

TECHNICAL DATA SHEET

SIGMA 52

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	38.9	45.5	51.8
°C	10 to 42		
°C	10 to 25		

REFRIGERATION SYSTEM

- Compressor

Type	Hermetic scroll
Nominal power (each)	kW 16.6
Number off	One
Full load current (each)	amps 28.2
Refrigerant type	R410A

- Condenser unit

Air cooled condenser	No. off	Two
Material	All aluminium	
Fan arrangement	No. off	One
air flow	m3/hr	10800
motor power	kW	1.63
Full load current	amps	2.86

- or

Water cooled condenser	No. off	One
Water flow	litres/hour	4600
Pressure drop	bar	0.3
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	7
Pressure	bar	2.5
Motor power	kW	1.2
Full load current	amp	3

- Connections

Warm water INLET	BSP female	1 ½
Chilled water OUTLET	BSP female	1 ½
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 52

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	19.7
amp	34.4
amp	40

NOISE LEVEL

@ 1m free field

dB'A' **71**

HEAT RECOVERY

From air or water cooled condenser

kW **54**

WEIGHT

Dry kg	370
Working kg	670

DIMENSIONS (mm)

- Stainless steel enclosure

Width	1000
Depth	1000
Height	2055

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