

Ultima Compact™
Air Cooled Liquid Chiller
R410A
30kW - 150kW



Technical Manual



FM00542

EMS52086

Customer Services

Warranty, Commissioning & Maintenance

As standard, Airedale guarantees all non consumable parts only for a period of 12 months, variations tailored to suit product and application are also available; please contact Airedale for full terms and details.

To further protect your investment in Airedale products, Airedale can provide full commissioning services, comprehensive maintenance packages and service cover 24 hours a day, 365 days a year (UK mainland).

For a free quotation contact Airedale or your local Sales Engineer.

All Airedale products are designed in accordance with EU Directives regarding prevention of build up of water, associated with the risk of contaminants such as legionella.

For effective prevention of such risk it is necessary that the equipment is maintained in accordance with Airedale recommendations.

ChillerGuard

In addition to commissioning, a 24 hour, 7 days a week on-call service is available throughout the year to UK mainland sites. This service will enable customers to contact a duty engineer outside normal working hours and receive assistance over the telephone. The duty engineer can, if necessary, attend site, usually within 24 hours or less.

Full details will be forwarded on acceptance of the maintenance agreement.

CAUTION ⚠

Warranty cover is not a substitute for maintenance. Warranty cover is conditional to maintenance being carried out in accordance with the recommendations provided during the warranty period. Failure to have the maintenance procedures carried out will invalidate the warranty and any liabilities by Airedale International Air Conditioning Ltd.

Spares

A spares list for 1, 3 and 5 years will be supplied with every unit and is also available from our Spares department on request.

Training

As well as our comprehensive range of products, Airedale offers a modular range of Refrigeration and Air Conditioning Training courses, for further information please contact Airedale.

Customer Services

For further assistance, please e-mail: enquiries@airedale.com or telephone:

UK Sales Enquiries	+ 44 (0) 113 239 1000	enquiries@airedale.com
International Enquiries	+ 44 (0) 113 239 1000	enquiries@airedale.com
Spares Hot Line	+ 44 (0) 113 238 7878	spares@airedale.com
Airedale Service	+ 44 (0) 113 239 1000	service@airedale.com
Technical Support	+ 44 (0) 113 239 1000	tech.support@airedale.com
Training Enquiries	+ 44 (0) 113 239 1000	training@airedale.com

For information, visit us at our web site: www.airedale.com

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Health and Safety**IMPORTANT**

The information contained in this manual is critical to the correct operation and maintenance of the unit and should be read by all persons responsible for the installation, commissioning and maintenance of this Airedale unit.

Safety

The equipment has been designed and manufactured to meet international safety standards but, like any mechanical/ electrical equipment, care must be taken if you are to obtain the best results.

CAUTION ⚠

When working with any air conditioning units ensure that the electrical isolator is switched off prior to servicing or repair work and that there is no power to any part of the equipment. Also ensure that there are no other power feeds to the unit such as fire alarm circuits, BMS circuits etc.

Electrical installation commissioning and maintenance work on this equipment should be undertaken by competent and trained personnel in accordance with local relevant standards and codes of practice.

A full hazard data sheet in accordance with COSHH regulations is available should this be required.

Personal Protective Equipment

Airedale recommends that personal protective equipment is used whilst installing, maintaining and commissioning equipment.

Manual Handling

Some operations when servicing or maintaining the unit may require additional assistance with regard to manual handling. This requirement is down to the discretion of the engineer.

Remember do not perform a lift that exceeds your ability.

Refrigerant Warning

The Airedale unit uses R410A refrigerant which requires careful attention to proper storage and handling procedures.

Use only manifold gauge sets designed for use with R410A refrigerant. Use only refrigerant recovery units and cylinders designed for high pressure refrigerants.

R410A must only be charged in the liquid state to ensure correct blend makeup.

The refrigerant must be stored in a clean, dry area away from sunlight. The refrigerant must never be stored above 50°C.

Pressure Equipment Directive (2014/68/EU)**Minimum and Maximum Operation Temperature (Ts) and Pressure (Ps)****Refrigeration**

Allowable Temperature Range (Ts), Ts = Min -20°C* to Max 120°C**

Maximum Allowable Pressure (Ps) Ps = High Side 36 Barg Low side 30 Barg

*Based on the refrigerant temperature in the unit off state in the lowest permitted ambient temperature.

**Based on the maximum allowable super heated refrigerant temperature.

Waterside

Allowable Temperature Range (Ts), Ts = Min -20°C* to Max 40°C**

Maximum Allowable Pressure (Ps) Ps = 10 Barg

*Based on the waterside temperature in the unit off state in the lowest permitted ambient temperature.

**Based on the waterside temperature in the unit off state in the highest permitted ambient temperature.

Pressure System Safety Regulations 2000

Refrigeration assemblies/systems may constitute a Pressure System as defined in the Pressure System Safety Regulations 2000.

Global Warming Potential

The R410A refrigerant has a GWP of 2088 (based on EN378-1:2016, 100 year life)

Ecodesign Directive 2009/125/EC

The product range within this document is designed in accordance to the European Ecodesign Directive 2009/125/EC.

The appendix at the rear section of the manual gives the product compliancy metrics. Products sold outside of the EU are exempt from this directive.

Environmental Considerations

Units with supply water temperatures below +5°C

- Glycol is recommended when a supply water temperature of +5°C or below is required or when static water can be exposed to freezing temperatures.

Units subject to ambient temperatures lower than 0°C

- Glycol of an appropriate concentration (1) must be used within the system to ensure adequate freeze protection. Please ensure that the concentration is capable of protection to at least 3K lower than ambient.
- Water / glycol solution should be constantly circulated through all waterside pipework and coils to avoid static water from freezing.
- Ensure that pumps are started and running even during shut down periods, when the ambient is within 3K of the solution freeze point (1) (i.e. if the solution freezes at 0°C, the pump must be operating at 3°C ambient).
- Additional trace heating is provided for interconnecting pipework.

(1) Refer to your glycol supplier for details.

Environmental Policy

It is our policy to:

- Take a proactive approach to resolve environmental issues and ensure compliance with regulatory requirements.
- Train personnel in sound environmental practices.
- Pursue opportunities to conserve resources, prevent pollution and eliminate waste.
- Manufacture products in a responsible manner with minimum impact on the environment.
- Reduce our use of chemicals and minimise their release to the environment.
- Measure, control and verify environmental performance through internal and external audits.
- Continually improve our environmental performance.

CE Directive

Airedale certify that the equipment detailed in this manual conforms with the following EC Directives:

Electromagnetic Compatibility Directive (EMC)	2014/30/EU
Machinery Directive (MD)	89/392/EEC version 2006/42/EC
Pressure Equipment Directive (PED)	2014/68/EU
Ecodesign	2009/125/EC

To comply with these directives appropriate national & harmonised standards have been applied. These are listed on the Declaration of Conformity, supplied with each product.

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Specification

	U	CCR	075	D	R-	2	A	G	G
U	Ultima								
CCR	CCR = Compact Chiller R410A								
xxx	Nominal Capacity (kW)								
	Number of Circuits								
S	Single Circuit								
D	Dual Circuit								
	Noise Variant								
R-	Regular Quiet								
X-	Extra Quiet								
1-4	Number of Fans/Case size								
A	Evaporator Type								
C - R	Compressor Configuration Circuit 1; 0 if n/a								
C - R	Compressor Configuration Circuit 2; 0 if n/a								

Introduction

The Airedale range of Ultima Compact air cooled liquid chillers covers the nominal capacity range 30kW to 150kW. The range comprises of 44 units in 5 case sizes. The range is available with many optional variations including Regular Quiet (R) and Extra Quiet (X) sound levels.

Attention has been placed on maximising the unit's performance while keeping the sound and vibration levels and footprint to an absolute minimum.

Construction

The base is fabricated from galvanised steel to ensure a tough, durable, weatherproof construction. The superstructure is manufactured from galvanised sheet steel coated with epoxy baked powder paint to provide a durable and weatherproof finish. Standard unit colour is Light Grey (RAL 7035).

Compressors and evaporator are mounted on a rigid galvanised heavy-duty sub frame. Fully weatherproofed electrical panels are situated at one end of the unit. Access to the compressors is via end panels adjacent to the electrical control panel.

Refrigeration

	Features	System Configuration									
		R Type					X Type				
		UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN	UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN
Refrigeration	Full Operating Charge of R410A	●	●	●	●	●	●	●	●	●	●
	Scroll Compressor Arrangement	●	●	●	●	●	●	●	●	●	●
	Plate Evaporator	●	●	●	●	●	●	●	●	●	●
	Enhanced Refrigeration Condenser Coils	●	●	●	●	●	●	●	●	●	●
	Epoxy Coated RTPF Condenser Coils	○	○	○	○	○	○	○	○	○	○
	Electronic Expansion Valve	●	●	●	●	●	●	●	●	●	●
	Liquid Line Sight Glass	●	●	●	●	●	●	●	●	●	●
	Liquid and Discharge Line Ball Valve	●	●	●	●	●	●	●	●	●	●
	Large Capacity Filter Drier	●	●	●	●	●	●	●	●	●	●
	Auto Reset HP/LP Switch (LP Via Microprocessor)	●	●	●	●	●	●	●	●	●	●
	Leak Detection	○	○	○	○	○	○	○	○	○	○
	Suction and Liquid Pressure Transducers	●	●	●	●	●	●	●	●	●	●
	Compressor Minimum Differential Pressure Protection	●	●	●	●	●	●	●	●	●	●
	Pressure Relief Valve	○	○	○	○	○	○	○	○	○	○
	Refrigerant Leak Detection	○	○	○	○	○	○	○	○	○	○

● Standard Features ○ Optional Features — Feature Not Available

Evaporator

Stainless steel high efficiency brazed plate heat exchanger(s) will allow optimum heat transfer between media. Each heat exchanger shall be insulated with closed cell polyurethane foam to Class 1 fire rating.

A pad heater is fitted to the single evaporator and will protect against freeze up in ambient temperatures as low as -20°C.

Internal water pipework is trace heated.

Connections for External Trace Heating (240V/500W available).

Condenser

Large surface area coil(s) ideally positioned to optimise airflow and heat transfer, it shall be manufactured from refrigeration quality copper tubes with mechanically bonded aluminium fins.

Epoxy Coated Condenser Coil

In atmospheres where high corrosion is anticipated epoxy coated aluminium finned coils shall be fitted.

Compressor

Scroll compressors comprising:

- Internal motor protection
- Integrated Discharge Valve
- Non return valve
- External discharge temperature protection
- Oil sight glass
- Sump heater

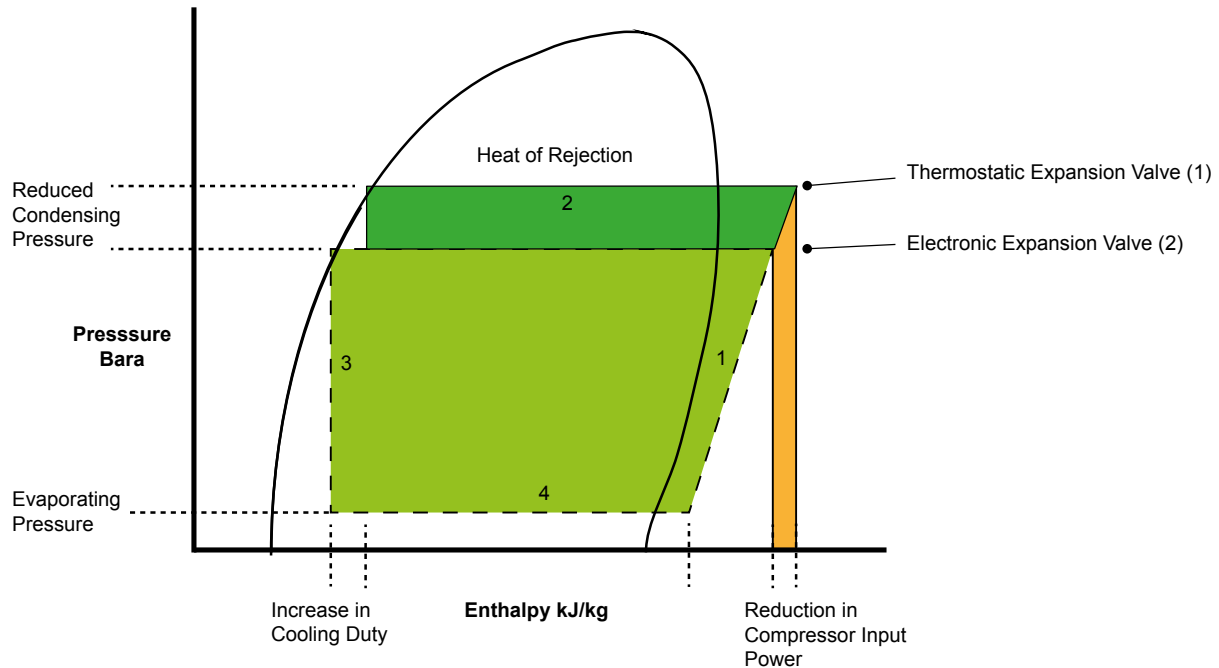
Each Tandem/Trio set has an oil equalisation line.

The compressors shall be mounted to the rigid galvanised heavy duty sub-frame with the use of vibration reducing isolation.

Electronic Expansion Valve

Electronic expansion valves differ to the normal thermostatic expansion valves in their ability to maintain control of the suction superheat at reduced head pressures. This can lead to significant energy savings particularly at minimum loading and low ambient temperatures.

Using an EEV allows for good refrigeration control with the chiller operating at part load and lower ambient conditions with a reduced condensing pressure. By fitting an EEV and adjusting the head pressure control setting, **reduction in energy running values of up to 27% can be achieved**. The Mollier diagram shown below helps to illustrate how this increase in efficiency is achieved.



Key

- Cooling Cycle @ 22°C ambient with a conventional TEV fitted.
- Cooling cycle @ 22°C ambient, demonstrating a typical EEV condensing temperature taking full advantage of lower ambient air temperatures (below 30°C).

Dual Pressure Relief Valve

A 3-way dual shut-off valve that incorporates 2 relief valve assemblies per circuit. The valve allows the maintenance of individual pressure relief valves and rupture discs without the need for refrigerant evacuation.

Electrical

	Features	System Configuration									
		R Type					X Type				
		UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN	UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN
Electrical	Door Interlocking Isolators	●	●	●	●	●	●	●	●	●	●
	Evaporator Pad Heater	●	●	●	●	●	●	●	●	●	●
	Trace Heating to Internal Pipework	●	●	●	●	●	●	●	●	●	●
	Connections for External Trace Heating	●	●	●	●	●	●	●	●	●	●
	Phase Rotation Protection	●	●	●	●	●	●	●	●	●	●
	Power Factor Correction	—	—	○	○	○	—	—	○	○	○
	Electronic Soft Start	○	○	○	○	○	○	○	○	○	○
	UltraCap Power Backup	●	●	●	●	●	●	●	●	●	●
	Power Monitoring	○	○	○	○	○	○	○	○	○	○

● Standard Features ○ Optional Features — Feature Not Available

Dedicated weatherproof electrical power and controls panels shall be situated at the end of the unit and contain:

- Separate, fully accessible, controls compartment, allowing adjustment of control set points whilst the unit is operational
- Circuit breakers for protection of all major unit components
- Separate, permanent supply for controls/trace heating, 230V/50Hz/1Phase

The electrical power and control panel is wired to the latest European standards and codes of practice.

Power Factor Correction

When applied to the motors of each compressor, the compressor power factor is controlled to a minimum operating value of 0.95 at the full operating capacity. This satisfies many supply authorities that may impose surcharges on equipment with power factor less than 0.95.

Electronic Soft Start

The electronic soft start enables the chiller compressor motor to be ramped to speed with the minimum full load current. Further benefits include removal of nuisance tripping, supply voltage dips and motor overheating.

Ultracap Uninterrupted Power Supply

The Ultracap module is an optional external backup device for the EVD Evolution used to close the valve in the event of mains power failures. The module guarantees temporary power to the EVD Evolution in the event of power failures, for enough time to immediately close the connected electronic valve. It avoids the need to install a solenoid valve in the refrigerant circuit or use the battery backup module.

Ultracap storage capacitors (EDLC = Electric Double Layer Capacitor), which are recharged independently by the module. Ultracap capacitors ensure reliability in terms of much longer component life than a module made with lead batteries: the life of the Ultracap module is at least 10 years. In addition, not using lead batteries also means no special precautions are required regarding safety and pollution.

Power Monitoring

A power meter shall be fitted to the unit. Voltages, currents and power inputs can be monitored and recorded giving power usage of the chiller. Current transformers are fitted to the unit's incoming supply.

General

	Features	System Configuration									
		R Type					X Type				
		UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN	UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN
General	Lifting Eye Bolts	—	—	●	●	●	—	—	●	●	●
	Lifting Lugs	●	●	—	—	—	●	●	—	—	—
	Condenser Fan Discharge Plenum	●	●	●	●	●	●	●	●	●	●
	Extended Height Fan Discharge Plenum	○	○	○	○	○	○	○	○	○	○
	Acoustically Lined Compressor Enclosure	—	—	—	—	—	●	●	●	●	●
	Anti Vibration Mount - Spring Type	○	○	○	○	○	○	○	○	○	○
	Anti Vibration Mount - Pad Type	○	○	○	○	○	○	○	○	○	○
	Coil Guard	○	○	○	○	○	○	○	○	○	○

● Standard Features ○ Optional Features — Feature Not Available

Lifting Eye Bolts / Lifting Lugs

Lifting eye bolts / lifting lugs shall be fitted for use with either slings or shackles.

Condenser Fan Discharge Air Plenum Extension

Constructed from galvanised sheet steel coated with epoxy baked powder paint, this plenum directs discharge air vertically, thus limiting air re-circulation and provides a degree of acoustic reduction in the horizontal plane, factory fitted. For details please contact Airedale. Standard unit colour is Light Grey (RAL 7035).

For further details refer to Dimensions.

Anti Vibration Mounts Spring Type

Spring vibration isolators can be supplied loose for on site fitting to the base frame of each chiller unit.

The isolators are suitable for fitting to a concrete slab or structural steelwork providing the surface is level and of sufficient strength where a high level of vibration elimination is required.

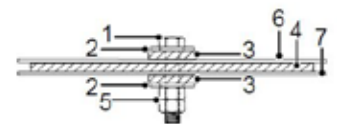
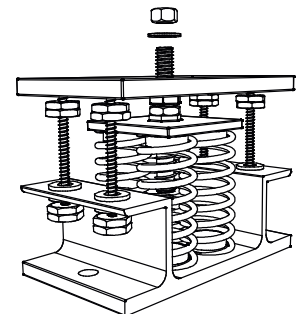
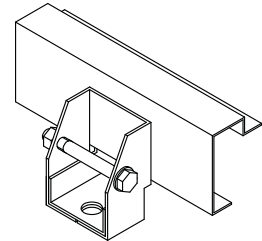
Anti Vibration Mounts Pad Type

Pad vibration isolators can be supplied loose for on site fitting to the base frame of each chiller unit.

The isolators are suitable for fitting to structural steelwork providing the surface is level and of sufficient strength where a moderate degree of vibration elimination is required.

Coil Guard

Guards can be fitted to each of the outer coils to protect against damage.



Controls

	Features	System Configuration									
		R Type					X Type				
		UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN	UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN
Controls	PCO5+ Microprocessor Controller	●	●	●	●	●	●	●	●	●	●
	Optimised Head Pressure Control	●	●	●	●	●	●	●	●	●	●
	Emergency Stop	●	●	●	●	●	●	●	●	●	●
	Remote Setpoint Adjust	○	○	○	○	○	○	○	○	○	○
	Sequence Controller	○	○	○	○	○	○	○	○	○	○

● Standard Features ○ Optional Features — Feature Not Available

As standard, the AireTronix microprocessor controller can provide 2 or 4 stages of capacity control, dependent upon model type.

Optionally, the controller is designed to provide capabilities for:

- Building Management Systems
- Networking
- Sequencing (Master/Slave and Run/Standby) to meet all your system requirements, please confirm at time of order. For further details, refer to Controls.

Optimised Head Pressure Control

Electronic head pressure controllers are fitted which modulate the fan speed to maintain an optimised condensing pressure, allowing the system to operate satisfactorily in ambient temperatures as low as -20°C.

Head pressure can be set, monitored and values viewed at the microprocessor display.

Sequence Controller

For the efficient temperature and capacity operation of multiple units on a single site, the sequence controller will permit interlinked operation of the complete system thereby providing optimum temperature control and minimum power consumption.

Included within this package is a site visit by Airedale Control Specialists to set up multiple unit sequence control.

BMS Interface Card

Enables AireTronix controlled chillers to be interfaced with most BMS, factory fitted, please contact Airedale.

Remote Setpoint Adjust

Allows the chilled water setpoint to be adjusted via an external 0-10V signal.

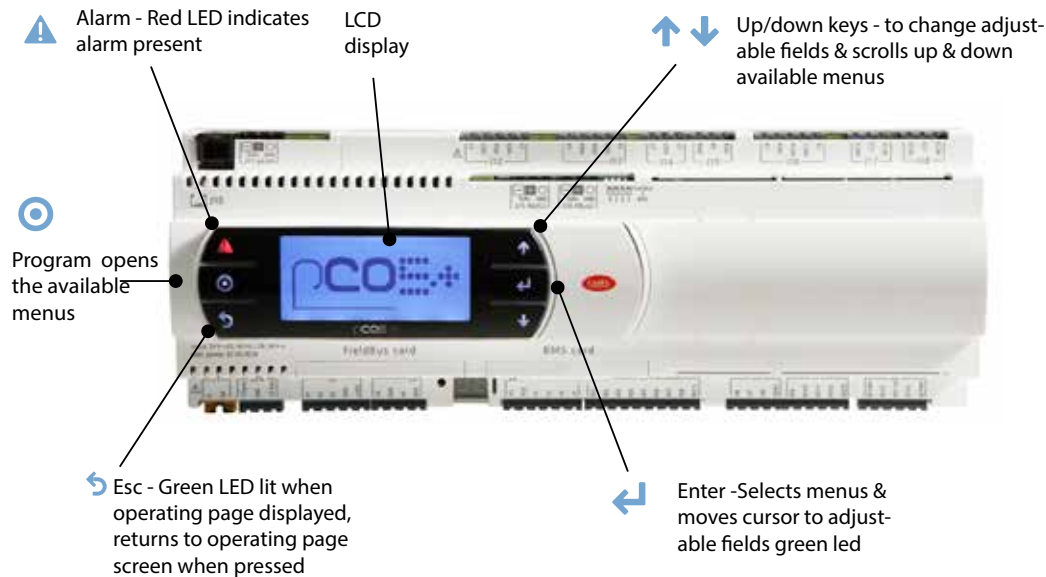
Controls

General Description

The AireTronix microprocessor controller offers powerful analogue and digital control to meet a wide range of monitoring and control features including a real time clock and industry standard communication port and network connections.

The controller's inbuilt display is used for viewing the unit operating status and making adjustments to control parameters by allowing the operator access to a series of display pages.

Also featured is a visual alarm and the facility to adjust and display control settings by local operator for information and control.



Unit Remote ON/OFF

Disables/enables the chiller remotely.

Compressor Anti Cycle

Control automatic via the microprocessor.

