TECHNICAL DATA SHEET

SIGMA-C 16

COOLING DUTY

• Chilled water temperature	°C	10	15	20
• Duty (32°C ambient)	kW	10.67	12.7	14.67
• Ambient temperature range for the standard design	°C	10 to 42		
• Chilled water temperature available in the standard design	°C	10 to 20		

Note: water chilled below +5°C will require antifreeze added.

REFRIGERATION SYSTEM

• Compressor	Type		Hermetic scroll
	Nominal power	kW	5.7
	Full load current	amps	13.4
	Refrigerant type		R410A
• Condenser unit	Air cooled condenser	No. off	One
	Material		All aluminium
	Air flow	m3/hr	4300
	Motor power	kW	0.71
	Full load current	amps	1.4
- or	Water cooled condenser	No. off	One
	Water flow	litres/hour	3300
	Pressure drop	bar	0.6
• Evaporator		Material	Stainless steel

• Refrigeration controls: compressor over-temperature protection, refrigerant drier, expansion valve, high/low pressure switch

WATER SYSTEM

• Water system instruments • Digital electronic temperature display and control +/-1°C • Permanent bypass

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• Bulk holding tank	Capacity	litres	26
	Material*		Plastic
	Water filling		Manual
• Water pump	Type		Horizontal multistage
	Flow	m3/hr	2.4
	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

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

ELECTRICAL SYSTEM

• Mains supply for the standard design	Volt phase cycle	400 / 3 / 50
• Control	Voltage	24VAC
• Total nominal power	kW	7.1
• Maximum load (per phase)	amp	13.4
• Safety fuse	amp	16

• Electrical controls: direct on line. Incorporates safety overload. • Remote control via volt free signal

• Protection rating IP54 • Collective fault/remote signal

NOISE LEVEL

@ 1m free field — dB'A' — 71

HEAT RECOVERY

From air or water cooled condenser — kW — 19

WEIGHT

Dry kg: 130 — Working kg: 156

DIMENSIONS (mm)

• Stainless steel frame
• Painted panels RAL5019

Width: 720 — Depth: 835 — Height: 930

OPTIONS

Pressure gauge
Level switch pump protection
Level switch warning
Water level gauge
Reinjection for high return water temperatures
Low ambient kit
Frost protection

Close temperature control ±0.5°C or ±0.1°C
Control temperature parallel with ambient
High ambient conditions
Systems suitable for deionised water
Flow switch
Pump isolation valves
High pressure pumps

Pressure relief valve
Autofill by solenoid valve
Twin inlets/outlets
Insulation
Freeze stat
Stainless steel tank
Special electrical circuits

24V DC control circuit
Power supply various
Cable marking
Harting connectors
Commissioning