

TECHNICAL DATA SHEET

SIGMA 160

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	121.4	142.6	159.6
°C	10 to 42		
°C	10 to 25		

REFRIGERATION SYSTEM

- Compressor

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

Air cooled condenser	No. off	Four
Material		All aluminium
Fan arrangement	No. off	One
air flow	m3/hr	31000
motor power	kW	1.97
Full load current	amps	3.4

- or

Water cooled condenser	No. off	Two
Water flow	litres/hour	8000
Pressure drop	bar	0.28
- 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	400
Material*		Plastic
Water filling		Mains
- Water pump

Type	Horizontal multistage	
Flow	m3/hr	25
Pressure	bar	2.5
Motor power	kW	4
Full load current	amp	812
- Connections

Warm water INLET	Flanged DN65	2 ½
Chilled water OUTLET	Flanged DN65	2 ½
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	61.6
amp	102.5
amp	125

NOISE LEVEL

@ 1m free field

dB'A' **72**

HEAT RECOVERY

From air or water cooled condenser

kW **164**

WEIGHT

Dry kg **880**
 Working kg **1280**

DIMENSIONS (mm)

- Stainless steel enclosure

Width **2000**
 Depth **1000**
 Height **2055**

FINISH

Paint RAL9005

OPTIONS

- | | |
|--|-----------------------------|
| Reinjection for high return water temperatures | Twin inlets/outlets |
| Low ambient kit | Insulation |
| Frost protection | Freeze stat |
| Close temperature control $\pm 0.5^{\circ}\text{C}$ or $\pm 0.1^{\circ}\text{C}$ | Pressure gauge |
| Control temperature parallel with ambient | Stainless steel tank |
| High ambient conditions | Remote control |
| Stainless steel evaporator coil | Special electrical circuits |
| Systems suitable for deionised water | 24V DC control circuit |
| Additional water level switch | Power supply various |
| Flow switch | Cable marking |
| Pump isolation valves | Harting connectors |
| High pressure pumps | Lifting handles |
| Pressure relief valve | GRP cover for external use |
| Autofill by solenoid valve | Commissioning |