Compressor Load Limit

Limits the condensing pressure by unloading above 35Barg.

Pump(s) Remote ON/OFF

Disables/enables the pump(s) remotely.

Remote Setback Temperature Setpoint Switch

A setback setpoint for supply water temperature can be selected to suit summer/winter conditions or night setback.

Compressor Hours Run

Displays hours run of each compressor.

Pumps Hours Run

Displays hours run of each pump.

Password Protection

The control system integrity can be maintained by restricting access with a password PIN number.

To change the PIN number, please contact Airedale at time of order with the preferred 4 digit number.

Controls

Temperature

The microprocessor maintains the set supply chilled water temperature by sensing the return and supply water temperatures and manages the compressor loading.

The microprocessor also monitors and displays the following measured parameters:

- Supply water temperature (°C)
- Return water temperature (°C)
- Suction pressure of each circuit (barg)
- Liquid pressure of each circuit (barg)
- Suction temperature at each circuit (°C)
- Superheat for each circuit (K)

Alarms

The following conditions will be detected, triggering a visual display:

Common for both circuits (Dual Circuit units):

- Low supply temperature
- Emergency stop
- Water flow
- Pump(s) status
- Pump(s) remote start

Individual for each circuit:

Individual alarms will isolate the affected circuit only.

- Compressor trip
- Low suction pressure for each circuit
- High liquid pressure for each circuit
- Volt free contact alarm indication
- Low pressure switch
- Compressor overload
- High compressor discharge temperature

Networking

A Local Area Network (AireLan) can be used to connect a number of chiller controllers to offer intercommunication and sequence control. There is also the facility to allow the connection of either a computer or modem for local or remote monitoring.

For further details, please contact Airedale.

Control Scheme Features

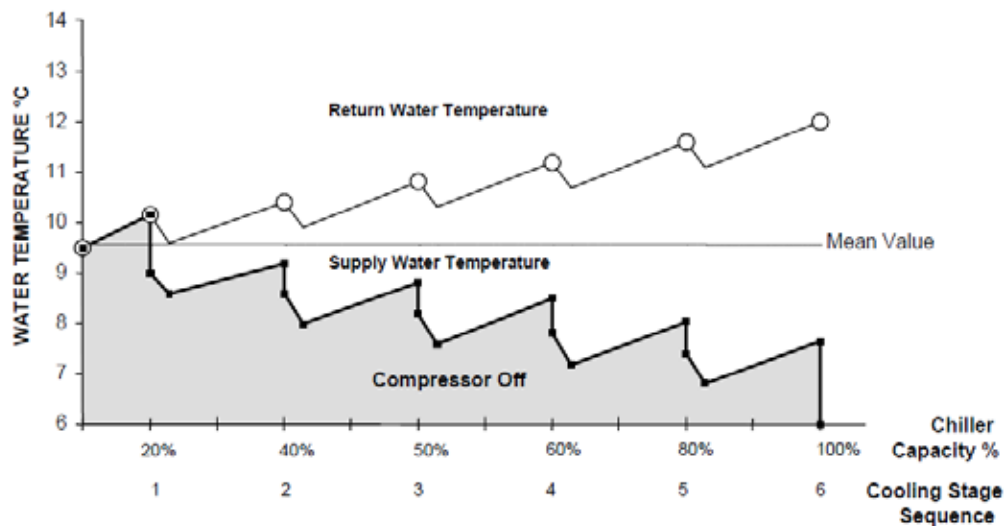
Airedale recognises that all chiller applications are different but fall mainly into 2 application categories; variable supply temperature and constant supply temperature.

The onboard microprocessor has the capability of satisfying either control requirement as illustrated below.

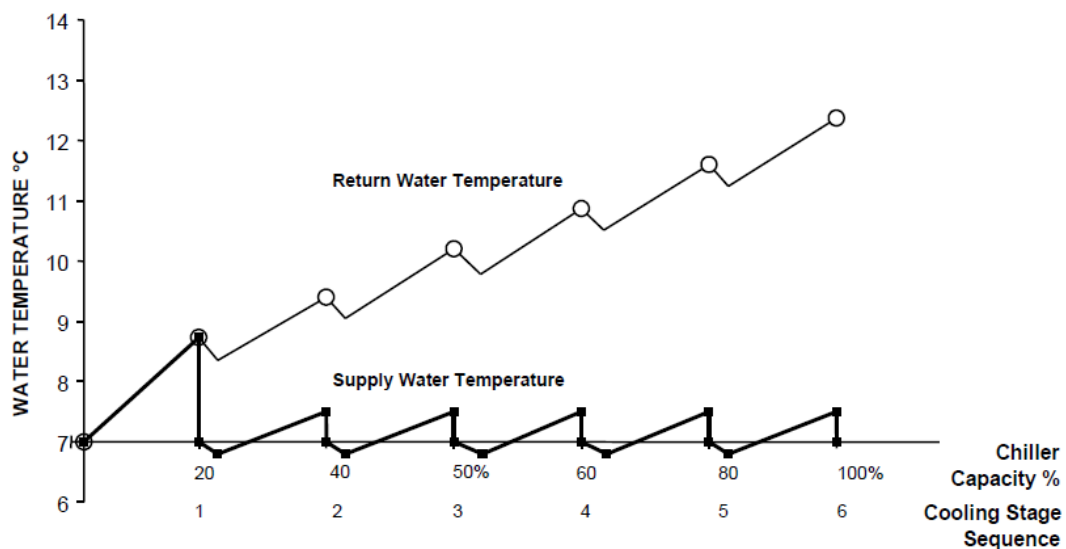
Using the Airedale variable supply temperature control scheme, energy savings are available when compared with previous schemes and that of the constant supply temperature application.

Variable supply temperature control schemes offer energy savings where the supply water temperature is not critical to its operation. Selection of the best application control scheme can be made via a soft switch in the microprocessor during initial commissioning.

Variable Supply Temperature Control



Constant Supply Temperature Control



CAUTION ⚠

Factory set to Variable Supply Temperature Control unless otherwise stated at order. Only when the mode selection has been set can the unit be enabled.

Airflow

Features		System Configuration									
		R Type					X Type				
		UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN	UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN
Airflow	EC Condenser Fans 960 rpm	●	●	—	—	—	—	—	—	—	—
	EC Condenser Fans 1030 rpm	—	—	●	●	●	—	—	—	—	—
	EC Condenser Fans 750 rpm	—	—	—	—	—	●	●	●	●	●
	AC Condenser Fans 960 rpm	○	○	○	○	○	—	—	—	—	—
	AC Condenser Fans 750 rpm	—	—	—	—	—	○	○	○	○	○

● Standard Features ○ Optional Features — Feature Not Available

Energy saving Electronically Commutated (EC) Fan Motor

Each fan incorporates on board electronics with AC / DC conversion and inverter driven

DC motor control to offer unparalleled high efficiency levels combined with smooth step-less speed control and quiet operation.

Sickle blades reduce air turbulence to minimise sound levels and power consumption whilst maximising performance.

The long bell mouth design provides improved aerodynamics, up to 10% more air movement, and an extended vertical throw of air to reduce the chance of air re-circulation. As standard the enclosure is complete with an integral finger proof grille.

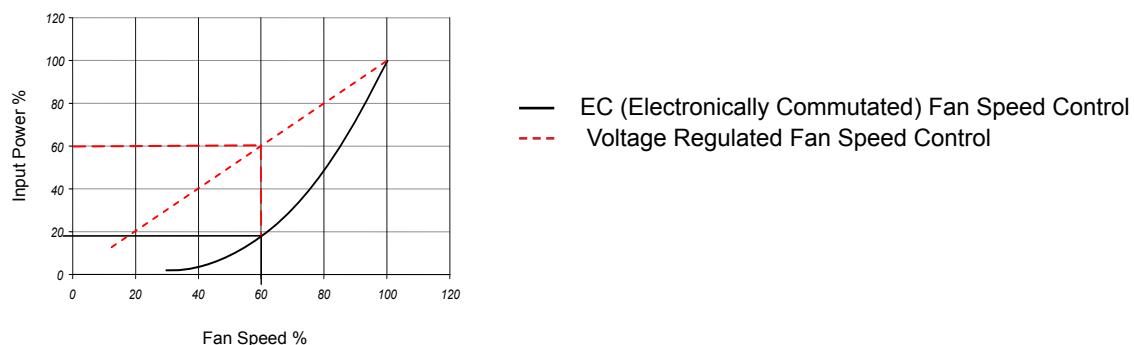
The fans offer maximum airflow performance while keeping sound levels to a minimum.

A mains EMC filter is fitted when the EC fan option is selected with the unit. The filter is design for convenient mains connection within the bus bar chamber. The in built EC fan control module allows for fan speed modulation from 15-100%, a standard AC fans modulating range is typically 40-100% of full fan speed.

The EC fan presents superior energy efficiency at full and reduced fan speed compared to the equivalent AC fan motor, offering efficiency savings anywhere between 30 to 100% compared with an AC fan.

Fan speeds are factory set depending on sound level variant.

Standard voltage regulated (VR) fan speed controllers offer a linear response. By comparison the EC fan is adjusted on demand via the unit microprocessor with precision, offering substantial energy savings. The following illustration shows a comparison of the typical power input required by each method.



Condenser Fans -AC

Axial fan assemblies with fingerproof grille and incorporating external rotor motor technology, to provide highly accurate discreet speed control, discharge air vertically. The fans offer maximum performance while keeping sound levels to a minimum. Electrical supply dependent upon model size, refer to Electrical Data for more information.

Waterside

	Features	System Configuration									
		R Type					X Type				
		UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN	UCCR030-75 1 FAN	UCCR030-75 2 FAN	UCCR085-150 2 FAN	UCCR085-150 3 FAN	UCCR085-150 4 FAN
Waterside	Flow Switch*	○	○	○	○	○	○	○	○	○	○
	Differential Water Pressure Transducer*	●	●	●	●	●	●	●	●	●	●
	Pump Interlock*	○	○	○	○	○	○	○	○	○	○
	Water Filter	○	○	○	○	○	○	○	○	○	○
	Water Inlet/Outlet Threaded Connection	●	●	—	—	—	●	●	—	—	—
	Flanged Connections	—	—	●	●	●	—	—	●	●	●
	Flush Bypass Kit (standard)	○	○	○	○	○	○	○	○	○	○
	Flush Bypass Kit (regulating)	○	○	○	○	○	○	○	○	○	○
	Single Head Pump	○	○	○	○	○	○	○	○	○	○
	Single Head Run/standby Pump	○	○	○	○	○	○	○	○	○	○
	Twin Head Pump	—	—	○	○	○	—	—	○	○	○
	Twin Head Run/standby Pump	—	—	○	○	○	—	—	○	○	○
	Mini Pressurisation Package	○	○	○	○	○	○	○	○	○	○

● Standard Features ○ Optional Features — Feature Not Available

Flow Switch

The flow switch will protect the chiller against low water flow. Factory fitted if pumps are selected. For no pump option the flow switch shall be supplied loose for on-site fitment.

Differential Water Pressure Transducer

An evaporator differential pressure sensor facilitates low flow limiting and pressure drop monitoring via the microprocessor shall be fitted to ensure a correct unit water flow.

Water Filter

A 20 mesh water filter shall be factory fitted on the inlet water pipework to protect the evaporator from clogging by sediment.

Water Inlet/Outlet Threaded Connection

BSP brass male taper threaded connections shall be factory fitted.

Flanged Connections

PN16 Flanged connections shall be factory fitted.

Flushing Bypass Kit (Standard)

Comprises:

- Shut off valves

Factory fitted to protect the evaporator from clogging by sediment and to enable the water system to be purged before running.

Flushing Bypass Kit (Regulating)

Comprises:

- Shut off valves
- Double regulating valve

Factory fitted to protect the evaporator from clogging by sediment and to enable the water system to be purged before running. The regulating Flushing Bypass Kit additionally allows the chiller to run with a lower ΔT (typically for chilled beam and/or high water temperature applications).

IMPORTANT ⚠

The flow switch and or pump interlock must be fitted to the unit as well as the differential pressure switch. At least two forms of protection must be used. Differential pressure switch plus either flow switch or pump interlock.

Internal Pump Packages

Integral pumps may be fitted, **standard or larger sizes** selected to suit installed system requirements. The following configurations are available:

Single Head Pump

Factory fitted with electrical switchgear and isolating valve.

Twin Head Pump

Factory fitted with common inlet and outlet connections and twin motor and pump impellers. Featuring automatic changeover via a paddle switch, electrical switchgear and isolating valve.

Single Head Run/Standby Pumps

Factory fitted dual pumps with shut off valves on the inlet and outlet and non-return valves on the outlet in automatic changeover configuration. Supplied with electrical switchgear and isolating valve.

The microprocessor can be programmed to automatically rotate usage of the run/standby pumps to a set period.

For further details, refer to Optional Flow Schemes.

Mini Pressurisation Package

Integral package automatically monitors and adjusts operation of a separate make-up pump to ensure a constant minimum system water pressure (typically 2.5 Barg), factory fitted.

Buffer Tank and Expansion Vessel

An integral water buffer vessel and expansion vessel can be factory fitted on systems where low water volume may be a problem.

All vessels and pipework are trace heated.

Design Features and Information

Glycol Data

Glycol is recommended when a supply water temperature of +5°C or below is required or when static water can be exposed to freezing temperatures. The use of the tables below is for guidance only. Please contact Airedale.

Ethylene Glycol Nominal Correction Factors

Glycol in System/Freezing Point °C	10% / -4°C	20% / -9°C	30% / -15°C	40% / -23°C
Cooling Duty	0.98	0.97	0.95	0.93
Input Power Catalogue Data x by:	0.99	0.98	0.96	0.95
Water Flow	0.99	1.02	1.04	1.07
Pressure Drop	1.05	1.20	1.38	1.57

Propylene Glycol Nominal Correction Factors

Glycol in System/Freezing Point °C	10% / -2°C	20% / -6°C	30% / -12°C	40% / -20°C
Cooling Duty	0.97	0.95	0.91	0.88
Input Power Catalogue Data x by:	0.99	0.98	0.96	0.95
Water Flow	0.98	0.97	0.95	0.95
Pressure Drop	1.08	1.17	1.31	1.45

Example: UCCR125DX-4ALL operating at 7/12, 30°C Ambient, 20% Ethylene Glycol

	Catalogue Figure	Multiplier		Corrected Figure
Cooling kW (refer to Capacity Data)	150.5	x 0.97	20% Ethylene Glycol =	146 kW
Input Power (refer to Capacity Data)	54.2	x 0.98		53.1 kW
Water Flow ($\text{calculated} = \frac{\text{DX (Mechanical Cooling kW)}}{\Delta T \times 4.19}$)	7.2	x 1.02		7.3 l/s
Pressure Drop (refer to Capacity Data)	50.0	x 1.20		60.0 kPa

Design Features and Information

Minimum System Water Volume Calculations

METHOD 1

(Preferred Method)

Where the system permanent heat load is known, the minimum water volume in litres V_{min} is:

$$V_{min} = \text{Water Flow Rate (litres/min)} \times \text{Minimum Compressor Run Time (min)} \times \text{Chiller Loading Factor (CLF)}$$

Where

V_{min} is the minimum water volume in litres

Minimum Compressor Run Time is 2 minutes

$$\text{Chiller loading factor} = \frac{\text{Minimum Turndown} \times \text{MHL} \times 1.2}{\text{Permanent Heat Load}}$$

Example: 150kW output at 30/35°C Condenser and 7/12°C Evaporator

Permanent Heat Load = 75kW

Minimum Turndown = 7.5% (4 Compressors)

$$V_{min} = \frac{150 \times 60}{3.9 \times 5} \times 5 \times \frac{0.075 \times 150 \times 1.2}{75} = 415.4 \text{ Litre}$$

METHOD 2

Where the system permanent heat load is unknown:

$$V_{min} = \frac{\text{Water Flow Rate (litres/hour)} \times \text{Min. Turndown} \times 1.2}{\text{Maximum number of Compressor starts (per Hour)}}$$

$$V_{min} = \frac{\frac{\text{kW} \times 3600}{\text{CP} \times \Delta t} \times \text{Min turndown} \times 1.2}{\text{Maximum number of Compressor starts(per hour)}} = 208 \text{ Litre}$$

Minimum Turndown

1 Compressor - 30%	4 Compressors - 7.5%
2 Compressors - 15%	
3 Compressors - 10%	

Example: 150kW output at 30/35°C Condenser and 7/12°C Evaporator

Minimum Turndown = 0.075 (7.5% 4 Compressors)

$$\frac{\frac{150 \times 3600}{3.9 \times 5} \times 0.075 \times 1.2}{12} = 208 \text{ Litre}$$

Design Features and Information

Sound Data

Measurement of Sound Data

All sound data quoted has been measured in the third-octave band limited values, using a Real Time Analyser calibrated sound pressure meter in accordance with BS EN ISO9614:2009. **The Global sound data quoted is valid for noise emitted in the horizontal plane in all directions**

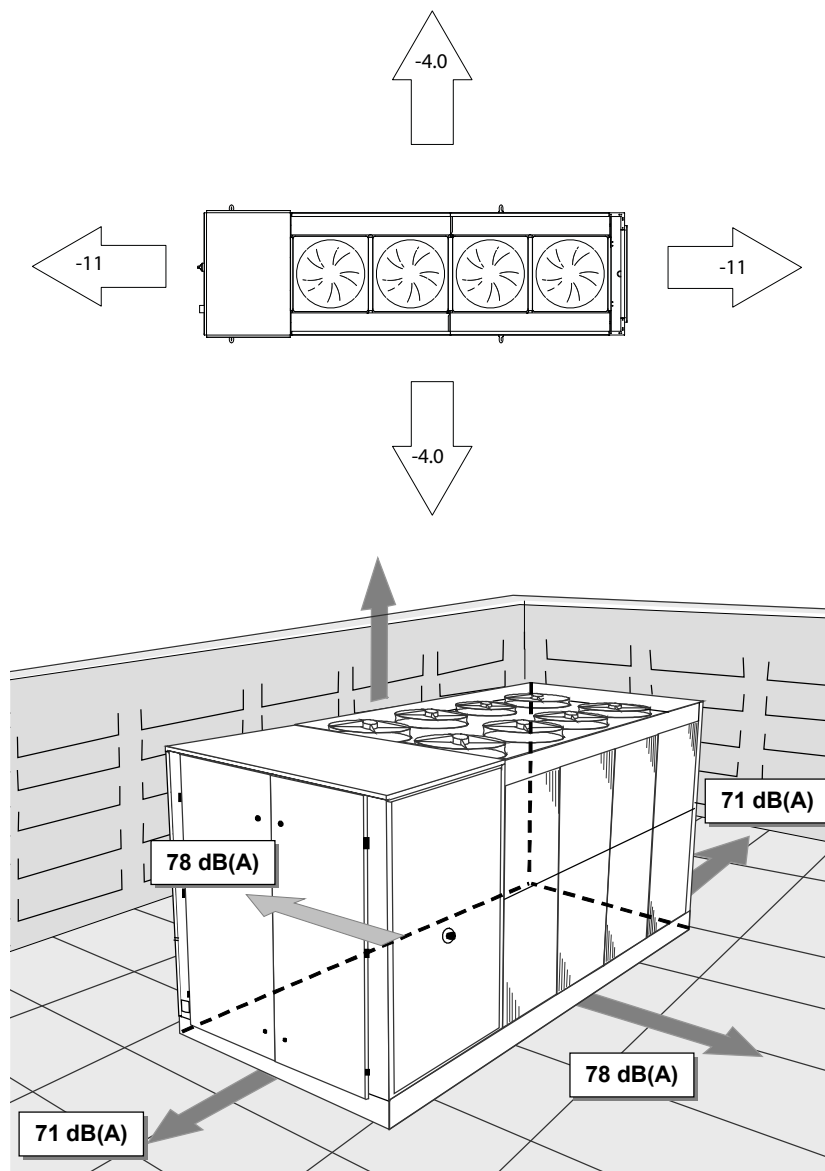
All Sound Power Levels quoted are calculated from measured sound pressure according to BS EN ISO9614:2009. Sound Pressure Levels are calculated from sound power using the expanded parallel piped method according to BS EN ISO9614:2009.

Resultant performance figures obtained from test will be proven to not differ from the claimed figures by more than the allowable deviations specified in table 7 of section VII of Eurovent RS 6/C/003-2016 (A-weighted sound power; +3dBA).

Sound Directivity

The Global sound measurements quoted in the following tables **do not** incorporate any directivity or denote any sound level heard at any given position surrounding the chiller, rather they represent the total sound level radiating from the chiller in **all directions in the horizontal plane** from source.

Using the adjustment factors from the map below, specific directional sound power levels can be derived from the global sound power data.



Design Features and Information
Operating Limits
(For 100% Water)

Standard Unit	
Minimum Ambient Air DB °C	-5°C
Maximum Ambient Air DB °C	Refer to Capacity Data
Minimum Leaving Water Temperature °C	+5°C
Maximum Return Water Temperature °C	+20°C

Unit with Electronic Fan Speed HP Control (-20°C)	
Minimum Ambient Air DB °C	-20°C
Maximum Ambient Air DB °C	Refer to Capacity Data
Minimum Leaving Water Temperature °C	+5°C
Maximum Return Water Temperature °C	+20°C

1) Temperatures lower than those stated can be obtained with the addition of glycol.
2) For conditions outside those quoted, please refer to Airedale.

