

# TECHNICAL DATA SHEET

# SIGMA 22

## COOLING DUTY

- Chilled water temperature
- Duty (32°C ambient)
- Ambient temperature range for the standard design
- Chilled water temperature available in the standard design

Note: water chilled below +5°C will require antifreeze added.

|    |          |    |      |
|----|----------|----|------|
| °C | 10       | 15 | 20   |
| kW | 16.9     | 20 | 21.7 |
| °C | 10 to 42 |    |      |
| °C | 10 to 25 |    |      |

## REFRIGERATION SYSTEM

- Compressor
 

|                          |                 |
|--------------------------|-----------------|
| Type                     | Hermetic scroll |
| Nominal power (each)     | kW 7.4          |
| Number off               | One             |
| Full load current (each) | amps 15.2       |
| Refrigerant type         | R410A           |
  
- Condenser unit
 

|                      |         |               |
|----------------------|---------|---------------|
| Air cooled condenser | No. off | One           |
| Material             |         | All aluminium |
| Fan arrangement      | No. off | One           |
| air flow             | m3/hr   | 60000         |
| motor power          | kW      | 0.71          |
| Full load current    | amps    | 1.4           |

- or

|                        |             |                 |
|------------------------|-------------|-----------------|
| Water cooled condenser | No. off     | One             |
| Water flow             | litres/hour | 2000            |
| Pressure drop          | bar         | 0.2             |
|                        | Material    | Stainless steel |
  
- Evaporator
- Refrigeration controls: control thermostat, compressor over-temperature protection, refrigerant drier, expansion valve, high pressure switch, fan pressure switch.

## WATER SYSTEM

- Water system instruments
 

|   |  |
|---|--|
| Digital electronic temperature display and control +/-1°C |  |
| Tank water level indicator                                |  |
| Water pressure gauge                                      |  |
| Permanent bypass  |  |
| Water level switch (pump security)                        |  |
  
- Bulk holding tank
 

|               |        |         |
|---------------|--------|---------|
| Capacity      | litres | 300     |
| Material*     |        | Plastic |
| Water filling |        | Mains   |
  
- Water pump
 

|                   |       |                       |
|-------------------|-------|-----------------------|
| Type              |       | Horizontal multistage |
| Flow              | m3/hr | 3.5                   |
| Pressure          | bar   | 2.5                   |
| Motor power       | kW    | 0.65                  |
| Full load current | amp   | 1.8                   |
  
- Connections
 

|                      |            |     |
|----------------------|------------|-----|
| Warm water INLET     | BSP female | 1 ¼ |
| Chilled water OUTLET | BSP female | 1 ¼ |
| Mains water          | BSP female | 3/8 |
| Drain                | BSP male   | ½   |

\*If heaters are fitted into tank it is manufactured of stainless steel

# TECHNICAL DATA SHEET

# SIGMA 22

## ELECTRICAL SYSTEM

- Mains supply for the standard design
- Control
- Total nominal power
- Maximum starting load (per phase)
- Safety fuse
- Electrical controls: direct on line. Incorporates safety overload.
- Protection rating IP54
- Collective fault/remote signal
- Remote control via volt free signal
- Fan speed control

|                  |              |
|------------------|--------------|
| Volt phase cycle | 400 / 3 / 50 |
| Voltage          | 24           |
| kW               | 9            |
| amp              | 18.7         |
| amp              | 20           |

## NOISE LEVEL

@ 1m free field

dB'A' **71**

## HEAT RECOVERY

From air or water cooled condenser

kW **23.5**

## WEIGHT

|            |            |
|------------|------------|
| Dry kg     | <b>320</b> |
| Working kg | <b>620</b> |

## DIMENSIONS (mm)

- Stainless steel enclosure

|        |             |
|--------|-------------|
| Width  | <b>1000</b> |
| Depth  | <b>1000</b> |
| Height | <b>2055</b> |

## FINISH

Paint RAL9005

## OPTIONS

Reinjection for high return water temperatures  
 Low ambient kit  
 Frost protection  
 Close temperature control  $\pm 0.5^{\circ}\text{C}$  or  $\pm 0.1^{\circ}\text{C}$   
 Control temperature parallel with ambient  
 High ambient conditions  
 Stainless steel evaporator coil  
 Systems suitable for deionised water  
 Additional water level switch  
 Flow switch  
 Pump isolation valves  
 High pressure pumps  
 Pressure relief valve  
 Autofill by solenoid valve

Twin inlets/outlets  
 Insulation  
 Freeze stat  
 Pressure gauge  
 Stainless steel tank  
 Remote control  
 Special electrical circuits  
 24V DC control circuit  
 Power supply various  
 Cable marking  
 Harting connectors  
 Lifting handles  
 GRP cover for external use  
 Commissioning