

# TECHNICAL DATA SHEET

# SIGMA 9

## 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	6.6	7.8	8.7
°C	10 to 42		
°C	10 to 25		

## REFRIGERATION SYSTEM

- Compressor
 

Type	Hermetic scroll
Nominal power (each)	kW 3.6
Number off	One
Full load current (each)	amps 5.8
Refrigerant type	R410A
  
- Condenser unit
 

Air cooled condenser	No. off	One
Material		All aluminium
Fan arrangement	No. off	One
air flow	m3/hr	4500
motor power	kW	0.71
Full load current	amps	1.4

- or

Water cooled condenser	No. off	One
Water flow	litres/hour	830
Pressure drop	bar	0.6
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	120
Material*		Plastic
Water filling		Mains
  
- Water pump
 

Type	Horizontal multistage	
Flow	m3/hr	1.5
Pressure	bar	3.0
Motor power	kW	0.46
Full load current	amp	1.2
  
- Connections
 

Warm water INLET	BSP female	¾
Chilled water OUTLET	BSP female	¾
Mains water	BSP female	3/8

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

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## 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	5
amp	8.7
amp	16

## NOISE LEVEL

@ 1m free field

dB'A' **71**

## HEAT RECOVERY

From air or water cooled condenser

kW **9.5**

## WEIGHT

Dry kg	<b>180</b>
Working kg	<b>300</b>

## DIMENSIONS (mm)

- Stainless steel enclosure

Width	<b>715</b>
Depth	<b>715</b>
Height	<b>1545</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