Technical Data R - Type**Capacity Data Regular Quiet (R) Models EC Fans**

Model	Supply Temp °C	Ambient (°C)							
		25		30		35		40	
		Output kW	Input kW	Output kW	Input kW	Output kW	Input kW	Output kW	Input kW
UCCR030SR-1AE0	5	30.8	8.3	29.1	9.1	27.3	9.9	25.5	10.8
	6	31.8	8.3	30.0	9.1	28.2	10.0	26.3	10.9
	7	32.7	8.4	30.9	9.2	29.0	10.0	27.1	10.9
	8	33.7	8.4	31.8	9.2	29.9	10.1	27.9	11.0
	9	34.7	8.5	32.8	9.3	30.8	10.2	28.8	11.1
	10	35.7	8.5	33.7	9.4	31.7	10.2	29.6	11.1
UCCR030SR-2AE0	5	32.3	7.5	30.7	8.3	29.0	9.1	27.3	10.0
	6	33.4	7.5	31.7	8.3	29.9	9.2	28.2	10.0
	7	34.4	7.6	32.7	8.4	30.9	9.2	29.1	10.1
	8	35.5	7.6	33.7	8.4	31.9	9.2	30.0	10.1
	9	36.6	7.6	34.8	8.4	32.9	9.3	31.0	10.2
	10	37.8	7.6	35.9	8.5	33.9	9.3	32.0	10.2
UCCR040SR-1AH0	5	39.0	11.8	36.7	13.0	34.4	14.2	31.9	15.6
	6	40.2	11.9	37.8	13.1	35.4	14.3	32.9	15.7
	7	41.4	12.0	39.0	13.2	36.4	14.4	33.8	15.8
	8	42.6	12.1	40.1	13.3	37.5	14.6	34.8	15.9
	9	43.8	12.2	41.2	13.4	38.5	14.7	35.8	16.0
	10	45.0	12.3	42.4	13.5	39.6	14.8	36.8	16.2
UCCR040DR-1ACC	5	40.4	11.8	38.1	13.0	35.6	14.2	33.0	15.6
	6	41.6	11.8	39.2	13.1	36.6	14.3	34.0	15.7
	7	42.9	11.9	40.3	13.2	37.7	14.4	35.0	15.8
	8	44.1	12.0	41.5	13.2	38.8	14.6	36.0	15.9
	9	45.4	12.1	42.7	13.3	39.9	14.7	37.0	16.0
	10	39.2	11.7	36.9	12.9	34.5	14.1	32.0	15.5
UCCR040SR-2AH0	5	42.0	10.5	39.9	11.6	37.8	12.8	35.5	14.0
	6	43.4	10.5	41.2	11.6	39.0	12.8	36.7	14.1
	7	44.8	10.5	42.6	11.7	40.3	12.9	37.9	14.2
	8	46.2	10.6	43.9	11.7	41.6	13.0	39.1	14.2
	9	47.6	10.6	45.3	11.8	42.9	13.0	40.3	14.3
	10	49.1	10.6	46.7	11.8	44.2	13.1	41.6	14.4
UCCR040DR-2ACC	5	42.2	10.4	40.1	11.5	37.9	12.7	35.7	14.0
	6	43.6	10.4	41.4	11.5	39.2	12.7	36.8	14.0
	7	45.0	10.4	42.8	11.6	40.5	12.8	38.0	14.1
	8	46.5	10.4	44.2	11.6	41.8	12.9	39.3	14.2
	9	47.9	10.5	45.6	11.7	43.1	12.9	40.5	14.2
	10	49.4	10.5	47.0	11.7	44.4	13.0	41.8	14.3
UCCR050SR-2AK0	5	54.6	14.4	51.7	15.9	48.7	17.4	45.6	19.0
	6	56.3	14.4	53.3	15.9	50.2	17.5	47.0	19.1
	7	58.0	14.5	54.9	16.0	51.7	17.6	48.5	19.2
	8	59.8	14.6	56.6	16.1	53.3	17.6	49.9	19.3
	9	61.5	14.6	58.3	16.1	54.9	17.7	51.4	19.4
	10	63.3	14.7	60.0	16.2	56.5	17.8	52.9	19.4
UCCR050DR-2ADD	5	54.7	14.3	51.8	15.8	48.8	17.4	45.7	19.0
	6	56.4	14.4	53.4	15.9	50.3	17.4	47.1	19.1
	7	58.2	14.4	55.1	15.9	51.8	17.5	48.5	19.2
	8	59.9	14.5	56.7	16.0	53.4	17.6	50.0	19.2
	9	61.7	14.5	58.4	16.1	55.0	17.7	51.5	19.3
	10	63.5	14.6	60.2	16.1	56.7	17.7	53.1	19.4

1) Output kW refers to the chilled water duty.

2) Input kW refers to the compressor input power and condenser fans.

3) Duties applicable for chilled water with 5°C ΔT

4) Interpolate for water temperatures between those quoted, do not extrapolate.

Technical Data

Capacity Data Regular Quiet (R) Models EC Fans

Model	Supply Temp °C	Ambient (°C)							
		25		30		35		40	
		Output kW	Input kW	Output kW	Input kW	Output kW	Input kW	Output kW	Input kW
UCCR060SR-2AL0	5	61.4	16.5	58.1	18.0	54.7	19.7	51.2	21.4
	6	63.3	16.6	59.9	18.2	56.4	19.8	52.8	21.6
	7	65.2	16.7	61.7	18.3	58.1	20.0	54.3	21.7
	8	67.1	16.8	63.5	18.4	59.8	20.1	56.0	21.9
	9	69.1	16.9	65.4	18.5	61.6	20.2	57.6	22.0
	10	71.1	17.0	67.3	18.7	63.3	20.4	59.3	22.1
UCCR060DR-2AEE	5	61.6	16.4	58.3	18.0	54.8	19.6	51.3	21.4
	6	63.5	16.5	60.1	18.1	56.5	19.8	52.9	21.5
	7	65.4	16.6	61.9	18.2	58.2	19.9	54.5	21.7
	8	67.4	16.7	63.7	18.3	60.0	20.0	56.1	21.8
	9	69.3	16.8	65.6	18.4	61.7	20.1	57.8	21.9
	10	71.3	16.9	67.5	18.6	63.5	20.3	59.4	22.1
UCCR070SR-2AM0	5	69.8	19.4	65.9	21.2	61.9	23.2	57.7	25.3
	6	71.9	19.5	67.9	21.4	63.7	23.4	59.4	25.5
	7	73.9	19.7	69.9	21.5	65.6	23.5	61.2	25.7
	8	76.1	19.8	71.9	21.7	67.5	23.7	63.0	25.8
	9	78.2	19.9	73.9	21.9	69.4	23.9	64.8	26.0
	10	80.4	20.1	76.0	22.0	71.4	24.1	66.6	26.2
UCCR070DR-2AFF	5	70.3	19.1	66.3	21.0	62.3	23.0	58.0	25.2
	6	72.4	19.2	68.3	21.2	64.1	23.2	59.8	25.3
	7	74.5	19.4	70.4	21.3	66.0	23.3	61.6	25.5
	8	76.7	19.5	72.4	21.4	68.0	23.5	63.4	25.6
	9	78.9	19.6	74.5	21.6	69.9	23.6	65.2	25.8
	10	81.2	19.7	76.6	21.7	71.9	23.8	67.1	26.0
UCCR075SR-2AN0	5	76.2	22.4	72.0	24.5	67.5	26.8	62.8	29.2
	6	78.4	22.6	74.0	24.7	69.4	27.0	64.6	29.4
	7	80.7	22.8	76.1	24.9	71.4	27.2	66.4	29.6
	8	82.9	23.0	78.3	25.1	73.4	27.4	68.3	29.8
	9	85.2	23.2	80.4	25.3	75.4	27.6	70.2	30.0
	10	87.5	23.4	82.6	25.5	77.5	27.8	72.1	30.2
UCCR075SR-2AP0	5	85.4	26.5	80.5	28.9	75.4	31.5	70.2	34.4
	6	87.9	26.7	82.8	29.2	77.6	31.8	72.2	34.7
	7	90.4	27.0	85.2	29.4	79.8	32.1	74.2	34.9
	8	92.9	27.2	87.6	29.7	82.0	32.4	76.3	35.2
	9	95.5	27.5	90.0	30.0	84.3	32.6	78.5	35.5
	10	98.1	27.7	92.5	30.2	86.6	32.9	80.6	35.8
UCCR075DR-2AGG	5	77.0	22.1	72.6	24.2	68.0	26.5	63.2	28.9
	6	79.2	22.2	74.7	24.4	70.0	26.7	65.1	29.1
	7	81.5	22.4	76.9	24.6	72.0	26.9	67.0	29.3
	8	83.8	22.5	79.1	24.7	74.1	27.1	68.9	29.5
	9	86.2	22.7	81.3	24.9	76.2	27.3	70.8	29.7
	10	88.6	22.8	83.6	25.1	78.3	27.5	72.8	29.9

1) Output kW refers to the chilled water duty.

2) Input kW refers to the compressor input power and condenser fans.

3) Duties applicable for chilled water with 5°C ΔT

4) Interpolate for water temperatures between those quoted, do not extrapolate.

Technical Data

Capacity Data Regular Quiet (R) Models EC Fans

Model	Supply Temp °C	Ambient (°C)							
		25		30		35		40	
		Output kW	Input kW	Output kW	Input kW	Output kW	Input kW	Output kW	Input kW
UCCR085SR-2AP0	5	89.4	25.2	84.4	27.5	79.3	30.1	73.9	32.8
	6	92.1	25.4	86.9	27.8	81.6	30.3	76.1	33.1
	7	94.8	25.6	89.5	28.0	84.0	30.5	78.4	33.3
	8	97.6	25.8	92.1	28.2	86.5	30.8	80.7	33.5
	9	100.3	26.0	94.7	28.4	88.9	31.0	83.0	33.8
	10	103.2	26.2	97.4	28.6	91.5	31.3	85.4	34.0
UCCR085DR-2AHJ	5	86.2	24.5	81.3	27.0	76.3	29.6	71.0	32.4
	6	88.8	24.7	83.8	27.2	78.6	29.8	73.2	32.6
	7	91.5	24.9	86.3	27.4	81.0	30.0	75.4	32.8
	8	94.2	25.1	88.9	27.6	83.4	30.2	77.7	33.0
	9	96.9	25.2	91.5	27.8	85.8	30.4	80.0	33.2
	10	99.7	25.4	94.1	27.9	88.3	30.6	82.3	33.4
UCCR100SR-2AQ0	5	106.0	28.8	100.2	31.6	94.3	34.6	88.1	37.7
	6	109.2	29.0	103.3	31.8	97.2	34.8	90.8	37.9
	7	112.4	29.2	106.4	32.0	100.1	35.0	93.5	38.2
	8	115.7	29.3	109.5	32.2	103.0	35.2	96.3	38.4
	9	119.1	29.5	112.7	32.4	106.0	35.4	99.1	38.6
	10	122.5	29.7	115.9	32.6	109.1	35.7	102.0	38.8
UCCR100DR-2AJK	5	102.6	28.2	97.1	31.0	91.3	33.9	85.3	37.0
	6	105.9	28.4	100.1	31.2	94.1	34.1	88.0	37.1
	7	109.1	28.5	103.2	31.3	97.0	34.2	90.7	37.3
	8	112.3	28.7	106.3	31.5	100.0	34.4	93.4	37.5
	9	115.6	28.8	109.4	31.6	102.9	34.6	96.2	37.7
	10	119.0	28.9	112.6	31.8	105.9	34.8	99.1	37.9
UCCR125SR-3AR0	5	122.6	31.7	116.4	35.0	109.8	38.4	103.0	42.0
	6	126.5	31.9	120.0	35.2	113.3	38.6	106.3	42.2
	7	130.4	32.0	123.8	35.4	116.9	38.8	109.7	42.5
	8	134.3	32.2	127.6	35.5	120.5	39.0	113.1	42.7
	9	138.4	32.4	131.4	35.7	124.2	39.3	116.6	42.9
	10	142.5	32.6	135.4	35.9	127.9	39.5	120.1	43.2
UCCR125DR-3ALL	5	125.8	33.1	119.4	36.3	112.7	39.6	105.9	43.2
	6	129.8	33.3	123.2	36.5	116.3	39.9	109.3	43.5
	7	133.9	33.5	127.0	36.8	120.0	40.2	112.7	43.8
	8	138.0	33.7	131.0	37.0	123.7	40.5	116.2	44.1
	9	142.2	33.9	135.0	37.3	127.5	40.7	119.8	44.4
	10	146.5	34.1	139.0	37.5	131.4	41.0	123.4	44.6
UCCR150DR-3ANN	5	157.4	44.6	148.9	48.8	139.9	53.3	130.5	57.9
	6	162.1	44.9	153.3	49.1	144.0	53.6	134.4	58.3
	7	166.8	45.2	157.7	49.5	148.2	53.9	138.3	58.7
	8	171.5	45.5	162.3	49.8	152.5	54.3	142.3	59.0
	9	176.3	45.8	166.9	50.1	156.8	54.7	146.4	59.4
	10	181.2	46.1	171.5	50.5	161.2	55.0	150.5	59.8

1) Output kW refers to the chilled water duty.

2) Input kW refers to the compressor input power and condenser fans.

3) Duties applicable for chilled water with 5°C ΔT

4) Interpolate for water temperatures between those quoted, do not extrapolate.

Technical

R Type

Technical Data**Sound Data****Global Chiller Sound Level****Standard - R Models - EC Fans**

Technical

R-Type

		Frequency Hz								Total :
		63 Hz :	125 Hz :	250 Hz :	500 Hz :	1000 Hz :	2000 Hz :	4000 Hz :	8000 Hz :	
UCCR030SR-1AE0	Sound Power	80	71	72	70	73	67	66	61	76
	Sound Pressure @ 10m	48	39	40	38	41	36	34	30	44
UCCR030SR-2AE0	Sound Power	78	80	70	70	73	67	66	61	76
	Sound Pressure @ 10m	47	48	39	39	41	36	34	30	44
UCCR040SR-1AH0	Sound Power	80	71	72	69	73	68	64	65	76
	Sound Pressure @ 10m	49	39	40	38	41	37	33	33	44
UCCR040DR-1ACC	Sound Power	80	71	72	69	73	68	64	65	76
	Sound Pressure @ 10m	49	39	40	38	41	37	33	33	44
UCCR040SR-2AH0	Sound Power	81	74	73	71	73	68	64	65	76
	Sound Pressure @ 10m	49	43	41	39	41	37	33	33	45
UCCR040DR-2ACC	Sound Power	81	74	73	71	73	68	64	65	76
	Sound Pressure @ 10m	49	43	41	39	41	37	33	33	45
UCCR050SR-2AK0	Sound Power	82	74	75	73	76	68	66	64	78
	Sound Pressure @ 10m	50	42	43	41	44	37	35	32	47
UCCR050DR-2ADD	Sound Power	82	74	75	73	76	68	66	64	78
	Sound Pressure @ 10m	50	42	43	41	44	37	35	32	47
UCCR060SR-2AL0	Sound Power	83	74	75	73	76	71	69	65	79
	Sound Pressure @ 10m	51	42	43	41	44	39	37	33	47
UCCR060DR-2AEE	Sound Power	83	74	75	73	76	71	69	65	79
	Sound Pressure @ 10m	51	42	43	41	44	39	37	33	47
UCCR070SR-2AM0	Sound Power	82	74	75	72	74	72	71	68	79
	Sound Pressure @ 10m	50	42	43	41	42	40	40	37	47
UCCR070DR-2AFF	Sound Power	82	74	75	72	74	72	71	68	79
	Sound Pressure @ 10m	50	42	43	41	42	40	40	37	47
UCCR075SR-2AN0	Sound Power	84	74	75	73	75	73	69	64	79
	Sound Pressure @ 10m	52	42	43	41	44	41	38	32	48
UCCR075SR-2AP0	Sound Power	83	74	75	73	76	71	69	65	79
	Sound Pressure @ 10m	51	42	43	41	44	39	37	33	47
UCCR075DR-2AGG	Sound Power	84	74	75	73	75	73	69	64	79
	Sound Pressure @ 10m	52	42	43	41	44	41	38	32	48
UCCR085SR-2AP0	Sound Power	83	73	75	73	76	71	69	65	79
	Sound Pressure @ 10m	51	42	43	41	44	39	37	33	47
UCCR085DR-2AHJ	Sound Power	83	74	75	73	78	72	69	69	81
	Sound Pressure @ 10m	51	42	43	42	46	40	37	38	49
UCCR100SR-2AQ0	Sound Power	84	83	82	81	79	75	73	69	84
	Sound Pressure @ 10m	52	51	50	50	47	43	41	37	52
UCCR100DR-2AJK	Sound Power	84	83	82	82	81	75	71	70	85
	Sound Pressure @ 10m	53	51	50	50	49	43	40	38	53
UCCR125SR-3AR0	Sound Power	86	82	82	82	80	75	71	65	84
	Sound Pressure @ 10m	54	50	50	50	48	43	39	33	52
UCCR125DR-3ALL	Sound Power	86	82	83	82	81	76	73	68	85
	Sound Pressure @ 10m	54	50	51	50	49	44	41	36	53
UCCR150DR-3ANN	Sound Power	87	85	84	83	81	78	74	68	86
	Sound Pressure @ 10m	55	53	52	51	49	46	42	36	54

CAUTION ⚠

The Sound Pressure data quoted is only valid in free field conditions. where the unit is installed on a reflective base. If the equipment is placed adjacent to a reflective wall, values may vary to those stated, typically increasing by 3dB for each side added.

Intentionally Blank

Technical

R Type

Technical Data

UCCR030SR-1AE0, UCCR030SR-2AE0, UCCR040SR-1AH0

Mechanical Data

			UCCR030SR-1AE0	UCCR030SR-2AE0	UCCR040SR-1AH0
Number of Refrigeration Circuits			1	1	1
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	29.0	30.9	36.4
Nominal Input - Mechanical		kW	10.0	9.2	14.4
EER	(2)		2.89	3.36	2.52
ESEER			3.18	3.71	3.60
Capacity Steps		%	100	100	60-100
Minimum Turndown Ratio			1.00	1.00	0.58
Dimensions (H x W x L)		mm	1450 x 1310 x 1650	1450 x 1310 x 2500	1450 x 1310 x 1650
Weight	(3)				
Machine		kg	481	618	541
Operating		kg	487	626	548
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Braze Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	3.2	3.2	4.0
Maximum Waterflow		l/s	2.2	2.4	2.8
Minimum Waterflow		l/s	1.0	1.0	1.4
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m ²	1.7	3.4	1.7
Nominal Airflow - EC Fans		m ³ /s	3.2	5.1	3.2
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			1	2	1
Diameter		mm	630	630	630
Maximum Speed - EC Fans		rpm	960	960	960
Compressor			Single	Single	Tandem
Quantity of Compressors			1	1	2
Oil Charge Volume (Total)		l	1 x 3.3	1 x 3.3	2 x 3
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Control			R410A (GWP 2088)		
Refrigerant Precharged					
Charge (Total)		kg	10	17.5	10.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	20.88	36.54	21.92
Connections					
Water Inlet / Outlet - Unit			1 1/2" BSP	1 1/2" BSP	1 1/2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	504	538	370
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR030SR-1AE0, UCCR030SR-2AE0, UCCR040SR-1AH0

Electrical Data

Unit Data			UCCR030SR-1AE0	UCCR030SR-2AE0	UCCR040SR-1AH0
Nominal Run Amps	(1)	A	23	26	31
Maximum Start Amps		A	150	154	115
Recommended Mains Fuse Size		A	32	32	40
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	35	36	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			1	2	1
Full Load Amps		A	3.3	3.3	3.3
Motor Rating		kW	0.73	0.73	0.73
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	19	19	13
Quantity			1	1	2
Motor Rating	(2)	kW	10.6	10.6	7.2
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	147	147	98
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	22.9	26.2	31.2
Maximum Start Amps		A	91.5	94.8	76.1
Recommended Mains Fuse		A	32	32	40

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

R Type

Technical Data

UCCR040DR-1ACC, UCCR040SR-2AH0, UCCR040DR-2ACC

Mechanical Data

			UCCR040DR-1ACC	UCCR040SR-2AH0	UCCR040DR-2ACC
Number of Refrigeration Circuits			2	1	2
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	36.6	40.3	40.5
Nominal Input - Mechanical		kW	14.3	12.9	12.8
EER	(2)		2.55	3.12	3.16
ESEER			3.01	4.13	3.64
Capacity Steps		%	50-100	55-100	50-100
Minimum Turndown Ratio			0.50	0.55	0.49
Dimensions (H x W x L)		mm	1450 x 1310 x 1650	1450 x 1310 x 2500	1450 x 1310 x 2500
Weight	(3)				
Machine		kg	540	679	677
Operating		kg	547	689	687
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazen Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	4.0	4.0	4.0
Maximum Waterflow		l/s	2.8	3.1	3.1
Minimum Waterflow		l/s	1.4	1.4	1.4
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m ²	1.7	3.4	3.4
Nominal Airflow - EC Fans		m ³ /s	3.2	6.0	5.9
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			1	2	2
Diameter		mm	630	630	630
Maximum Speed - EC Fans		rpm	960	960	960
Compressor			Single + Single	Tandem	Single + Single
Quantity of Compressors			2	2	2
Oil Charge Volume (Total)		l	1 x 3 + 1 x 3	2 x 3	1 x 3 + 1 x 3
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Control			R410A (GWP 2088)		
Refrigerant Precharged					
Charge (Total)		kg	5.5 + 5.5	18	9 + 9
GWP Equivalent CO ₂ Tonnes		tCO ₂	22.97	37.58	37.58
Connections					
Water Inlet / Outlet - Unit			1 1/2" BSP	1 1/2" BSP	1 1/2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	321	387	350
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR040DR-1ACC, UCCR040SR-2AH0, UCCR040DR-2ACC

Electrical Data

Unit Data			UCCR040DR-1ACC	UCCR040SR-2AH0	UCCR040DR-2ACC
Nominal Run Amps	(1)	A	31	35	35
Maximum Start Amps		A	115	119	119
Recommended Mains Fuse Size		A	40	40	40
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	35	35	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			1	2	2
Full Load Amps		A	3.3	3.3	3.3
Motor Rating		kW	0.73	0.73	0.73
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	13.44 / 13.44	13	13.44 / 13.44
Quantity			2	2	2
Motor Rating	(2)	kW	7.22 / 7.22	7.2	7.22 / 7.22
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	98 / 98	98	98 / 98
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	31.2	34.5	34.5
Maximum Start Amps		A	76.1	79.4	79.4
Recommended Mains Fuse		A	40	40	40

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

R Type

Technical Data

UCCR050SR-2AK0, UCCR050DR-2ADD, UCCR060SR-2AL0

Mechanical Data

			UCCR050SR-2AK0	UCCR050DR-2ADD	UCCR060SR-2AL0
Number of Refrigeration Circuits			1	2	1
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	51.7	51.8	58.1
Nominal Input - Mechanical		kW	17.6	17.5	20.0
EER	(2)		2.95	2.96	2.91
ESEER			3.97	3.39	3.90
Capacity Steps		%	55-100	50-100	55-100
Minimum Turndown Ratio			0.56	0.49	0.56
Dimensions (H x W x L)		mm	1450 x 1310 x 2500	1450 x 1310 x 2500	1450 x 1310 x 2500
Weight	(3)				
Machine		kg	694	692	705
Operating		kg	704	702	720
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Braze Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	4.4	4.4	5.2
Maximum Waterflow		l/s	4.0	4.0	4.4
Minimum Waterflow		l/s	1.4	1.4	1.6
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m ²	3.4	3.4	3.4
Nominal Airflow - EC Fans		m ³ /s	6.5	6.5	6.5
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			2	2	2
Diameter		mm	630	630	630
Maximum Speed - EC Fans		rpm	960	960	960
Compressor			Tandem	Single + Single	Tandem
Quantity of Compressors			2	2	2
Oil Charge Volume (Total)		l	2 x 3.3	1 x 3.3 + 1 x 3.3	2 x 3.3
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Control			R410A (GWP 2088)		
Refrigerant Precharged					
Charge (Total)		kg	18.5	9 + 9	18.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	38.63	37.58	38.63
Connections					
Water Inlet / Outlet - Unit			2" BSP	2" BSP	2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	505	448	575
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR050SR-2AK0, UCCR050DR-2ADD, UCCR060SR-2AL0

Electrical Data

Unit Data			UCCR050SR-2AK0	UCCR050DR-2ADD	UCCR060SR-2AL0
Nominal Run Amps	(1)	A	42	42	46
Maximum Start Amps		A	166	166	173
Recommended Mains Fuse Size		A	50	50	63
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	35	35	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			2	2	2
Full Load Amps		A	3.3	3.3	3.3
Motor Rating		kW	0.73	0.73	0.73
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	17	17.22 / 17.22	19
Quantity			2	2	2
Motor Rating	(2)	kW	9.4	9.44 / 9.44	10.6
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	142	142 / 142	147
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	42.3	42.3	45.9
Maximum Start Amps		A	109.7	109.7	114.4
Recommended Mains Fuse		A	50	50	63

