |
| 1. | Length | in | 203 |
| 2. | Width | in | 135 |
| 3. | Height | in | 156 |
| 4. | Operating weight | lbs | 42549.2 |
| 5. | Shipping weight | lbs | 40565.1 |
| 6. | Flooded weight | lbs | 60406.7 |
| 7. | Dry weight | lbs | 31746.6 |
| 8. | Tube cleaning space (any one side length-wise) | in | 165.4 |

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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.

5. Burner Selection is valid upto 100m above mean Sea level.