

# TECHNICAL DATA SHEET

# SIGMA 42

## 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	31.4	37	41.5
°C	10 to 42		
°C	10 to 25		

## REFRIGERATION SYSTEM

- Compressor
 

Type	Hermetic scroll
Nominal power (each)	kW 14.8
Number off	One
Full load current (each)	amps 24.2
Refrigerant type	R410A
  
- Condenser unit
 

Air cooled condenser	No. off	Two
Material	All aluminium	
Fan arrangement	No. off	One
air flow	m3/hr	10000
motor power	kW	1.63
Full load current	amps	2.86

- or

Water cooled condenser	No. off	One
Water flow	litres/hour	3800
Pressure drop	bar	0.4
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	6.5
Pressure	bar	2.5
Motor power	kW	1.2
Full load current	amp	3.0
  
- 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

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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	17.9
amp	30.4
amp	35

## NOISE LEVEL

@ 1m free field

dB'A' **71**

## HEAT RECOVERY

From air or water cooled condenser

kW **45**

## WEIGHT

Dry kg	<b>350</b>
Working kg	<b>650</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