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

R Type

Technical Data

UCCR060DR-2AEE, UCCR070SR-2AM0, UCCR070DR-2AFF

Mechanical Data

			UCCR060DR-2AEE	UCCR070SR-2AM0	UCCR070DR-2AFF
Number of Refrigeration Circuits			2	1	2
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	58.2	65.6	66.0
Nominal Input - Mechanical		kW	19.9	23.5	23.3
EER	(2)		2.93	2.79	2.83
ESEER			3.32	3.84	3.26
Capacity Steps		%	50-100	55-100	50-100
Minimum Turndown Ratio			0.50	0.57	0.50
Dimensions (H x W x L)		mm	1450 x 1310 x 2500	1450 x 1310 x 2500	1450 x 1310 x 2500
Weight	(3)				
Machine		kg	704	716	714
Operating		kg	719	732	730
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazen Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	5.2	6.4	6.4
Maximum Waterflow		l/s	4.5	5.0	5.1
Minimum Waterflow		l/s	1.6	2.0	2.0
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m ²	3.4	3.4	3.4
Nominal Airflow - EC Fans		m ³ /s	6.5	6.5	6.5
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			2	2	2
Diameter		mm	630	630	630
Maximum Speed - EC Fans		rpm	960	960	960
Compressor			Single + Single	Tandem	Single + Single
Quantity of Compressors			2	2	2
Oil Charge Volume (Total)		l	1 x 3.3 + 1 x 3.3	2 x 3.3	1 x 3.3 + 1 x 3.3
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Control			R410A (GWP 2088)		
Refrigerant Precharged					
Charge (Total)		kg	9.5 + 9	19	9.5 + 9.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	38.63	39.67	39.67
Connections					
Water Inlet / Outlet - Unit			2" BSP	2" BSP	2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	510	657	582
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR060DR-2AEE, UCCR070SR-2AM0, UCCR070DR-2AFF

Electrical Data

Unit Data			UCCR060DR-2AEE	UCCR070SR-2AM0	UCCR070DR-2AFF
Nominal Run Amps	(1)	A	46	51	51
Maximum Start Amps		A	173	187	187
Recommended Mains Fuse Size		A	63	63	63
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	35	35	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			2	2	2
Full Load Amps		A	3.3	3.3	3.3
Motor Rating		kW	0.73	0.73	0.73
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	18.98 / 18.98	21	21.31 / 21.31
Quantity			2	2	2
Motor Rating	(2)	kW	10.56 / 10.56	12.2	12.15 / 12.15
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	147 / 147	158	158 / 158
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	45.9	51.0	51.0
Maximum Start Amps		A	114.4	123.6	123.6
Recommended Mains Fuse		A	63	63	63

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical Data

UCCR075SR-2AN0, UCCR075SR-2AP0, UCCR075DR-2AGG

Mechanical Data

			UCCR075SR-2AN0	UCCR075SR-2AP0	UCCR075DR-2AGG
Number of Refrigeration Circuits			1	1	2
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	71.4	79.8	72.0
Nominal Input - Mechanical		kW	27.2	32.1	26.9
EER	(2)		2.62	2.49	2.68
ESEER			3.71	3.84	3.11
Capacity Steps		%	60-100	40-75-100	50-100
Minimum Turndown Ratio			0.58	0.41	0.50
Dimensions (H x W x L)		mm	1450 x 1310 x 2500	1450 x 1310 x 2500	1450 x 1310 x 2500
Weight	(3)				
Machine		kg	722	722	720
Operating		kg	739	739	737
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazen Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	6.4	6.4	6.4
Maximum Waterflow		l/s	5.4	6.1	5.5
Minimum Waterflow		l/s	2.0	2.0	2.0
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m ²	3.4	3.4	3.4
Nominal Airflow - EC Fans		m ³ /s	6.5	6.5	6.5
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			2	2	2
Diameter		mm	630	630	630
Maximum Speed - EC Fans		rpm	960	960	960
Compressor			Tandem	Trio	Single + Single
Quantity of Compressors			2	3	2
Oil Charge Volume (Total)		l	2 x 3.6	3 x 3.3	1 x 3.6 + 1 x 3.6
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Control			R410A (GWP 2088)		
Refrigerant Precharged					
Charge (Total)		kg	19	19	9.5 + 9.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	39.67	39.67	39.67
Connections					
Water Inlet / Outlet - Unit			2" BSP	2" BSP	2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	729	582	633
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR075SR-2AN0, UCCR075SR-2AP0, UCCR075DR-2AGG

Electrical Data

Unit Data			UCCR075SR-2AN0	UCCR075SR-2AP0	UCCR075DR-2AGG
Nominal Run Amps	(1)	A	57	66	57
Maximum Start Amps		A	229	193	229
Recommended Mains Fuse Size		A	80	80	80
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	35	35	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			2	2	2
Full Load Amps		A	3.3	3.3	3.3
Motor Rating		kW	0.73	0.73	0.73
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	24	19	24.32 / 24.32
Quantity			2	3	2
Motor Rating	(2)	kW	13.7	10.6	13.68 / 13.68
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	197	147	197 / 197
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	57.3	65.5	57.3
Maximum Start Amps		A	150.1	134.1	150.1
Recommended Mains Fuse		A	80	80	80

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

R Type

Technical Data **UCCR085SR-2AP0 , UCCR085DR-2AHJ, UCCR100SR-2AQ0 ,UCCR100DR-2AJK**
Mechanical Data

			UCCR085SR-2AP0	UCCR085DR-2AHJ	UCCR100SR-2AQ0	UCCR100DR-2AJK
Number of Refrigeration Circuits			1	2	1	2
Cooling Duty - EC Fans						
Nominal Output - Mechanical	(1)	kW	84.0	81.0	100.1	97.0
Nominal Input - Mechanical		kW	30.5	30.0	35.0	34.2
EER	(2)		2.75	2.70	2.86	2.83
ESEER			4.06	3.84	4.11	3.89
Capacity Steps			%			
Minimum Turndown Ratio						
Dimensions (H x W x L)			mm			
Weight			(3)			
Machine		kg	1071	1071	1122	1122
Operating		kg	1089	1089	1141	1141
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)			
Evaporator			Brazen Plate			
Insulation			Class 1			
Water Volume (Total Internal)		l	7.2	7.2	8.6	8.4
Maximum Waterflow		l/s	6.4	6.2	7.6	7.4
Minimum Waterflow		l/s	2.5	2.5	2.8	2.8
Condenser			Copper tube & Aluminium Fins			
Face Area (Total)		m ²	5.1	5.1	5.1	5.1
Nominal Airflow - EC Fans		m ³ /s	6.9	6.9	10.3	10.3
Condenser Fan & Motor			Sickle Bladed Fan			
Quantity			2	2	2	2
Diameter		mm	630	630	710	710
Maximum Speed - EC Fans		rpm	960	960	1030	1030
Compressor			Trio	Tandem + Tandem	Trio	Tandem + Tandem
Quantity of Compressors			3	4	3	4
Oil Charge Volume (Total)		l	3 x 3.3	2 x 3 + 2 x 3.3	3 x 3.3	2 x 3.3 + 2 x 3.3
Oil Type			Polyol Ether			
Refrigeration			Electronic Expansion Valve (EEV)			
Refrigerant Control			R410A (GWP 2088)			
Refrigerant Precharged						
Charge (Total)		kg	27	14 + 14	28	14 + 14
GWP Equivalent CO ₂ Tonnes		tCO ₂	56.38	58.46	58.46	58.46
Connections						
Water Inlet / Outlet - Unit			DN65	DN65	DN65	DN65
Water Drain / Bleed - Evap			inch	1/2	1/2	1/2
Water System						
Minimum System Water Volume	(4)	l	595	384	683	451
Maximum System Operating Pressure		Bar	10	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options , operating weight includes refrigerant charge guide value

(4) For minimum system volume , refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data **UCCR085SR-2AP0 , UCCR085DR-2AHJ, UCCR100SR-2AQ0 ,UCCR100DR-2AJK**
Electrical Data

Unit Data			UCCR085SR-2AP0	UCCR085DR-2AHJ	UCCR100SR-2AQ0	UCCR100DR-2AJK
Nominal Run Amps	(1)	A	66	68	72	75
Maximum Start Amps		A	193	193	208	199
Recommended Mains Fuse Size		A	80	80	80	100
Mains Supply		VAC	400V 3 PH 50 Hz			
Max Mains Incoming Cable Size		mm ²	70	70	70	70
Recommended Permanent Fuse Size		A	16A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz			
Max Permanent Incoming Cable Size		mm ²	4	4	4	4
Control Circuit		VAC	24V/230VAC			
Evaporator						
Immersion Heater Rating		W	80	80	80	80
External Trace Heating						
Available (fitted by others)		W	500	500	500	500
Condenser Fan - Per Fan (EC)						
Quantity			2	2	2	2
Full Load Amps		A	3.3	3.3	2.7	2.7
Motor Rating		kW	0.73	0.73	1.7	1.7
Compressor - Per Compressor						
Nominal Run Amps	(2)	A	19	13.44 / 16.25	21	16.25 / 17.22
Quantity			3	4	3	4
Motor Rating	(2)	kW	10.6	7.22 / 8.4	12.2	8.4 / 9.44
Sump Heater Rating		W	80	80	80	80
Start Amps	(2)	A	147	98 / 142	158	142 / 142
Type Of Start	(3)		Direct on line			
OPTIONAL EXTRAS						
Power Factor Correction						
Nominal Run Amps		A	57.5	57.7	64.2	63.3
Maximum Start Amps		A	192.88	193.34	207.84	198.93
Recommended Mains Fuse Size		A	80	80	80	100
Electronic Soft-start						
Nominal Run Amps		A	65.5	68.2	72.1	74.8
Maximum Start Amps		A	134.1	136.5	144.6	142.1
Recommended Mains Fuse		A	80	80	80	100

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

R Type

Technical Data

UCCR125SR-3AR0, UCCR125DR-3ALL, UCCR150DR-3ANN

Mechanical Data

			UCCR125SR-3AR0	UCCR125DR-3ALL	UCCR150DR-3ANN
Number of Refrigeration Circuits			1	2	2
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	116.9	120.0	148.2
Nominal Input - Mechanical		kW	38.8	40.2	53.9
EER	(2)		3.01	2.99	2.75
ESEER			4.25	4.01	3.82
Capacity Steps					
		%	40-70-100	25-55-75-100	30-55-80-100
Minimum Turndown Ratio			0.38	0.27	0.28
Dimensions (H x W x L)					
		mm	2000 x 1300 x 3650	2000 x 1300 x 3650	2000 x 1300 x 3650
Weight					
Machine	(3)	kg	1358	1358	1391
Operating		kg	1392	1392	1427
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazen Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	11.0	11.2	13.2
Maximum Waterflow		l/s	8.9	9.2	11.3
Minimum Waterflow		l/s	3.4	3.4	3.8
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m²	7.7	7.7	7.7
Nominal Airflow - EC Fans		m³/s	14.6	14.7	15.4
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			3	3	3
Diameter		mm	710	710	710
Maximum Speed - EC Fans		rpm	1030	1030	1030
Compressor			Trio	Tandem + Tandem	Tandem + Tandem
Quantity of Compressors			3	4	4
Oil Charge Volume (Total)		l	3 x 3.6	2 x 3.3 + 2 x 3.3	2 x 3.6 + 2 x 3.6
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Control			R410A (GWP 2088)		
Refrigerant Precharged					
Charge (Total)		kg	39.5	20 + 20	20.5 + 20.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	82.48	83.52	85.61
Connections					
Water Inlet / Outlet - Unit			DN65	DN65	DN65
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	788	591	742
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR125SR-3AR0, UCCR125DR-3ALL, UCCR150DR-3ANN

Electrical Data

Unit Data			UCCR125SR-3AR0	UCCR125DR-3ALL	UCCR150DR-3ANN
Nominal Run Amps	(1)	A	84	87	109
Maximum Start Amps		A	256	214	281
Recommended Mains Fuse Size		A	100	100	125
Mains Supply		VAC		400V 3 PH 50 Hz	
Max Mains Incoming Cable Size		mm ²	70	70	70
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC		230V 1 PH 50 Hz	
Max Permanent Incoming Cable Size		mm ²	4	4	4
Control Circuit		VAC		24V/230VAC	
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			3	3	3
Full Load Amps		A	2.7	2.7	2.7
Motor Rating		kW	1.7	1.7	1.7
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	24	18.98 / 18.98	24.32 / 24.32
Quantity			3	4	4
Motor Rating	(2)	kW	13.7	10.56 / 10.56	13.68 / 13.68
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	197	147 / 147	197 / 197
Type Of Start	(3)			Direct on line	
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	74.2	75.9	96.2
Maximum Start Amps		A	255.76	214.02	281.09
Recommended Mains Fuse Size		A	100	100	125
Electronic Soft-start					
Nominal Run Amps		A	84.1	86.7	109.4
Maximum Start Amps		A	177.0	155.2	202.3
Recommended Mains Fuse		A	100	100	125

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

R Type

Technical Data X type

Capacity Data Extra Quiet (X) Models EC Fans

Model	Supply Temp °C	Ambient (°C)							
		25		30		35		40	
		Output kW	Input kW	Output kW	Input kW	Output kW	Input kW	Output kW	Input kW
UCCR030SX-1AE0	5	31.0	8.2	29.2	9.0	27.5	9.8	25.7	10.7
	6	31.9	8.2	30.1	9.0	28.3	9.9	26.5	10.8
	7	32.9	8.3	31.1	9.1	29.2	9.9	27.3	10.8
	8	33.9	8.3	32.0	9.1	30.1	10.0	28.1	10.9
	9	34.9	8.4	32.9	9.2	31.0	10.0	28.9	11.0
	10	35.9	8.4	33.9	9.2	31.9	10.1	29.8	11.0
UCCR030SX-2AE0	5	32.5	7.5	30.8	8.2	29.1	9.1	27.4	9.9
	6	33.5	7.5	31.8	8.3	30.1	9.1	28.3	10.0
	7	34.6	7.5	32.9	8.3	31.1	9.1	29.2	10.0
	8	35.7	7.5	33.9	8.3	32.1	9.2	30.2	10.1
	9	36.8	7.5	34.9	8.4	33.1	9.2	31.1	10.1
	10	37.9	7.5	36.1	8.4	34.1	9.3	32.1	10.1
UCCR040SX-1AH0	5	39.2	11.6	37.0	12.8	34.6	14.1	32.1	15.4
	6	40.4	11.7	38.1	12.9	35.6	14.2	33.1	15.5
	7	41.6	11.8	39.2	13.0	36.7	14.3	34.1	15.6
	8	42.8	11.9	40.3	13.1	37.7	14.4	35.1	15.7
	9	44.0	12.0	41.5	13.2	38.8	14.5	36.1	15.8
	10	45.3	12.1	42.6	13.3	39.9	14.6	37.1	16.0
UCCR040SX-2AH0	5	42.2	10.4	40.1	11.5	38.0	12.7	35.7	13.9
	6	43.6	10.4	41.5	11.5	39.2	12.7	36.9	14.0
	7	45.0	10.4	42.8	11.6	40.5	12.8	38.1	14.0
	8	46.4	10.5	44.2	11.6	41.8	12.8	39.3	14.1
	9	47.9	10.5	45.5	11.7	43.1	12.9	40.6	14.2
	10	49.3	10.5	47.0	11.7	44.4	13.0	41.8	14.2
UCCR040DX-1ACC	5	39.4	11.5	37.2	12.7	34.8	14.0	32.3	15.3
	6	40.7	11.6	38.3	12.8	35.8	14.1	33.3	15.4
	7	41.9	11.7	39.4	12.9	36.9	14.2	34.2	15.5
	8	43.1	11.8	40.6	13.0	38.0	14.3	35.2	15.6
	9	44.4	11.8	41.8	13.1	39.1	14.4	36.3	15.7
	10	45.6	11.9	43.0	13.2	40.2	14.5	37.3	15.8
UCCR040DX-2ACC	5	42.4	10.3	40.3	11.4	38.1	12.6	35.8	13.8
	6	43.8	10.3	41.6	11.4	39.4	12.6	37.0	13.9
	7	45.2	10.3	43.0	11.5	40.7	12.7	38.2	14.0
	8	46.7	10.3	44.4	11.5	42.0	12.7	39.5	14.0
	9	48.2	10.3	45.8	11.5	43.3	12.8	40.7	14.1
	10	49.7	10.4	47.2	11.6	44.7	12.8	42.0	14.1
UCCR050SX-2AK0	5	54.8	14.2	51.9	15.7	48.9	17.2	45.8	18.8
	6	56.5	14.2	53.5	15.7	50.4	17.3	47.2	18.9
	7	58.2	14.3	55.1	15.8	52.0	17.4	48.7	19.0
	8	60.0	14.3	56.8	15.9	53.5	17.4	50.2	19.1
	9	61.8	14.4	58.5	15.9	55.1	17.5	51.7	19.1
	10	63.6	14.4	60.2	16.0	56.8	17.6	53.2	19.2
UCCR050DX-2ADD	5	54.9	14.1	52.0	15.6	49.0	17.2	45.9	18.8
	6	56.6	14.2	53.6	15.7	50.5	17.2	47.3	18.9
	7	58.4	14.2	55.3	15.7	52.1	17.3	48.8	18.9
	8	60.1	14.3	56.9	15.8	53.6	17.4	50.2	19.0
	9	61.9	14.3	58.7	15.9	55.3	17.4	51.8	19.1
	10	63.8	14.3	60.4	15.9	56.9	17.5	53.3	19.2

1) Output kW refers to the chilled water duty.

2) Input kW refers to the compressor input power and condenser fans.

3) Duties applicable for chilled water with 5°C ΔT.

4) Interpolate for water temperatures between those quoted, do not extrapolate.

Technical Data

Capacity Data Extra Quiet (X) Models EC Fans

Model	Supply Temp °C	Ambient (°C)							
		25		30		35		40	
		Output kW	Input kW	Output kW	Input kW	Output kW	Input kW	Output kW	Input kW
UCCR060SX-2AL0	5	61.7	16.3	58.4	17.8	55.0	19.5	51.4	21.2
	6	63.6	16.4	60.2	17.9	56.6	19.6	53.0	21.3
	7	65.5	16.5	62.0	18.1	58.3	19.7	54.6	21.5
	8	67.4	16.6	63.8	18.2	60.1	19.9	56.2	21.6
	9	69.4	16.7	65.7	18.3	61.8	20.0	57.9	21.8
	10	71.4	16.8	67.6	18.4	63.6	20.1	59.6	21.9
UCCR060DX-2AEE	5	61.8	16.2	58.5	17.8	55.1	19.4	51.5	21.2
	6	63.7	16.3	60.3	17.9	56.8	19.5	53.1	21.3
	7	65.7	16.4	62.1	18.0	58.5	19.7	54.7	21.4
	8	67.6	16.5	64.0	18.1	60.2	19.8	56.4	21.6
	9	69.6	16.6	65.9	18.2	62.0	19.9	58.1	21.7
	10	71.6	16.7	67.8	18.3	63.8	20.0	59.8	21.8
UCCR070SX-2AM0	5	70.1	19.1	66.2	21.0	62.2	22.9	58.0	25.0
	6	72.2	19.2	68.2	21.1	64.1	23.1	59.8	25.2
	7	74.3	19.4	70.2	21.3	66.0	23.3	61.6	25.4
	8	76.4	19.5	72.2	21.4	67.9	23.4	63.3	25.6
	9	78.6	19.7	74.3	21.6	69.8	23.6	65.2	25.7
	10	80.8	19.8	76.4	21.7	71.8	23.8	67.0	25.9
UCCR070DX-2AFF	5	70.6	18.9	66.7	20.8	62.6	22.8	58.4	24.9
	6	72.7	19.0	68.7	20.9	64.5	22.9	60.1	25.0
	7	74.9	19.1	70.7	21.0	66.4	23.1	61.9	25.2
	8	77.1	19.2	72.8	21.2	68.3	23.2	63.8	25.4
	9	79.3	19.3	74.9	21.3	70.3	23.4	65.6	25.5
	10	81.6	19.4	77.0	21.4	72.3	23.5	67.5	25.7
UCCR075SX-2AN0	5	76.6	22.1	72.3	24.2	67.9	26.5	63.2	28.8
	6	78.8	22.3	74.4	24.4	69.8	26.7	65.0	29.1
	7	81.1	22.5	76.6	24.6	71.8	26.9	66.9	29.3
	8	83.3	22.7	78.7	24.8	73.8	27.1	68.8	29.5
	9	85.6	22.8	80.9	25.0	75.9	27.3	70.7	29.7
	10	87.9	23.0	83.1	25.2	78.0	27.5	72.6	29.9
UCCR075SX-2AP0	5	85.9	26.1	81.0	28.6	75.9	31.2	70.7	34.0
	6	88.4	26.4	83.3	28.8	78.1	31.4	72.7	34.3
	7	90.9	26.6	85.7	29.1	80.3	31.7	74.8	34.5
	8	93.5	26.9	88.1	29.3	82.6	32.0	76.9	34.8
	9	96.1	27.1	90.6	29.6	84.9	32.2	79.1	35.1
	10	98.7	27.4	93.1	29.9	87.2	32.5	81.2	35.3
UCCR075DX-2AGG	5	77.3	21.8	72.9	23.9	68.4	26.2	63.6	28.6
	6	79.6	21.9	75.1	24.1	70.4	26.4	65.5	28.8
	7	81.9	22.1	77.3	24.3	72.4	26.6	67.4	29.0
	8	84.3	22.2	79.5	24.4	74.5	26.8	69.4	29.2
	9	86.7	22.4	81.8	24.6	76.6	26.9	71.3	29.4
	10	89.1	22.5	84.1	24.8	78.8	27.1	73.3	29.6
UCCR085SX-2AP0	5	90.3	24.7	85.3	27.0	80.1	29.6	74.8	32.3
	6	93.0	24.9	87.8	27.2	82.5	29.8	77.1	32.5
	7	95.7	25.0	90.4	27.4	85.0	30.0	79.4	32.7
	8	98.5	25.2	93.1	27.7	87.5	30.2	81.7	32.9
	9	101.4	25.4	95.8	27.9	90.0	30.4	84.1	33.2
	10	104.2	25.6	98.5	28.1	92.6	30.7	86.5	33.4

1) Output kW refers to the chilled water duty.

2) Input kW refers to the compressor input power and condenser fans.

3) Duties applicable for chilled water with 5°C ΔT.

4) Interpolate for water temperatures between those quoted, do not extrapolate.

