

TECHNICAL DATA SHEET

SIGMA 80

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	60.7	71.3	79.8
°C	10 to 42		
°C	10 to 25		

REFRIGERATION SYSTEM

- Compressor

Type	Hermetic scroll
Nominal power (each)	kW 26.7
Number off	One
Full load current (each)	amps 43.6
Refrigerant type	R410A

- Condenser unit

Air cooled condenser	No. off	Two
Material		All aluminium
Fan arrangement	No. off	One
air flow	m3/hr	15500
motor power	kW	1.97
Full load current	amps	3.4

- or

Water cooled condenser	No. off	One
Water flow	litres/hour	7200
Pressure drop	bar	0.51

- Evaporator

	Material	Stainless steel
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- 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	12.7
Pressure	bar	2.9
Motor power	kW	2.2
Full load current	amp	4.7

- Connections

Warm water INLET	BSP female	2
Chilled water OUTLET	BSP female	2
Mains water	BSP female	3/8
Drain	BSP male	1/2

*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	31.1
amp	52
amp	63

NOISE LEVEL

@ 1m free field

dB'A' **72**

HEAT RECOVERY

From air or water cooled condenser

kW **84**

WEIGHT

Dry kg **440**
 Working kg **740**

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