

Azanechiller

Plant Specification

The air cooled range of **Azanechiller** are complete refrigeration packages housed in one unit. Each chiller comprises open type, screw compressors, a vertical oil separator, a semi-welded plate heat exchanger evaporator, a low-charge surge drum, an air-cooled condenser with a separate oil cooling circuit and an electrical control panel assembled onto a common fabricated steel frame. All interconnecting pipework, valves and wiring are included in the complete package.

All pressure vessels designed to PD5500:2012

One starter/control panel is included. It incorporates all isolators, starters and fuses for the compressors. A panel mounted Mitsubishi HMI allows automatic and manual control of the plant. In addition it displays machinery status, faults and hours run. The control circuit is protected by a miniature circuit breaker and a door-interlocked isolator is fitted. Different modes of control and extra isolators for fans and motors are available as options, contacts are provided to connect to a Building Management System for monitoring purposes.

Details of the **Azanechiller** can be found in the technical schedule below:

| Technical Schedule | | | AA400 |
|---|--|-----------|---------------------|
| GENERAL | Capacity (kW) | Chiller 1 | 275 |
| | | Chiller 2 | 222 |
| | | Chiller 3 | 191 |
| | Condensing Temp (°C) | Chiller 1 | 44.0 |
| | | Chiller 2 | 43.0 |
| | | Chiller 3 | 41.0 |
| | Dry Bulb Temperature (°C) | | 33.0 |
| | Power Supply | | 400V/3ph/50Hz |
| | Sound Pressure Level (dB(A) @ 10m) (ISO1680) | | 65 |
| | Dimensions (m) – (L x W x H) | | 5.5 x 2.9 x 2.5 |
| | Dry Weight (kg) | | 10249 |
| | Operating Weight (kg) | | 10546 |
| | Refrigerant Charge (kg) | | 79 |
| | Full Load Current (A) | | 278 |
| Chilled Fluid Pipes Size (NB) | | 100 DIN | |
| OPEN SCREW COMPRESSORS | Quantity | | 2 |
| | Max. Absorbed Power (kW) per compressor | | 47 |
| | Motor power (kW) per compressor | | 75 |
| | Enclosure | | IP55 |
| AIR COOLED CONDENSER | Heat Rejection Cap (kW) | | 324.6 |
| | No. of Fans | | 10-off |
| | Air Flow Volume (m ³ /s) | | 48 |
| | Total Absorbed Fan Power (kW) | | 25.6 |
| | Fan Speed | | 860 |
| PLATE HEAT EXCHANGER EVAPORATOR | Cold Side Medium | | R717 |
| | Hot Side Medium | | 40% Ethylene Glycol |
| | Hot Temp In/Out (°C) | Chiller 1 | +1/-5 |
| | | Chiller 2 | -5/-9.9 |
| | | Chiller 3 | -9.9/-14 |
| | Evaporating Temp (°C) | Chiller 1 | -7.7 |
| | | Chiller 2 | -12.7 |
| Chiller 3 | | -17 | |
| Fluid Flow (m ³ /h) (Design) | | 13.27 | |