Technical

X Type

Technical Data

Capacity Data Extra Quiet (X) Models EC Fans

Model	Supply Temp °C	Ambient (°C)							
		25		30		35		40	
		Output kW	Input kW	Output kW	Input kW	Output kW	Input kW	Output kW	Input kW
UCCR085DX-2AHJ	5	87.0	24.0	82.1	26.5	77.1	29.0	71.8	31.8
	6	89.6	24.2	84.7	26.6	79.5	29.2	74.1	32.0
	7	92.3	24.4	87.2	26.8	81.9	29.4	76.4	32.2
	8	95.1	24.5	89.8	27.0	84.4	29.6	78.7	32.4
	9	97.9	24.7	92.5	27.2	86.8	29.8	81.0	32.6
	10	100.7	24.8	95.1	27.4	89.4	30.0	83.3	32.8
UCCR100SX-3AQ0	5	106.7	27.4	100.9	30.2	94.9	33.2	88.7	36.3
	6	110.0	27.5	104.0	30.4	97.8	33.4	91.4	36.5
	7	113.3	27.7	107.2	30.5	100.8	33.6	94.2	36.7
	8	116.6	27.8	110.4	30.7	103.8	33.7	97.1	36.9
	9	120.0	28.0	113.4	30.9	106.9	33.9	99.9	37.1
	10	123.5	28.1	116.9	31.1	110.0	34.1	102.9	37.3
UCCR100DX-3AJK	5	103.4	26.8	97.7	29.6	91.9	32.5	85.8	35.6
	6	106.6	26.9	100.8	29.7	94.8	32.6	88.5	35.7
	7	109.9	27.0	103.9	29.9	97.7	32.8	91.3	35.9
	8	113.2	27.1	107.0	30.0	100.7	33.0	94.1	36.1
	9	116.5	27.2	110.2	30.1	103.7	33.1	96.9	36.2
	10	119.9	27.3	113.5	30.3	106.8	33.3	99.8	36.4
UCCR125SX-4AR0	5	124.2	30.2	117.6	33.4	110.7	36.7	103.6	40.2
	6	128.0	30.4	121.2	33.6	114.2	36.9	106.8	40.4
	7	131.8	30.5	124.9	33.7	117.7	37.1	110.1	40.6
	8	135.8	30.6	128.7	33.9	121.2	37.2	113.4	40.8
	9	139.8	30.7	132.5	34.0	124.8	37.4	116.9	41.0
	10	143.8	30.9	136.4	34.1	128.5	37.6	120.3	41.1
UCCR125DX-4ALL	5	127.4	31.6	120.6	34.7	113.5	37.9	106.3	41.4
	6	131.3	31.7	124.3	34.9	117.1	38.2	109.7	41.6
	7	135.3	31.9	128.1	35.1	120.7	38.4	113.1	41.9
	8	139.4	32.0	132.0	35.3	124.4	38.6	116.5	42.1
	9	143.5	32.2	135.9	35.5	128.1	38.8	120.0	42.3
	10	147.7	32.3	139.9	35.6	131.9	39.0	123.6	42.6
UCCR150DX-4ANN	5	157.8	42.5	149.2	46.7	140.2	51.1	130.8	55.8
	6	162.5	42.7	153.7	47.0	144.4	51.5	134.7	56.2
	7	167.2	43.0	158.2	47.3	148.6	51.8	138.7	56.5
	8	172.0	43.3	162.7	47.6	152.9	52.1	142.7	56.9
	9	176.9	43.6	167.3	47.9	157.3	52.5	146.9	57.3
	10	181.8	43.9	172.0	48.3	161.7	52.8	151.0	57.6

1) Output kW refers to the chilled water duty.

2) Input kW refers to the compressor input power and condenser fans.

3) Duties applicable for chilled water with 5°C ΔT.

4) Interpolate for water temperatures between those quoted, do not extrapolate.

Technical Data**Sound Data****Global Chiller Sound Level****Quiet - X models Models - EC Fans**

		Frequency Hz								Total :
		63 Hz :	125 Hz :	250 Hz :	500 Hz :	1000 Hz :	2000 Hz :	4000 Hz :	8000 Hz :	
UCCR030SX-1AE0	Sound Power	77	69	71	70	70	64	64	60	74
	Sound Pressure @ 10m	45	37	39	39	38	33	33	29	42
UCCR030SX-2AE0	Sound Power	76	74	69	70	70	64	64	60	74
	Sound Pressure @ 10m	44	42	37	39	38	33	33	29	42
UCCR040SX-1AH0	Sound Power	79	69	71	70	70	66	63	64	74
	Sound Pressure @ 10m	47	37	39	38	38	34	31	32	42
UCCR040SX-2AH0	Sound Power	79	71	72	71	70	66	63	64	75
	Sound Pressure @ 10m	47	39	40	40	39	34	31	32	43
UCCR040DX-1ACC	Sound Power	79	69	71	70	70	66	63	64	74
	Sound Pressure @ 10m	47	37	39	38	38	34	31	32	42
UCCR040DX-2ACC	Sound Power	79	71	72	71	70	66	63	64	75
	Sound Pressure @ 10m	47	39	40	40	39	34	31	32	43
UCCR050SX-2AK0	Sound Power	79	72	74	73	73	66	65	62	76
	Sound Pressure @ 10m	47	40	42	41	41	34	33	31	45
UCCR050DX-2ADD	Sound Power	79	72	74	73	73	66	65	62	76
	Sound Pressure @ 10m	47	40	42	41	41	34	33	31	45
UCCR060SX-2AL0	Sound Power	80	72	74	73	73	67	67	63	77
	Sound Pressure @ 10m	48	40	42	41	41	36	36	32	45
UCCR060DX-2AEE	Sound Power	80	72	74	73	73	67	67	63	77
	Sound Pressure @ 10m	48	40	42	41	41	36	36	32	45
UCCR070SX-2AM0	Sound Power	79	72	74	73	71	68	70	67	77
	Sound Pressure @ 10m	48	40	42	41	40	37	38	35	45
UCCR070DX-2AFF	Sound Power	79	72	74	73	71	68	70	67	77
	Sound Pressure @ 10m	48	40	42	41	40	37	38	35	45
UCCR075SX-2AN0	Sound Power	82	72	74	73	73	70	68	63	77
	Sound Pressure @ 10m	50	40	42	41	41	38	36	31	46
UCCR075SX-2AP0	Sound Power	80	72	74	73	73	67	67	63	77
	Sound Pressure @ 10m	48	40	42	41	41	36	36	32	45
UCCR075DX-2AGG	Sound Power	82	72	74	73	73	70	68	63	77
	Sound Pressure @ 10m	50	40	42	41	41	38	36	31	46
UCCR085SX-2AP0	Sound Power	80	72	74	73	73	68	67	63	77
	Sound Pressure @ 10m	48	40	42	42	41	36	36	31	45
UCCR085DX-2AHJ	Sound Power	81	72	74	74	75	70	68	69	79
	Sound Pressure @ 10m	49	40	42	42	43	38	36	37	47
UCCR100SX-3AQ0	Sound Power	80	74	76	75	72	69	70	67	78
	Sound Pressure @ 10m	48	42	44	43	40	37	38	35	46
UCCR100DX-3AJK	Sound Power	81	74	76	76	76	70	68	68	80
	Sound Pressure @ 10m	49	42	44	44	44	38	36	36	48
UCCR125SX-4AR0	Sound Power	83	75	77	76	74	70	68	63	79
	Sound Pressure @ 10m	51	43	45	44	42	38	36	31	47
UCCR125DX-4ALL	Sound Power	83	75	77	76	76	71	70	66	80
	Sound Pressure @ 10m	51	43	45	44	44	38	38	34	48
UCCR150DX-4ANN	Sound Power	85	75	77	76	76	73	71	66	80
	Sound Pressure @ 10m	53	43	45	44	44	41	39	34	48

CAUTION ⚠

The Sound Pressure data quoted is only valid in free field conditions, where the unit is installed on a reflective base. If the equipment is placed adjacent to a reflective wall, values may vary to those stated, typically increasing by 3dB for each side added.

Technical

X Type

Technical Data X Type

UCCR030SX-1AE0, UCCR030SX-2AE0, UCCR040SX-1AH0

Mechanical Data

			UCCR030SX-1AE0	UCCR030SX-2AE0	UCCR040SX-1AH0
Number of Refrigeration Circuits			1	1	1
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	29.2	31.1	36.7
Nominal Input - Mechanical		kW	9.9	9.1	14.3
EER	(2)		2.94	3.40	2.57
ESEER			3.24	3.75	3.66
Capacity Steps			%	100	100
Minimum Turndown Ratio				1.00	0.58
Dimensions (H x W x L)			mm	1450 x 1310 x 1650	1450 x 1310 x 1650
Weight			(3)		
Machine		kg	481	618	541
Operating		kg	487	626	548
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazen Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	3.2	3.2	4.0
Maximum Waterflow		l/s	2.2	2.4	2.8
Minimum Waterflow		l/s	1.0	1.0	1.4
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m²	1.7	3.4	1.7
Nominal Airflow - EC Fans		m³/s	3.4	5.4	3.4
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			1	2	1
Diameter		mm	710	710	710
Maximum Speed - EC Fans		rpm	750	750	750
Compressor			Single	Single	Tandem
Quantity of Compressors			1	1	2
Oil Charge Volume (Total)		l	1 x 3.3	1 x 3.3	2 x 3
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Precharged			R410A (GWP 2088)		
Charge (Total)		kg	10	17.5	10.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	20.88	36.54	21.92
Connections					
Water Inlet / Outlet - Unit			1 1/2" BSP	1 1/2" BSP	1 1/2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	506	541	372
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR030SX-1AE0, UCCR030SX-2AE0, UCCR040SX-1AH0

Electrical Data

Unit Data			UCCR030SX-1AE0	UCCR030SX-2AE0	UCCR040SX-1AH0
Nominal Run Amps	(1)	A	22	25	31
Maximum Start Amps		A	150	152	115
Recommended Mains Fuse Size		A	32	32	40
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	35	35	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			1	2	1
Full Load Amps		A	2.7	2.7	2.7
Motor Rating		kW	1.7	1.7	1.7
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	19	19	13
Quantity			1	1	2
Motor Rating	(2)	kW	10.6	10.6	7.2
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	147	147	98
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	22.3	25.0	30.6
Maximum Start Amps		A	90.9	93.6	75.5
Recommended Mains Fuse		A	32	32	40

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

X Type

Technical Data

UCCR040DX-1ACC, UCCR040SX-2AH0, UCCR040DX-2ACC

Mechanical Data

			UCCR040DX-1ACC	UCCR040SX-2AH0	UCCR040DX-2ACC
Number of Refrigeration Circuits			2	1	2
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	36.9	40.5	40.7
Nominal Input - Mechanical		kW	14.2	12.8	12.7
EER	(2)		2.60	3.17	3.21
ESEER			3.07	4.16	3.69
Capacity Steps		%	50-100	55-100	50-100
Minimum Turndown Ratio			0.50	0.55	0.49
Dimensions (H x W x L)		mm	1450 x 1310 x 1650	1450 x 1310 x 2500	1450 x 1310 x 2500
Weight	(3)				
Machine		kg	540	679	677
Operating		kg	547	689	687
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazen Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	4.0	4.0	4.0
Maximum Waterflow		l/s	2.8	3.1	3.1
Minimum Waterflow		l/s	1.4	1.4	1.4
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m²	1.7	3.4	3.4
Nominal Airflow - EC Fans		m³/s	3.4	6.3	6.3
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			1	2	2
Diameter		mm	710	710	710
Maximum Speed - EC Fans		rpm	750	750	750
Compressor			Single + Single	Tandem	Single + Single
Quantity of Compressors			2	2	2
Oil Charge Volume (Total)		l	1 x 3 + 1 x 3	2 x 3	1 x 3 + 1 x 3
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Control			R410A (GWP 2088)		
Refrigerant Precharged					
Charge (Total)		kg	5.5 + 5.5	18	9 + 9
GWP Equivalent CO ₂ Tonnes		tCO ₂	22.97	37.58	37.58
Connections					
Water Inlet / Outlet - Unit			1 1/2" BSP	1 1/2" BSP	1 1/2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	323	389	353
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR040DX-1ACC, UCCR040SX-2AH0, UCCR040DX-2ACC

Electrical Data

Unit Data			UCCR040DX-1ACC	UCCR040SX-2AH0	UCCR040DX-2ACC
Nominal Run Amps	(1)	A	31	33	33
Maximum Start Amps		A	115	117	117
Recommended Mains Fuse Size		A	40	40	40
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	35	35	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			1	2	2
Full Load Amps		A	2.7	2.7	2.7
Motor Rating		kW	1.7	1.7	1.7
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	13.44 / 13.44	13	13.44 / 13.44
Quantity			2	2	2
Motor Rating	(2)	kW	7.22 / 7.22	7.2	7.22 / 7.22
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	98 / 98	98	98 / 98
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	30.6	33.3	33.3
Maximum Start Amps		A	75.5	78.2	78.2
Recommended Mains Fuse		A	40	40	40

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

X Type

Technical Data

UCCR050SX-2AK0, UCCR050DX-2ADD, UCCR060SX-2AL0

Mechanical Data

			UCCR050SX-2AK0	UCCR050DX-2ADD	UCCR060SX-2AL0
Number of Refrigeration Circuits			1	2	1
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	52.0	52.1	58.3
Nominal Input - Mechanical		kW	17.4	17.3	19.7
EER	(2)		2.99	3.01	2.96
ESEER			4.01	3.45	3.94
Capacity Steps			%		
Minimum Turndown Ratio					
Minimum Turndown Ratio			0.56	0.49	0.56
Dimensions (H x W x L)			mm		
Dimensions (H x W x L)			1450 x 1310 x 2500	1450 x 1310 x 2500	1450 x 1310 x 2500
Weight			(3)		
Machine		kg	694	692	705
Operating		kg	704	702	720
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazen Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	4.4	4.4	5.2
Maximum Waterflow		l/s	4.0	4.0	4.5
Minimum Waterflow		l/s	1.4	1.4	1.6
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m²	3.4	3.4	3.4
Nominal Airflow - EC Fans		m³/s	6.7	6.7	6.7
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			2	2	2
Diameter		mm	710	710	710
Maximum Speed - EC Fans		rpm	750	750	750
Compressor			Tandem	Single + Single	Tandem
Quantity of Compressors			2	2	2
Oil Charge Volume (Total)		l	2 x 3.3	1 x 3.3 + 1 x 3.3	2 x 3.3
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Precharged			R410A (GWP 2088)		
Charge (Total)		kg	18.5	9 + 9	18.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	38.63	37.58	38.63
Connections					
Water Inlet / Outlet - Unit			2" BSP	2" BSP	2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	508	451	578
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR050SX-2AK0, UCCR050DX-2ADD, UCCR060SX-2AL0

Electrical Data

Unit Data			UCCR050SX-2AK0	UCCR050DX-2ADD	UCCR060SX-2AL0
Nominal Run Amps	(1)	A	41	41	45
Maximum Start Amps		A	165	165	172
Recommended Mains Fuse Size		A	50	50	50
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	35	35	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			2	2	2
Full Load Amps		A	2.7	2.7	2.7
Motor Rating		kW	1.7	1.7	1.7
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	17	17.22 / 17.22	19
Quantity			2	2	2
Motor Rating	(2)	kW	9.4	9.44 / 9.44	10.6
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	142	142 / 142	147
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	41.1	41.1	44.7
Maximum Start Amps		A	108.5	108.5	113.2
Recommended Mains Fuse		A	50	50	50

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

X Type

Technical Data

UCCR060DX-2AEE, UCCR070SX-2AM0, UCCR070DX-2AFF

Mechanical Data

			UCCR060DX-2AEE	UCCR070SX-2AM0	UCCR070DX-2AFF
Number of Refrigeration Circuits			2	1	2
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	58.5	66.0	66.4
Nominal Input - Mechanical		kW	19.7	23.3	23.1
EER	(2)		2.98	2.83	2.88
ESEER			3.38	3.89	3.32
Capacity Steps		%	50-100	55-100	50-100
Minimum Turndown Ratio			0.50	0.57	0.50
Dimensions (H x W x L)		mm	1450 x 1310 x 2500	1450 x 1310 x 2500	1450 x 1310 x 2500
Weight	(3)				
Machine		kg	704	716	714
Operating		kg	719	732	730
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazen Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	5.2	6.4	6.4
Maximum Waterflow		l/s	4.5	5.0	5.1
Minimum Waterflow		l/s	1.6	2.0	2.0
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m²	3.4	3.4	3.4
Nominal Airflow - EC Fans		m³/s	6.7	6.7	6.7
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			2	2	2
Diameter		mm	710	710	710
Maximum Speed - EC Fans		rpm	750	750	750
Compressor			Single + Single	Tandem	Single + Single
Quantity of Compressors			2	2	2
Oil Charge Volume (Total)		l	1 x 3.3 + 1 x 3.3	2 x 3.3	1 x 3.3 + 1 x 3.3
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Precharged			R410A (GWP 2088)		
Charge (Total)		kg	9.5 + 9	19	9.5 + 9.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	38.63	39.67	39.67
Connections					
Water Inlet / Outlet - Unit			2" BSP	2" BSP	2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	513	661	585
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR060DX-2AEE, UCCR070SX-2AM0, UCCR070DX-2AFF

Electrical Data

Unit Data			UCCR060DX-2AEE	UCCR070SX-2AM0	UCCR070DX-2AFF
Nominal Run Amps	(1)	A	45	50	50
Maximum Start Amps		A	172	186	186
Recommended Mains Fuse Size		A	50	63	63
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	35	35	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			2	2	2
Full Load Amps		A	2.7	2.7	2.7
Motor Rating		kW	1.7	1.7	1.7
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	18.98 / 18.98	21	21.31 / 21.31
Quantity			2	2	2
Motor Rating	(2)	kW	10.56 / 10.56	12.2	12.15 / 12.15
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	147 / 147	158	158 / 158
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	44.7	49.8	49.8
Maximum Start Amps		A	113.2	122.4	122.4
Recommended Mains Fuse		A	50	63	63

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

X Type

Technical Data

UCCR075SX-2AN0, UCCR075SX-2AP0, UCCR075DX-2AGG

Mechanical Data

			UCCR075SX-2AN0	UCCR075SX-2AP0	UCCR075DX-2AGG
Number of Refrigeration Circuits			1	1	2
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	71.8	80.3	72.4
Nominal Input - Mechanical		kW	26.9	31.7	26.6
EER	(2)		2.67	2.53	2.73
ESEER			3.77	3.89	3.17
Capacity Steps			%		
Minimum Turndown Ratio					
Dimensions (H x W x L)			mm		
Weight			(3)		
Machine		kg	722	722	720
Operating		kg	739	739	737
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazed Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	6.4	6.4	6.4
Maximum Waterflow		l/s	5.5	6.2	5.6
Minimum Waterflow		l/s	2.0	2.0	2.0
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m ²	3.4	3.4	3.4
Nominal Airflow - EC Fans		m ³ /s	6.7	6.7	6.7
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			2	2	2
Diameter		mm	710	710	710
Maximum Speed - EC Fans		rpm	750	750	750
Compressor			Tandem	Trio	Single + Single
Quantity of Compressors			2	3	2
Oil Charge Volume (Total)		l	2 x 3.6	3 x 3.3	1 x 3.6 + 1 x 3.6
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Control			R410A (GWP 2088)		
Refrigerant Precharged					
Charge (Total)		kg	19	19	9.5 + 9.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	39.67	39.67	39.67
Connections					
Water Inlet / Outlet - Unit			2" BSP	2" BSP	2" BSP
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	734	586	637
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR075SX-2AN0, UCCR075SX-2AP0, UCCR075DX-2AGG

Electrical Data

Unit Data			UCCR075SX-2AN0	UCCR075SX-2AP0	UCCR075DX-2AGG
Nominal Run Amps	(1)	A	56	64	56
Maximum Start Amps		A	228	192	228
Recommended Mains Fuse Size		A	63	80	63
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm ²	35	35	35
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm ²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			2	2	2
Full Load Amps		A	2.7	2.7	2.7
Motor Rating		kW	1.7	1.7	1.7
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	24	19	24.32 / 24.32
Quantity			2	3	2
Motor Rating	(2)	kW	13.7	10.6	13.68 / 13.68
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	197	147	197 / 197
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	N/A	N/A	N/A
Maximum Start Amps		A	N/A	N/A	N/A
Recommended Mains Fuse Size		A	N/A	N/A	N/A
Electronic Soft-start					
Nominal Run Amps		A	56.1	64.3	56.1
Maximum Start Amps		A	148.9	132.9	148.9
Recommended Mains Fuse		A	63	80	63

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

X Type

Technical Data UCCR085SX-2AP0 , UCCR085DX-2AHJ, UCCR100SX-3AQ0 , UCCR100DX-3AJK
Mechanical Data

			UCCR085SX-2AP0	UCCR085DX-2AHJ	UCCR100SX-3AQ0	UCCR100DX-3AJK
Number of Refrigeration Circuits			1	2	1	2
Cooling Duty - EC Fans						
Nominal Output - Mechanical	(1)	kW	85.0	81.9	100.8	97.7
Nominal Input - Mechanical		kW	30.0	29.4	33.6	32.8
EER	(2)		2.83	2.78	3.00	2.98
ESEER			4.19	3.98	4.28	4.08
Capacity Steps			%			
Minimum Turndown Ratio						
Dimensions (H x W x L)			mm			
Weight			(3)			
Machine		kg	1071	1071	1333	1333
Operating		kg	1089	1089	1357	1357
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)			
Evaporator			Brazen Plate			
Insulation			Class 1			
Water Volume (Total Internal)		l	7.2	7.2	8.6	8.4
Maximum Waterflow		l/s	6.5	6.3	7.7	7.5
Minimum Waterflow		l/s	2.5	2.5	2.8	2.8
Condenser			Copper tube & Aluminium Fins			
Face Area (Total)		m ²	5.1	5.1	7.7	7.7
Nominal Airflow - EC Fans		m ³ /s	7.4	7.4	11.1	11.1
Condenser Fan & Motor			Sickle Bladed Fan			
Quantity			2	2	3	3
Diameter		mm	710	710	710	710
Maximum Speed - EC Fans		rpm	750	750	750	750
Compressor			Trio	Tandem + Tandem	Trio	Tandem + Tandem
Quantity of Compressors			3	4	3	4
Oil Charge Volume (Total)		l	3 x 3.3	2 x 3 + 2 x 3.3	3 x 3.3	2 x 3.3 + 2 x 3.3
Oil Type			Polyol Ether			
Refrigeration			Electronic Expansion Valve (EEV)			
Refrigerant Control			R410A (GWP 2088)			
Refrigerant Precharged						
Charge (Total)		kg	27	14 + 14	38.5	19.5 + 19.5
GWP Equivalent CO ₂ Tonnes		tCO ₂	56.38	58.46	80.39	81.43
Connections						
Water Inlet / Outlet - Unit			DN65	DN65	DN65	DN65
Water Drain / Bleed - Evap			inch	1/2	1/2	1/2
Water System						
Minimum System Water Volume	(4)	l	599	388	692	461
Maximum System Operating Pressure		Bar	10	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options, operating weight includes refrigerant charge guide value

(4) For minimum system volume, refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR085SX-2AP0 , UCCR085DX-2AHJ, UCCR100SX-3AQ0 , UCCR100DX-3AJK

Electrical Data

Unit Data			UCCR085SX-2AP0	UCCR085DX-2AHJ	UCCR100SX-3AQ0	UCCR100DX-3AJK
Nominal Run Amps	(1)	A	64	67	75	77
Maximum Start Amps		A	192	192	211	202
Recommended Mains Fuse Size		A	80	80	100	100
Mains Supply		VAC	400V 3 PH 50 Hz			
Max Mains Incoming Cable Size		mm ²	70	70	70	70
Recommended Permanent Fuse Size		A	16A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz			
Max Permanent Incoming Cable Size		mm ²	4	4	4	4
Control Circuit		VAC	24V/230VAC			
Evaporator						
Immersion Heater Rating		W	80	80	80	80
External Trace Heating						
Available (fitted by others)		W	500	500	500	500
Condenser Fan - Per Fan (EC)						
Quantity			2	2	3	3
Full Load Amps		A	2.7	2.7	2.7	2.7
Motor Rating		kW	1.7	1.7	1.7	1.7
Compressor - Per Compressor						
Nominal Run Amps	(2)	A	19	13.44 / 16.25	21	16.25 / 17.22
Quantity			3	4	3	4
Motor Rating	(2)	kW	10.6	7.22 / 8.4	12.2	8.4 / 9.44
Sump Heater Rating		W	80	80	80	80
Start Amps	(2)	A	147	98 / 142	158	142 / 142
Type Of Start	(3)		Direct on line			
OPTIONAL EXTRAS						
Power Factor Correction						
Nominal Run Amps		A	56.3	56.5	66.9	66.0
Maximum Start Amps		A	191.68	192.14	210.54	201.63
Recommended Mains Fuse Size		A	80	80	100	100
Electronic Soft-start						
Nominal Run Amps		A	64.3	67.0	74.8	77.5
Maximum Start Amps		A	132.9	135.3	147.3	144.8
Recommended Mains Fuse		A	80	80	100	100

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

X Type

Technical Data

UCCR125SX-4AR0 , UCCR125DX-4ALL, UCCR150DX-4ANN

Mechanical Data

			UCCR125SX-4AR0	UCCR125DX-4ALL	UCCR150DX-4ANN
Number of Refrigeration Circuits			1	2	2
Cooling Duty - EC Fans					
Nominal Output - Mechanical	(1)	kW	117.6	120.7	148.6
Nominal Input - Mechanical		kW	37.1	38.4	51.8
EER	(2)		3.17	3.14	2.87
ESEER			4.42	4.20	4.03
Capacity Steps			%	40-70-100	25-55-80-100
Minimum Turndown Ratio				0.38	0.27
Dimensions (H x W x L)			mm	2000 x 1300 x 4500	2000 x 1300 x 4500
Weight			(3)		
Machine		kg	1542	1542	1574
Operating		kg	1583	1583	1617
Construction - Material / Colour			Base: Plain Galvanised Steel, Panels: Galvanised Sheet Steel, Epoxy Baked Powder Paint, Light Grey (RAL7035)		
Evaporator			Brazed Plate		
Insulation			Class 1		
Water Volume (Total Internal)		l	11.0	11.2	13.2
Maximum Waterflow		l/s	9.0	9.2	11.3
Minimum Waterflow		l/s	3.4	3.4	3.8
Condenser			Copper tube & Aluminium Fins		
Face Area (Total)		m ²	10.2	10.2	10.2
Nominal Airflow - EC Fans		m ³ /s	14.8	14.8	14.8
Condenser Fan & Motor			Sickle Bladed Fan		
Quantity			4	4	4
Diameter		mm	710	710	710
Maximum Speed - EC Fans		rpm	750	750	750
Compressor			Trio	Tandem + Tandem	Tandem + Tandem
Quantity of Compressors			3	4	4
Oil Charge Volume (Total)		l	3 x 3.6	2 x 3.3 + 2 x 3.3	2 x 3.6 + 2 x 3.6
Oil Type			Polyol Ether		
Refrigeration			Electronic Expansion Valve (EEV)		
Refrigerant Control			R410A (GWP 2088)		
Refrigerant Precharged					
Charge (Total)		kg	50.5	25.5 + 25.5	26 + 26
GWP Equivalent CO ₂ Tonnes		tCO ₂	105.44	106.49	108.58
Connections					
Water Inlet / Outlet - Unit			DN65	DN65	DN65
Water Drain / Bleed - Evap		inch	1/2	1/2	1/2
Water System					
Minimum System Water Volume	(4)	l	802	606	762
Maximum System Operating Pressure		Bar	10	10	10

(1) Based on units performance at 12/7°C return/supply temperature and 35°C Ambient, 100% water, all performance data supplied in accordance with BS EN 14511-1:2013

(2) EER is Cooling duty / (Compressor input power + Fan input power)

(3) Based on standard unit without options , operating weight includes refrigerant charge guide value

(4) For minimum system volume , refer to Design Features & Information - Minimum System Water Volume Calculations

Technical Data

UCCR125SX-4AR0 , UCCR125DX-4ALL, UCCR150DX-4ANN

Electrical Data

Unit Data			UCCR125SX-4AR0	UCCR125DX-4ALL	UCCR150DX-4ANN
Nominal Run Amps	(1)	A	87	89	112
Maximum Start Amps		A	258	217	284
Recommended Mains Fuse Size		A	100	100	125
Mains Supply		VAC	400V 3 PH 50 Hz		
Max Mains Incoming Cable Size		mm²	70	70	70
Recommended Permanent Fuse Size		A	16A	16A	16A
Permanent Supply		VAC	230V 1 PH 50 Hz		
Max Permanent Incoming Cable Size		mm²	4	4	4
Control Circuit		VAC	24V/230VAC		
Evaporator					
Immersion Heater Rating		W	80	80	80
External Trace Heating					
Available (fitted by others)		W	500	500	500
Condenser Fan - Per Fan (EC)					
Quantity			4	4	4
Full Load Amps		A	2.7	2.7	2.7
Motor Rating		kW	1.7	1.7	1.7
Compressor - Per Compressor					
Nominal Run Amps	(2)	A	24	18.98 / 18.98	24.32 / 24.32
Quantity			3	4	4
Motor Rating	(2)	kW	13.7	10.56 / 10.56	13.68 / 13.68
Sump Heater Rating		W	80	80	80
Start Amps	(2)	A	197	147 / 147	197 / 197
Type Of Start	(3)		Direct on line		
OPTIONAL EXTRAS					
Power Factor Correction					
Nominal Run Amps		A	76.9	78.6	98.9
Maximum Start Amps		A	258.46	216.72	283.79
Recommended Mains Fuse Size		A	100	100	125
Electronic Soft-start					
Nominal Run Amps		A	86.8	89.4	112.1
Maximum Start Amps		A	179.7	157.9	205.0
Recommended Mains Fuse		A	100	100	125

(1) EC fans and no pumps.

(2) Data quoted at ARI condition

(3) Starting amps refers to the direct on line connections.

Pump electrical data is available from Airedale upon request.

Technical

X Type

Hydronics Data
Waterside Pressure Drops

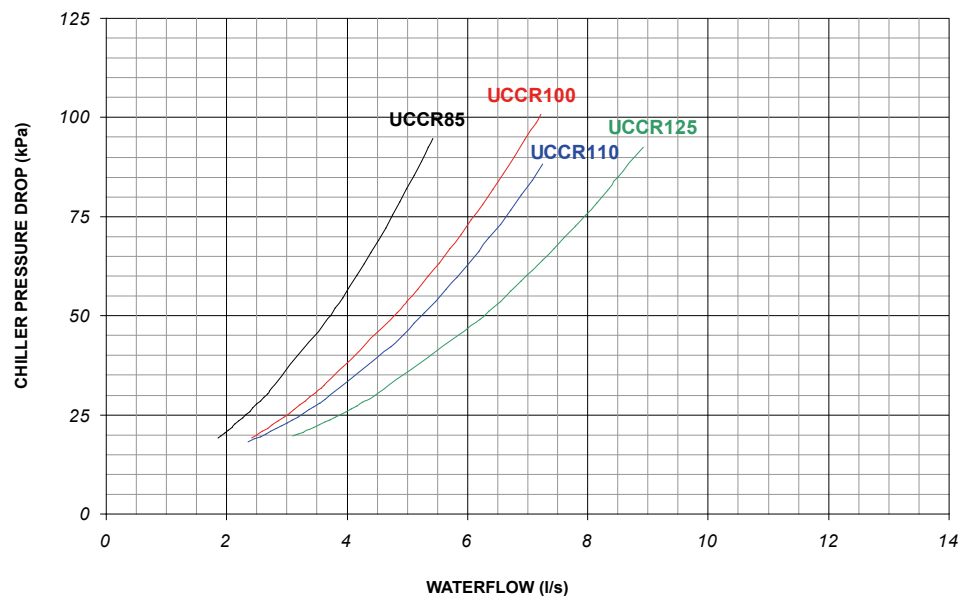
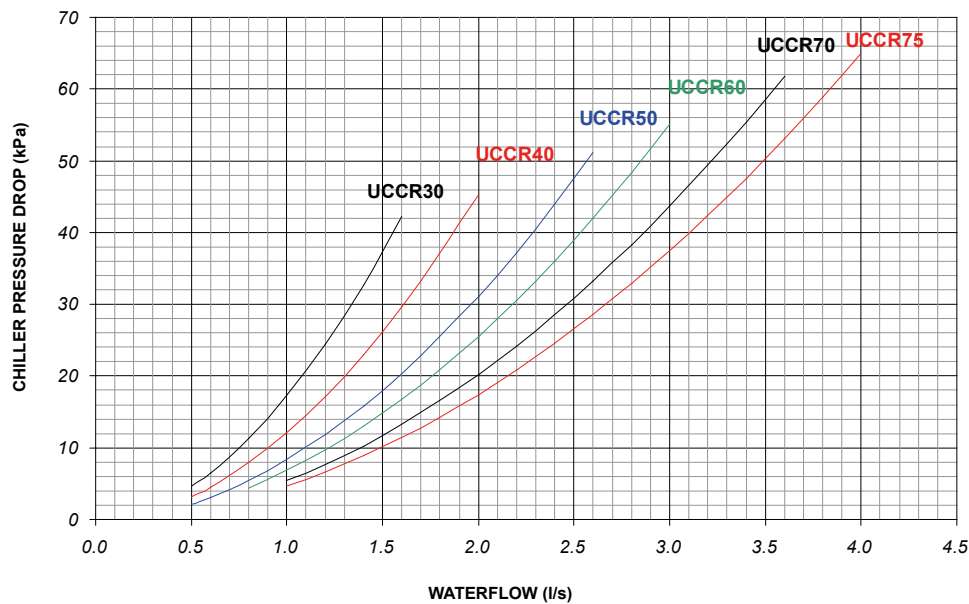
CAUTION 

Constant water flow **MUST** be maintained. Variable water volume is **NOT** recommended and may invalidate warranty.

Use the formula below to calculate the External Head Available:
Total Pump Head Available - Chiller Pressure Drop = **External Head Available**

Example: UCCR125DX-4ALL 8.0 l/s, standard single pump:
190 kPa - 75 kPa = **115 kPa**

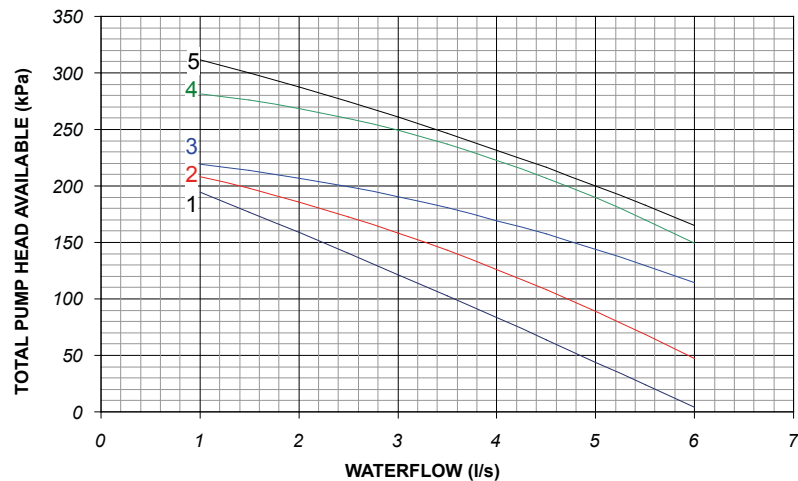
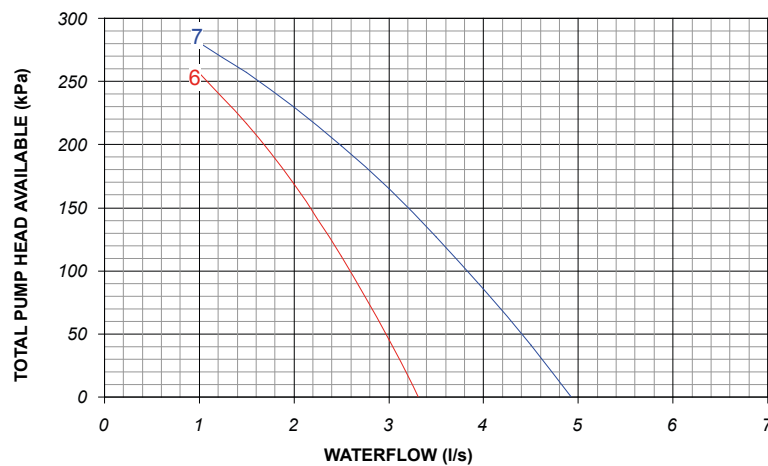
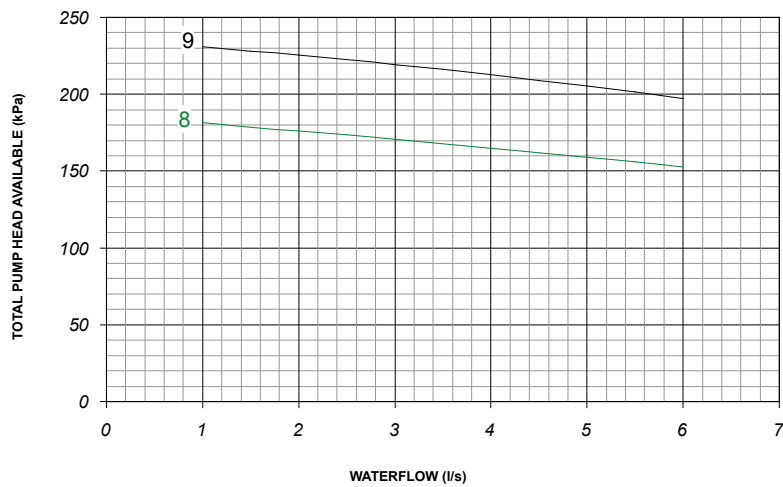
UCCR30-UCCR150



1) For glycol solutions, please refer to Glycol Data.
2) Chiller pressure drop refers to standard unit without optional pumps and/or pipework.

Performance Data

Pump Packages Single headed pump or Run/standby Pump
UCCR30-UCCR80

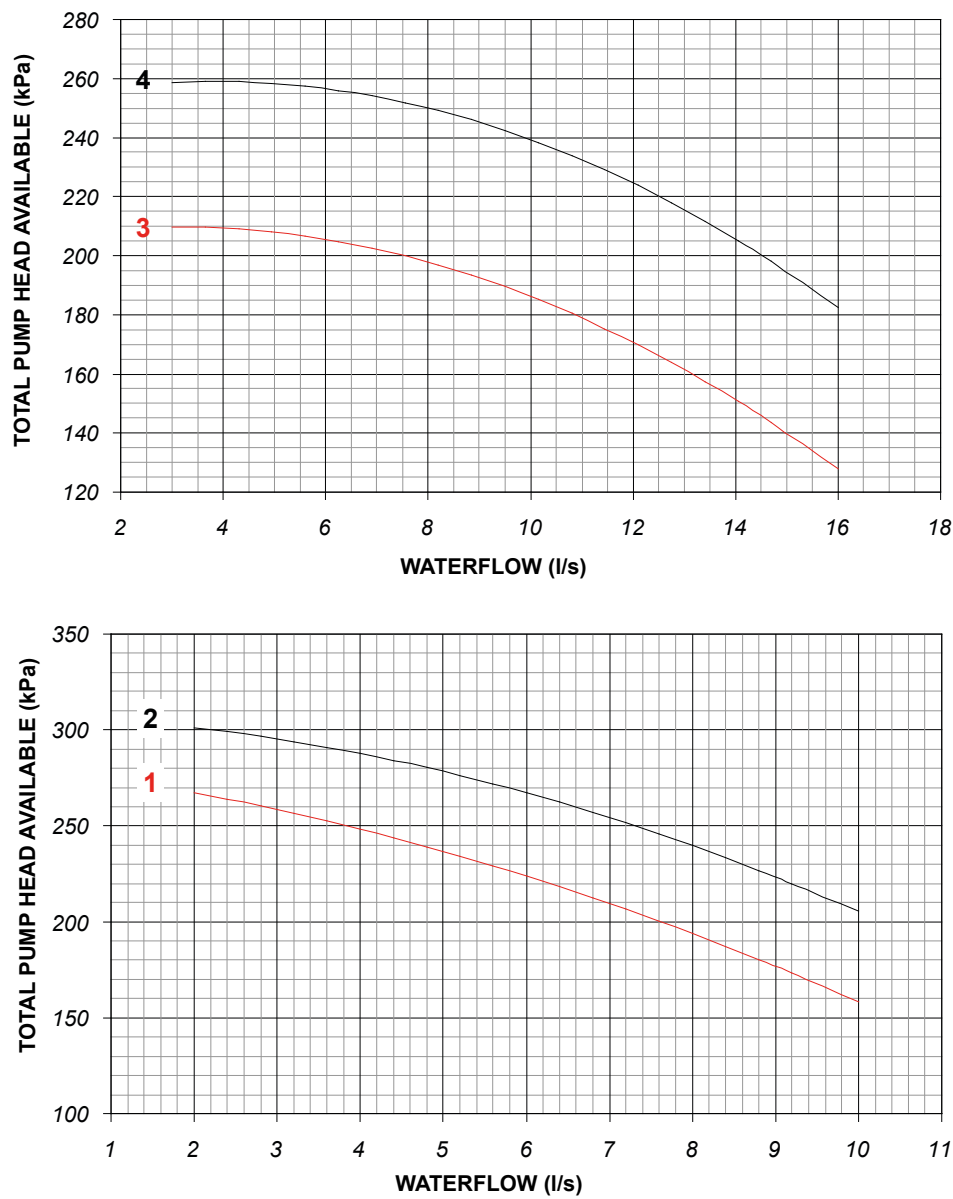


		Single Head Pump or Run / Standby Pump	
		Standard	Larger
UCCR30	Curve	1	6
UCCR40		1	7
UCCR50 - UCCR60		2	5
UCCR70 - UCCR75		3	4
		Twin Head Pump	
		Standard	Larger
UCCR30 - UCCR80	Curve	8	9

Technical

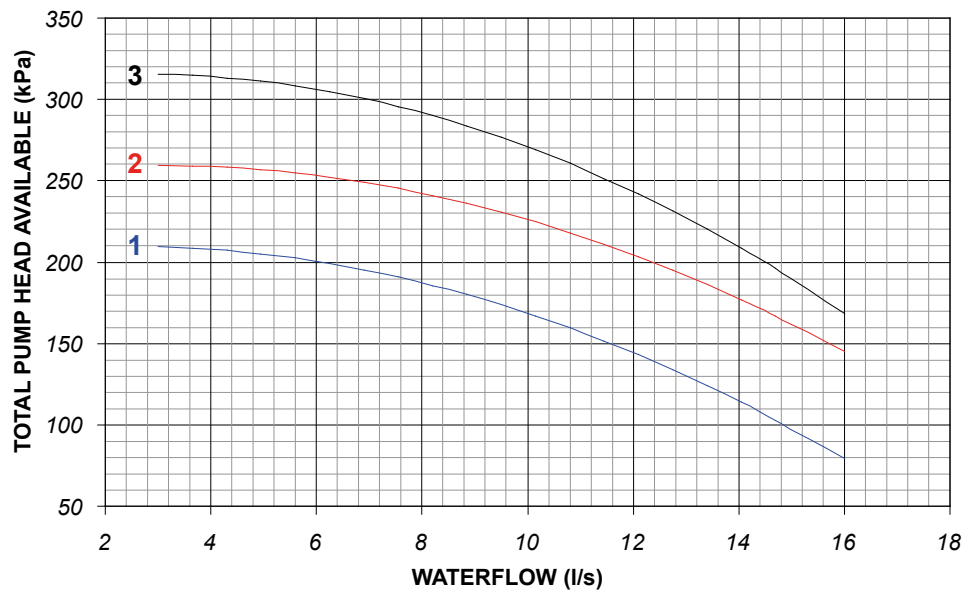
Performance Data

Pump Packages - Single Head Pump or Run/Standby
UCCR75-UCCR150



		Single Head Pump or Run / Standby Pump	
		Standard	Larger
UCCR75 - 150	Curve	1	2
UCCR150		3	4

Performance Data
Pump Packages - Twin Head Pump
UCCR75-UCCR150

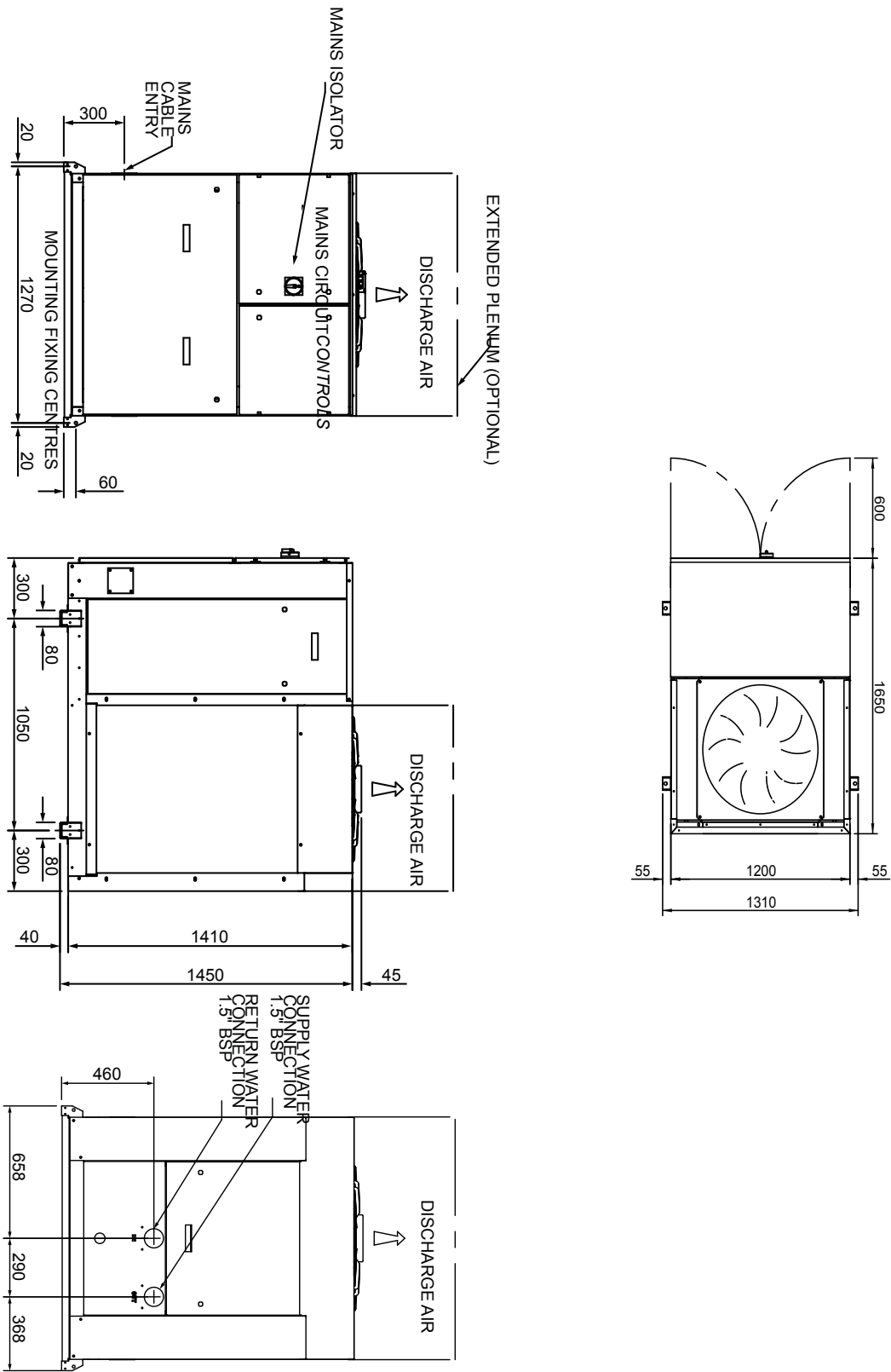


		Twin Head Pump	
		Standard	Larger
UCCR75 - 150	Curve	1	2

Technical

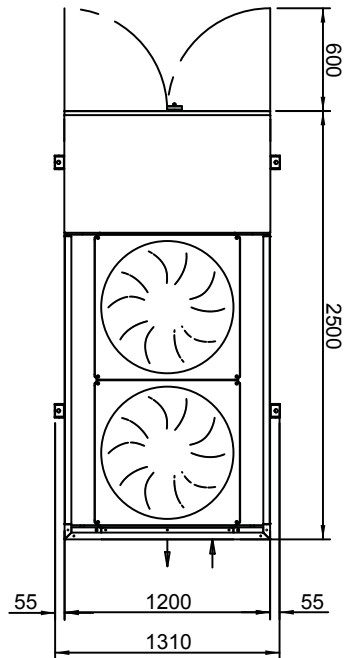
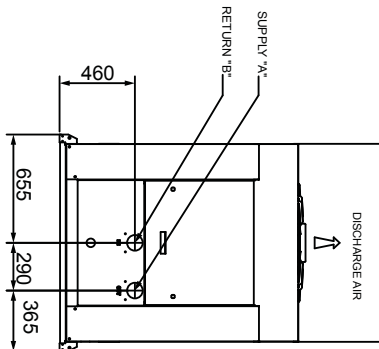
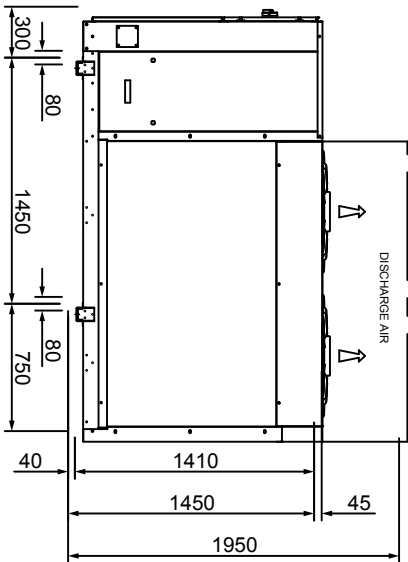
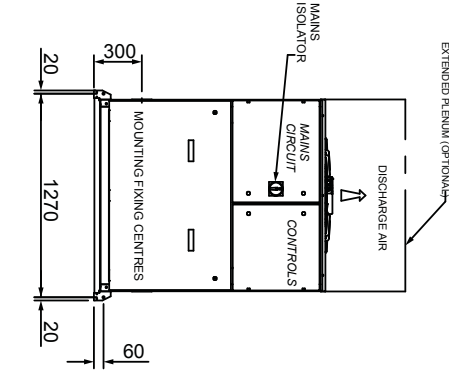
Installation
Dimensions
UCCR30 - 40

Technical



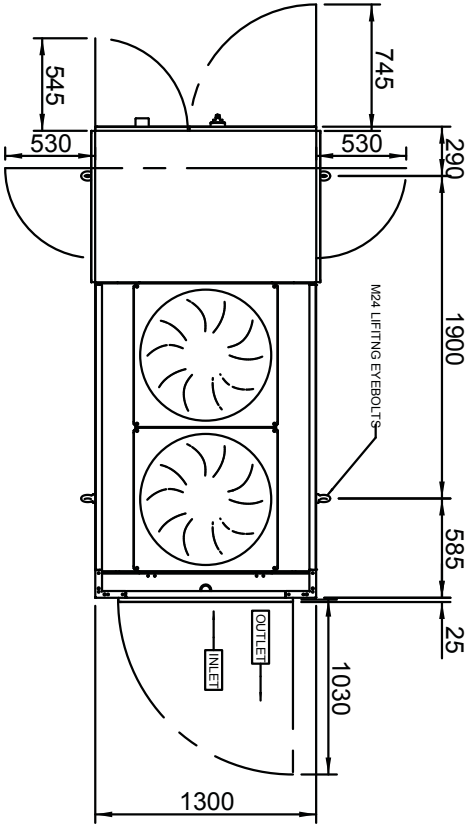
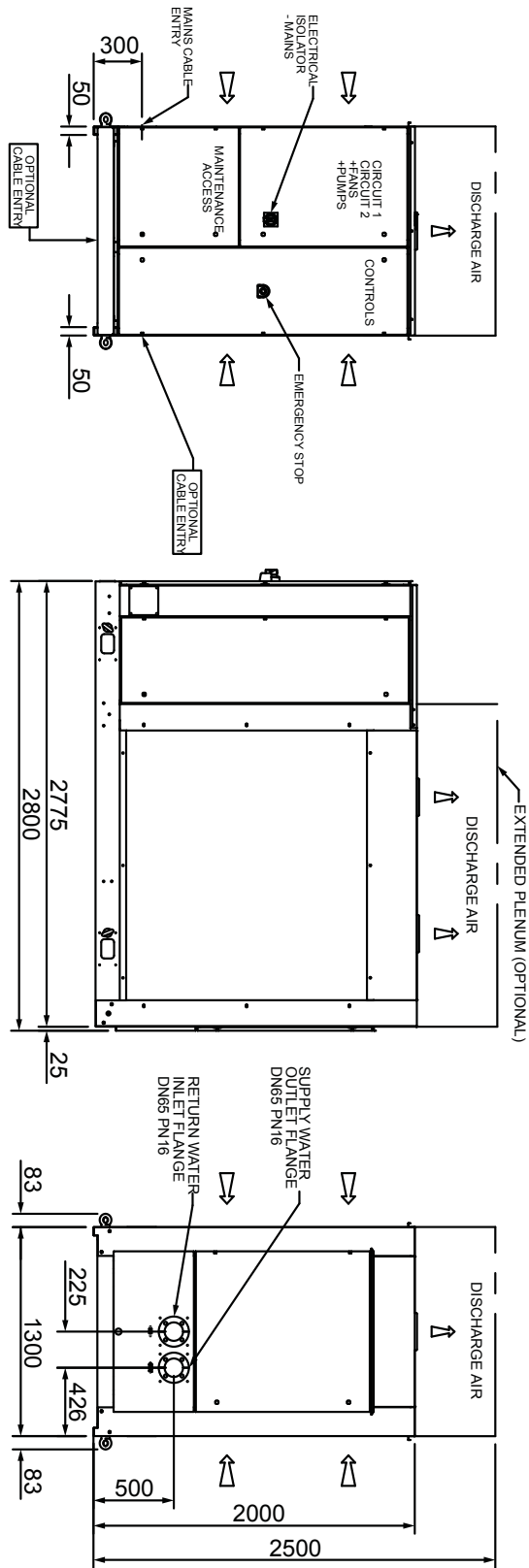
Installation
Dimensions
UCCR30 - 75

PIPE WATER CONNECTION SIZES (BSP)			
	SUPPLY 'A'	RETURN 'B'	
UCCR 30-40	1 1/2"	1 1/2"	
UCCR 50-75	2"	2"	



Installation
Dimensions
UCCR85 - 100

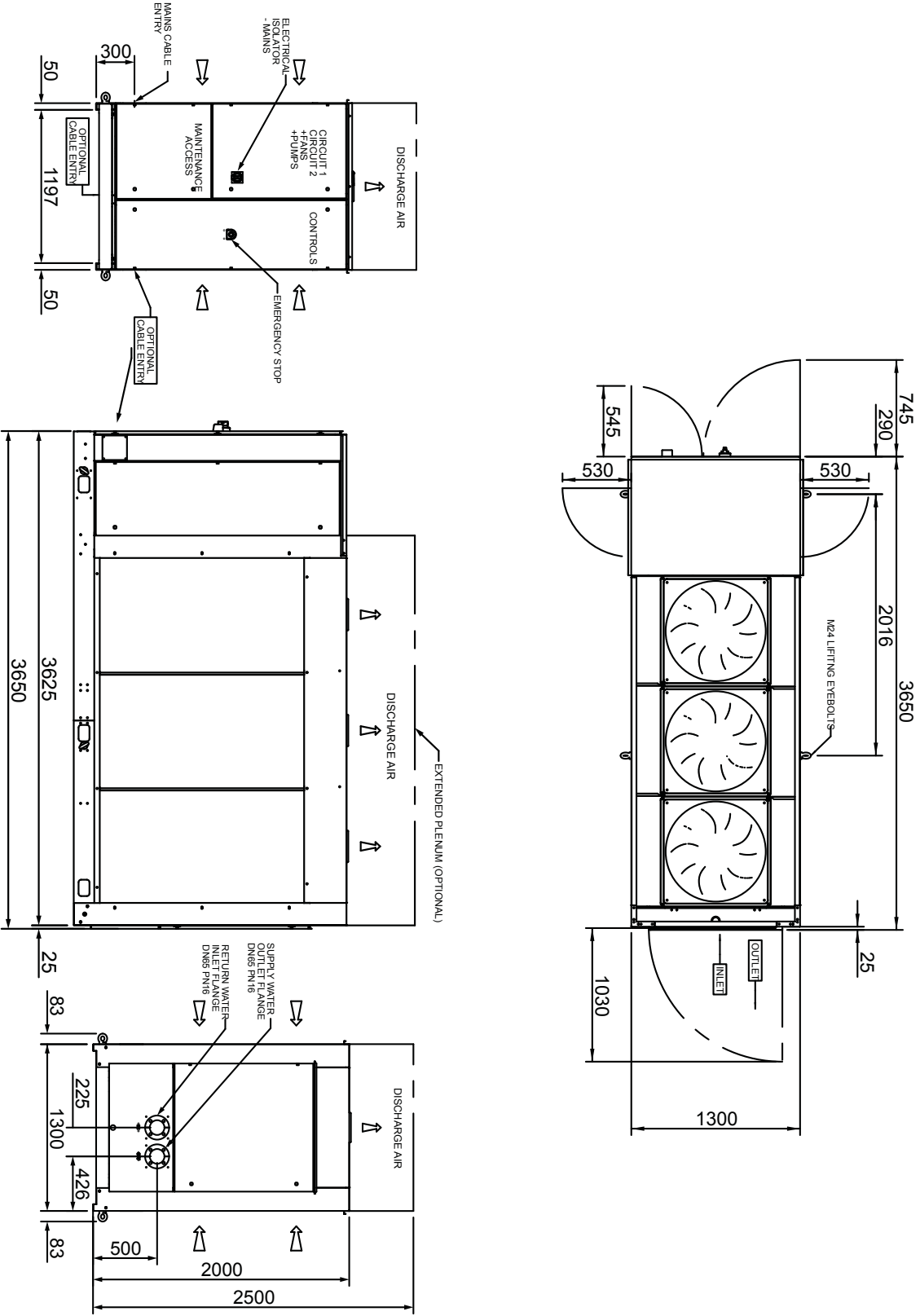
Installation



Installation

Dimensions

UCCR100 - 150

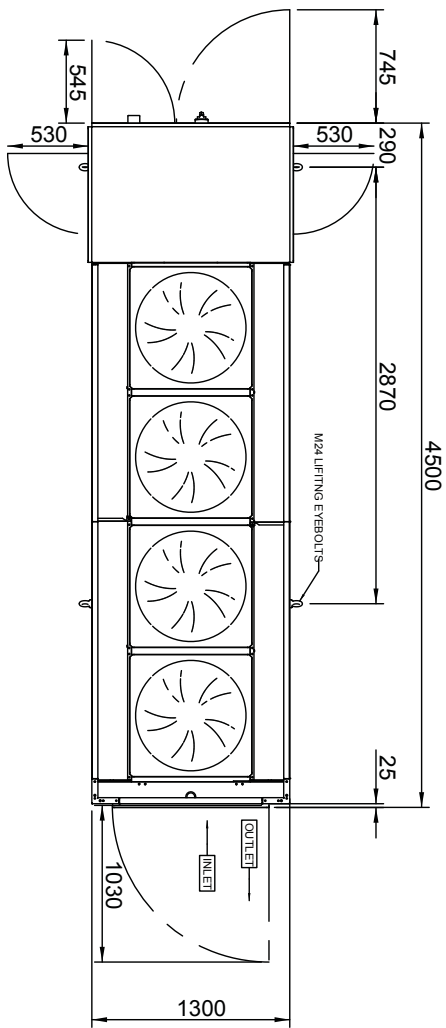
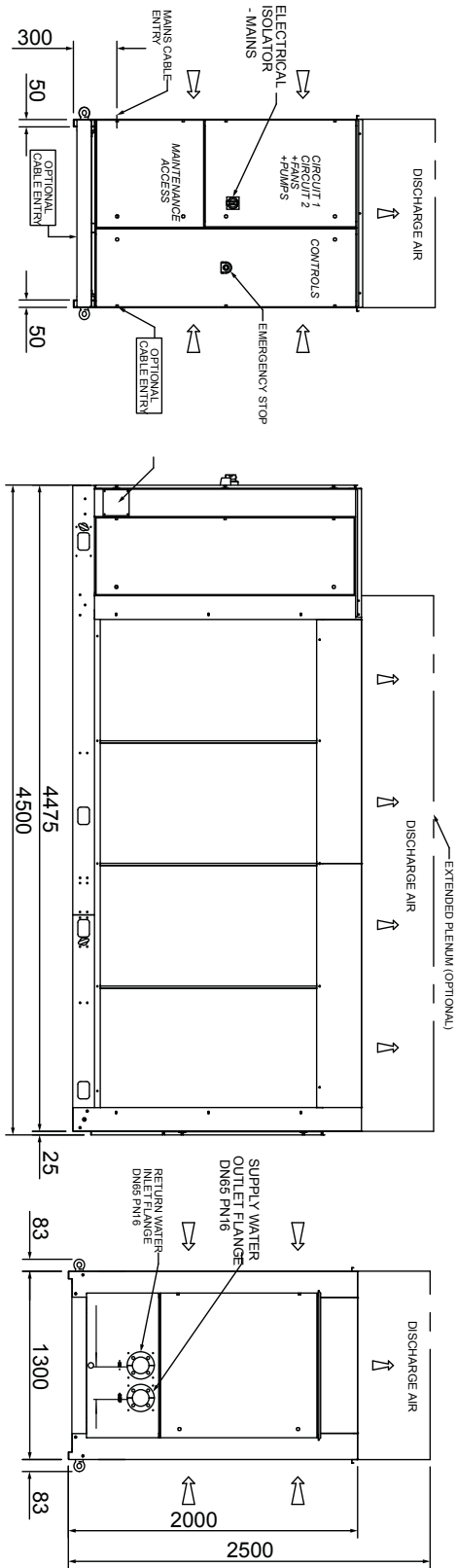


Installation

Dimensions

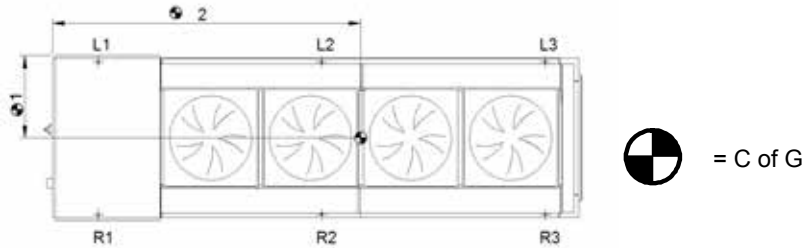
UCCR125 - 150

Installation



Installation

Point Loadings, Weights and Centre of Gravity (C of G)



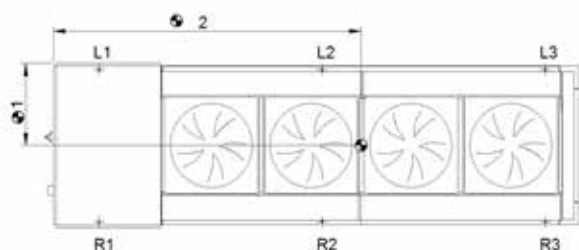
Model		L1	R1	L2	R2	L3	R3	Operating weight	C of G1 (mm)	C of G2 (mm)
UCCR030SR-1AE0	kg	142	119	108	109	(1)	(1)	478	626	746
UCCR030SR-2AE0	kg	161	139	153	156	(1)	(1)	610	635	1002
UCCR040SR-1AH0	kg	158	159	111	112	(1)	(1)	539	656	701
UCCR040DR-1ACC	kg	158	158	111	111	(1)	(1)	539	656	701
UCCR040SR-2AH0	kg	178	179	156	159	(1)	(1)	671	659	945
UCCR040DR-2ACC	kg	178	179	155	159	(1)	(1)	670	659	945
UCCR050SR-2AK0	kg	186	186	156	160	(1)	(1)	688	659	932
UCCR050DR-2ADD	kg	185	186	156	159	(1)	(1)	686	659	932
UCCR060SR-2AL0	kg	190	191	160	163	(1)	(1)	704	659	927
UCCR060DR-2AEE	kg	190	190	159	163	(1)	(1)	702	659	927
UCCR070SR-2AM0	kg	194	195	161	165	(1)	(1)	715	659	922
UCCR070DR-2AFF	kg	194	194	161	164	(1)	(1)	713	659	922
UCCR075SR-2AN0	kg	198	198	162	165	(1)	(1)	722	658	916
UCCR075SR-2AP0	kg	228	228	163	166	(1)	(1)	785	658	868
UCCR075DR-2AGG	kg	197	198	161	164	(1)	(1)	720	658	916
UCCR085SR-2AP0	kg	287	289	213	216	(1)	(1)	1005	657	1193
UCCR085DR-2AHJ	kg	313	314	218	220	(1)	(1)	1064	657	1163
UCCR100SR-2AQ0	kg	297	300	224	231	(1)	(1)	1051	661	1203
UCCR100DR-2AJK	kg	325	328	228	235	(1)	(1)	1116	661	1170
UCCR125SR-3AR0	kg	239	244	239	251	156	163	1292	666	1804
UCCR125DR-3ALL	kg	259	264	249	260	158	165	1356	666	1771
UCCR150DR-3ANN	kg	269	274	255	266	160	167	1391	665	1758

1) Have only 4 fixing and 4 point loadings.

2) Calculation based on standard unit, for units fitted with pump, tank and expansion vessel options, please contact Airedale.

Installation

Point Loadings, Weights and Centre of Gravity (C of G)



= C of G

Installation

Model		L1	R1	L2	R2	L3	R3	Operating weight	C of G1 (mm)	C of G2 (mm)
UCCR030SX-1AE0	kg	142	119	108	109	(1)	(1)	478	626	746
UCCR030SX-2AE0	kg	161	139	153	156	(1)	(1)	610	635	1002
UCCR040SX-1AH0	kg	158	159	111	112	(1)	(1)	539	656	701
UCCR040DX-1ACC	kg	158	158	111	111	(1)	(1)	539	656	701
UCCR040SX-2AH0	kg	178	179	156	159	(1)	(1)	671	659	945
UCCR040DX-2ACC	kg	178	179	155	159	(1)	(1)	670	659	945
UCCR050SX-2AK0	kg	186	186	156	160	(1)	(1)	688	659	932
UCCR050DX-2ADD	kg	185	186	156	159	(1)	(1)	686	659	932
UCCR060SX-2AL0	kg	190	191	160	163	(1)	(1)	704	659	927
UCCR060DX-2AEE	kg	190	190	159	163	(1)	(1)	702	659	927
UCCR070SX-2AM0	kg	194	195	161	165	(1)	(1)	715	654	922
UCCR070DX-2AFF	kg	194	194	161	164	(1)	(1)	713	654	922
UCCR075SX-2AN0	kg	198	198	162	165	(1)	(1)	722	653	916
UCCR075SX-2AP0	kg	228	228	163	166	(1)	(1)	785	653	868
UCCR075DX-2AGG	kg	197	198	161	164	(1)	(1)	720	653	916
UCCR085SX-2AP0	kg	287	289	213	216	(1)	(1)	1005	652	1193
UCCR085DX-2AHJ	kg	313	314	218	220	(1)	(1)	1064	652	1163
UCCR100SX-3AQ0	kg	232	236	232	244	153	160	1257	662	1812
UCCR100DX-3AJK	kg	252	256	242	253	156	162	1321	661	1779
UCCR125SX-4AR0	kg	255	264	280	299	182	194	1473	668	2095
UCCR125DX-4ALL	kg	274	283	291	310	183	196	1536	667	2060
UCCR150DX-4ANN	kg	284	292	297	316	185	197	1571	667	2044

1) Have only 4 fixing and 4 point loadings.

2) Calculation based on standard unit, for units fitted with pump, tank and expansion vessel options, please contact Airedale.

Installation

Lifting

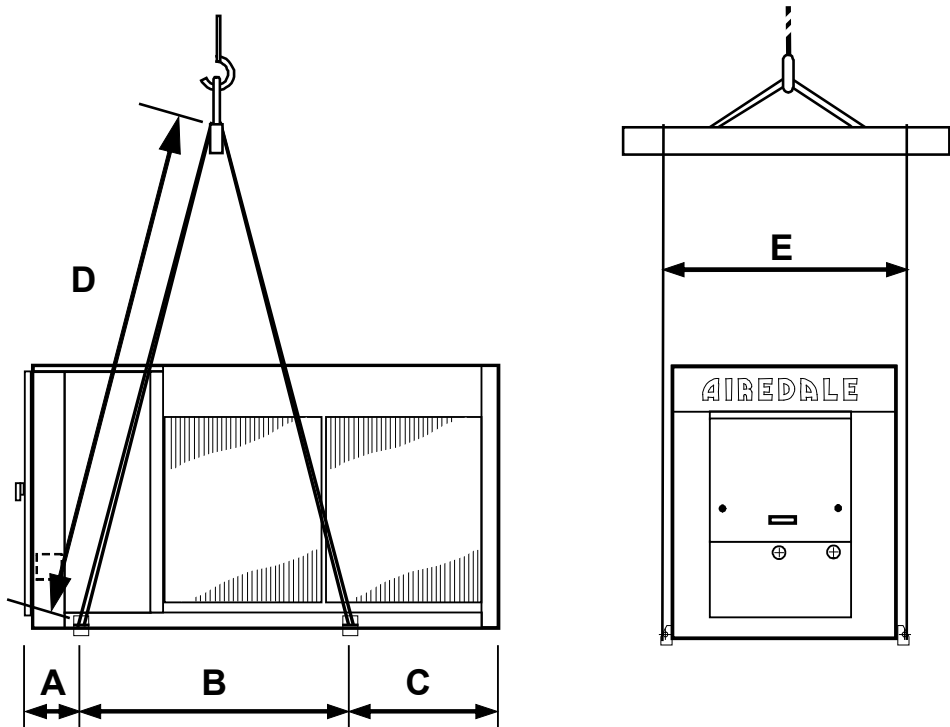
- Employ lifting specialists
- Local codes and regulations relating to the lifting of this type of equipment should be observed
- Use the lifting eye bolts/lifting lugs provided
- Attach lifting chains to the 4 lifting eye bolts/lifting lugs provided, each chain and eye bolt must be capable of lifting the whole chiller
- Use the appropriate spreader bars/lifting slings with the holes/lugs provided
- Lift the unit slowly and evenly
- If the unit is dropped, it should immediately be checked for damage and reported to Airedale Service

CAUTION ⚠

Only use lifting points provided.

The unit should be lifted from the base and where possible, with all packing and protection in position. If any other type of slinging is used, due care should be taken to ensure that the slings do not crush the casework or coil.

Lifting Dimensions



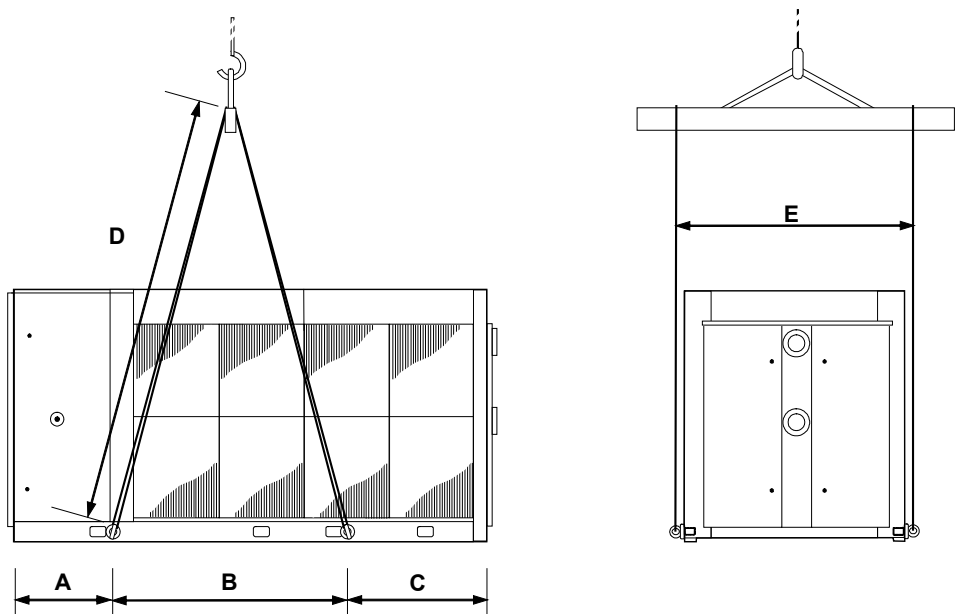
UCCR30 - 75		A	B ⁽¹⁾	C ⁽¹⁾	D ⁽¹⁾	E
1 FAN	mm	300	1050 (1450)	300 (300)	1900 (2200)	1270
2 FANS	mm	300	1450	750	2200	1270

1) Dimensions in brackets refer to the optional buffer tank when fitted.

Installation

Lifting Dimensions

Installation



UCCR85 - UCCR150		A	B	C	D	E
2 Fans	mm	290	1900	585	2500	1450
3 Fans	mm	290	2015	1320	2500	1450
4 Fans	mm	290	2870	1315	3000	1450

Installation

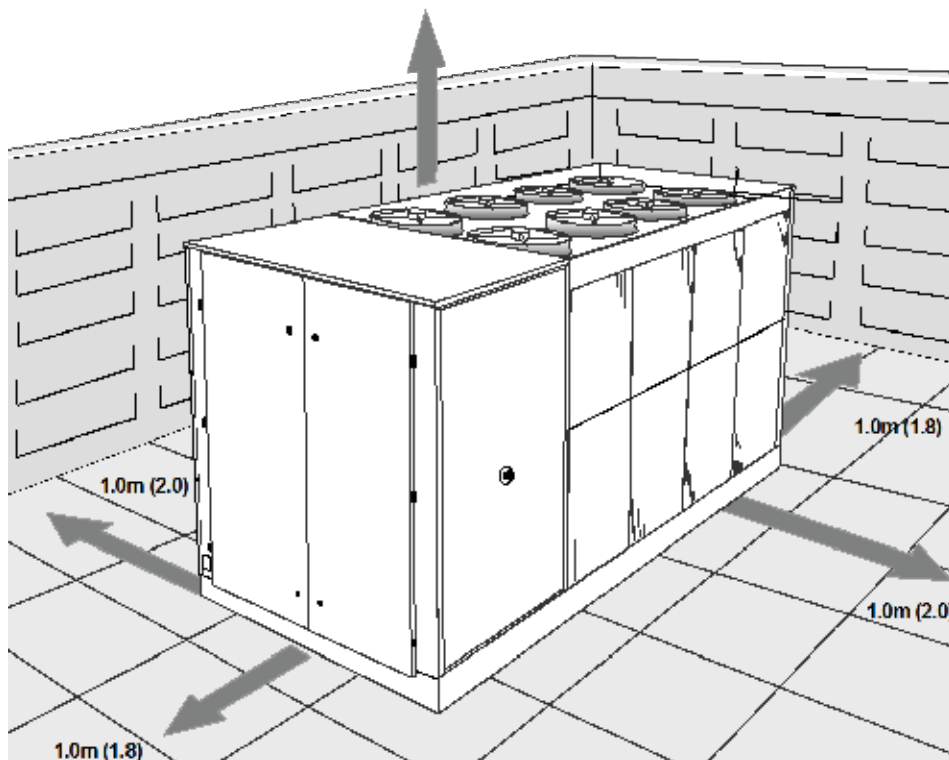
Positioning

The installation position should be selected with the following points in mind:

- Position on a stable and even base, levelled to ensure that the compressor operates correctly.
- Levelling should be to $\pm 5\text{mm}$.
- Where vibration transmission to the building structure is possible, fit spring anti-vibration mounts and flexible water connections.
- Observe airflow and maintenance clearances.
- Pipework and electrical connections are readily accessible.
- Where multiple units are installed, due care should be taken to avoid the discharge air from each unit adversely affecting other units in the vicinity.
- Within a side enclosed installation, the fan MUST be higher than the enclosing structure. Figures in brackets indicate airflow and maintenance clearances for side-enclosed or multiple chiller applications.
- Ensure there are no obstructions directly above the fans.
- Allow free space above the fans to prevent air recirculation.

CAUTION ⚠

Prior to connecting services, ensure that the equipment is installed and completely level.



Installation

Anti Vibration Mounting (Optional)

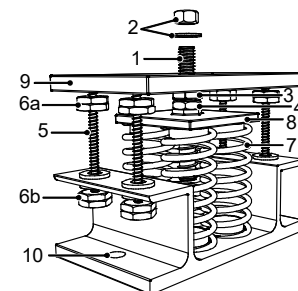
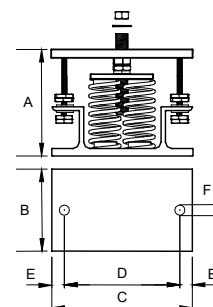
Spring Type

Each mount is coloured to indicate the different loads, refer to AV selection sheet supplied separately for correct allocation.

	A ⁽¹⁾ (mm)	B (mm)	C (mm)	D (mm)	E (mm)	FØ (mm)
2 Spring	162	110	180	148	16	11

1) Unloaded dimension.

2) For models with optional pumps fitted, please consult Airedale.



Components

1	Locating screw.	6b	Lower retaining nuts.
2	Retaining nut & washer.	7	Spring assembly.
3	Levelling screw.	8	Pressure plate.
4	Levelling lock nut.	9	Top plate.
5	Retaining studs.	10	Fixing holes.
6a	Upper retaining nuts.		

Installation

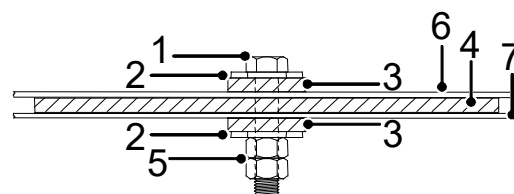
1. Locate and secure mount using bolting down holes (10) in base plate.
2. Ensure mounts are located in line with the unit base.
3. If applicable, remove compressor enclosure covers to allow access to mount fixing holes in the unit base.
4. Lock the upper retaining nuts (6a) to the underside of the top plate (9) before a load is applied.
5. Slacken levelling lock nut (4). (the levelling screw will not move if this is not slackened).
6. Remove retaining nut and washer (2), lower the unit onto the mounts and replace retaining nut and washer.
7. Beginning with the mount with the largest deflection, adjust the height of each mount using the levelling screw (3). Mountings must be adjusted incrementally in turn.
8. Do not fully adjust 1 mount at a time as this may overload and damage springs.
9. When all mounts are level, lock each into place using the levelling lock nut (4).
10. Lock all retaining nuts (6a and 6b) to the extreme ends of the retaining studs (5).

CAUTION ⚠

Do not connect any services until all anti vibration mounts have been fully adjusted.

Pad Type

1. M16 Bolt (Not Supplied).
2. Washer (Not Supplied).
3. Fixing Pad 6173231.
4. A V Pad 6173223.
5. 2 x M16 Nut (Not Supplied).
6. Unit Base.
7. Unit Mounting Plinth.



Installation (steel plinth)

1. Locate the pad type anti vibration mount between the unit base and the unit steel mounting plinth.
2. Locate the M16 bolt through the hole in the unit, AV mount pad and steel mounting plinth.
3. Tighten the M16 nut to the underside of the steel mounting plinth.
4. Tighten the second M16 nut (locking nut) to the underside of the steel mounting plinth.

Installation (concrete plinth)

1. Locate the pad type anti vibration mount between the unit base and the unit concrete mounting plinth.
2. Locate the concrete fixing anchor through the AV mount pad and the hole in the unit.
3. Tighten the anchor bolt.

Installation

Water System

Chilled water pipework and ancillary components must be installed in accordance with:

- National and Local Water supply company standards.
- The manufacturer's instructions when fitting ancillary components.

It is also required:

- that the system water is treated to prevent corrosion and algae forming.
- In ambients of 0°C and below, where static water can be expected, or when water supply temperatures of +5°C or below is required, the necessary concentration of Glycol or use of an electrical trace heater must be included.
- The schematic is referred to as a guide to ancillary recommendations.

CAUTION ▲

The unit water connections are NOT designed to support external pipework, pipework should be supported during installation.

The water flow commissioning valve set is not shown in the diagram overleaf, as the valve can be fitted elsewhere within the chilled water circuit.

Component Recommended Requirements

The recommended requirements to allow commissioning to be carried out correctly are:

- The inclusion of Binder Points adjacent to the flow and return connections, to allow temperature and pressure readings.
- A flow switch or equivalent, fitted adjacent to the water outlet side of the chiller.

CAUTION ▲

Constant water flow MUST be maintained. Variable water volume is NOT recommended and may invalidate warranty.
The correct operation of the flow switch is critical if the chiller warranty is to be valid.

- A 20 mesh strainer fitted prior to the evaporator inlet
- A water-flow commissioning valve set fitted to the system
- In multiple chiller installations, 1 commissioning valve set is required per chiller. Air vents are to be installed at all high points and where air is likely to be trapped at intermediate points
- Drain points are to be installed at all low points in the system and in particular adjacent to the unit for maintenance to be carried out
- Isolating valves should be installed adjacent to all major items of equipment for ease of maintenance.
- Balancing valves can be installed if required to aid correct system balancing
- All chilled water pipework must be insulated and vapour sealed to avoid condensation
- If several units are installed in parallel adjacent to each other, reverse return should be applied to avoid unnecessary balancing valves

Pump Statement

When installing circulating water pumps or equipment containing them, the following rules should be applied:

- Ensure the system is filled with water then vented and the pump primed with water before running the pump. This is required because the pumped liquid cools the pump bearings and mechanical seal faces
- To avoid cavitation the NPSH (Net Positive Suction Head) incorporating a safety margin of 0.5m head must be available at the pump inlet during operation

Interlocks and Protection

Always electrically interlock the operation of the chiller with the pump controls and water flow switch for safety reasons. Failure to do this will invalidate the chiller warranty.

Do not rely solely on the BMS to protect the chiller against low flow conditions.

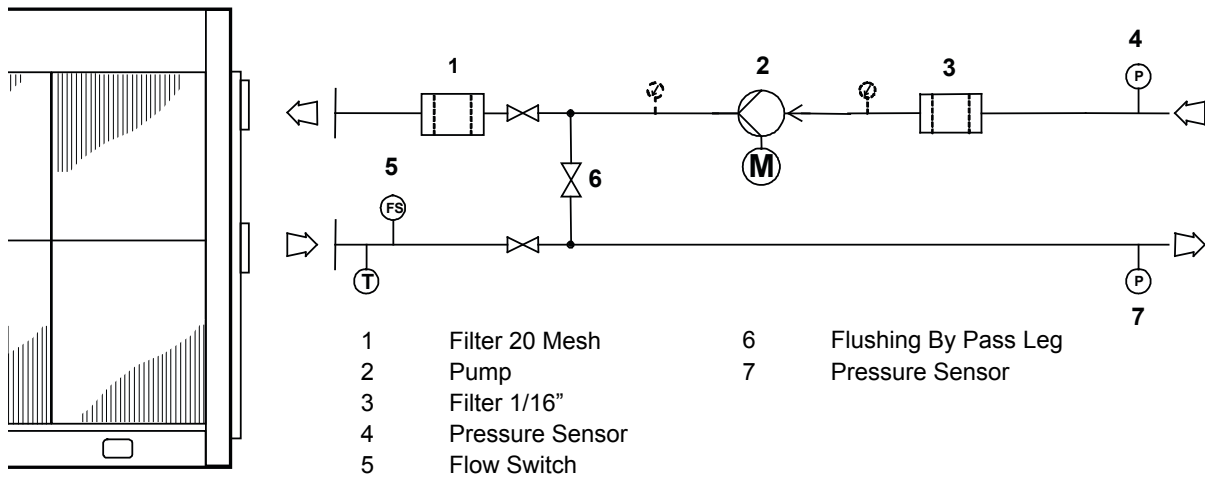
An evaporator pump interlock and flow switch MUST be directly wired to the chiller, refer to Interconnecting Wiring diagram.

Installation

Water System

Standard Recommended Installation (Parts Supplied By Others)

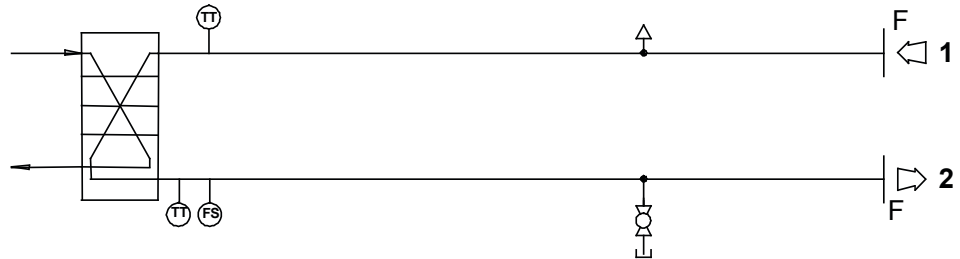
Installation



Flow Schemes

Basic Supplied Water Schematic

(Includes Flow Switch
Optional Extra)



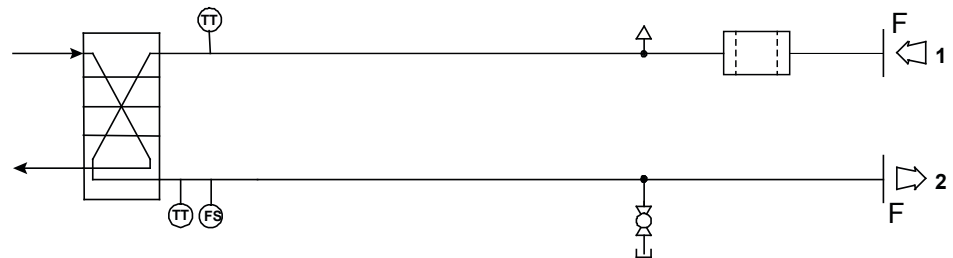
Optional Flow Schemes

Filter Only Scheme - Comprises:

Standard Circuit plus:

Optional Extras:

- Flow Switch
- 20 Mesh Water Filter

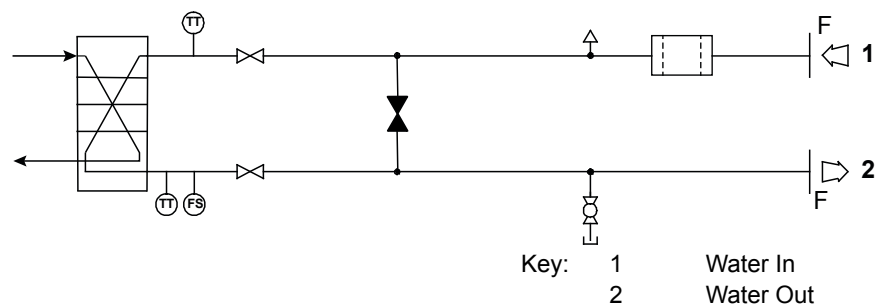


Filter - Flushing Bypass Scheme - Comprises:

Standard Circuit plus:

Optional Extras:

- Flow Switch
- 20 Mesh Water Filter
- Flushing Bypass Circuit



Installation

Water System

Pump Options - Flow Schemes

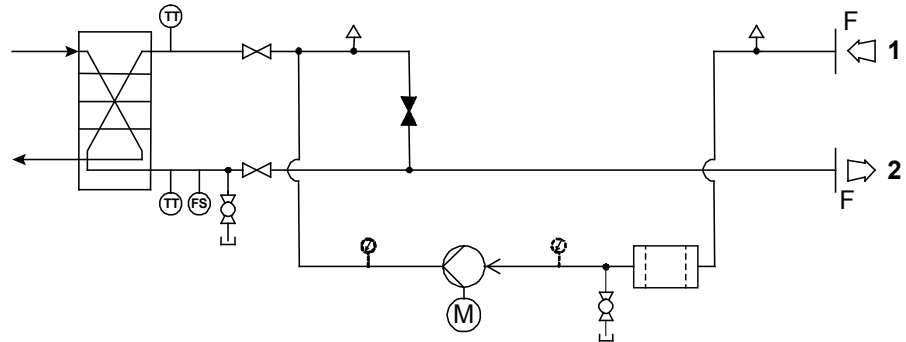
Single Head Pump Scheme -

Comprises:

Standard Circuit plus:

Optional Extras:

- Flow Switch
- 20 Mesh Water Filter
- Flushing Bypass Circuit
- Single Head Pump



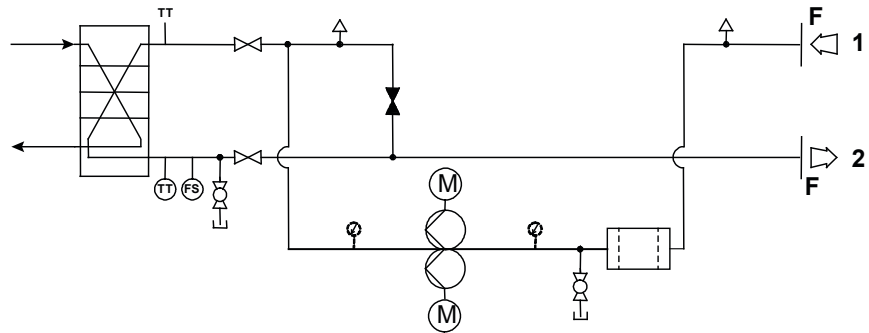
Twin Head Pump Scheme -

Comprises:

Standard Circuit plus:

Optional Extras:

- Flow Switch
- 20 Mesh Water Filter
- Flushing Bypass Circuit
- Twin Head Pump



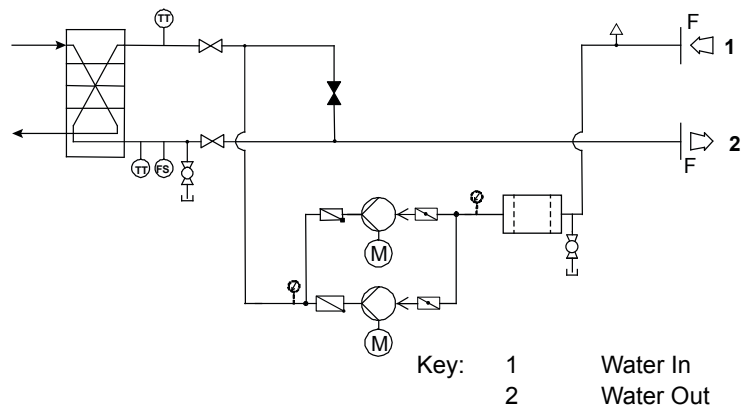
Single Head Run/Standby Pump

Scheme - Comprises:

Standard Circuit plus:

Optional Extras:

- Flow Switch
- 20 Mesh Water Filter
- Flushing Bypass Circuit
- Single Head Run/Standby Pump



Installation

Electrical

General

- As standard the equipment is designed for 400V, 3 Phase, 3 wire 50Hz and a separate permanent 230V, 1 phase, 50Hz supply, to all relevant IEE regulations, British standards and IEC requirements.
- A fused and isolated electrical supply of the appropriate phase, frequency and voltage should be installed.
- The control voltage to the interlocks is 24V. Always size the low voltage interlock and protection cabling for a maximum voltage drop of 2V.

CAUTION ⚠

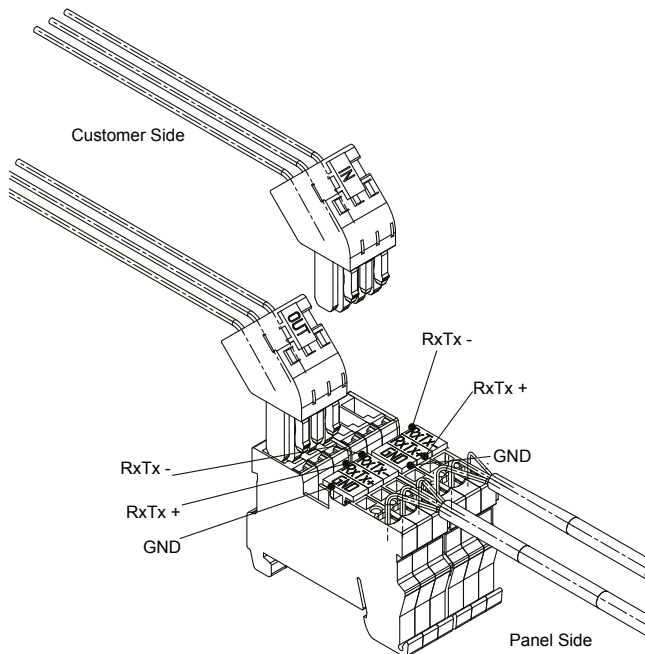
Wires should be capable of carrying the maximum load current under non-fault conditions at the stipulated voltage.

- Avoid large voltage drops on cable runs, particularly low voltage wiring.

CAUTION ⚠

A separately fused, locally isolated, permanent single phase and neutral supply **MUST BE FITTED** for the compressor sump heater, evaporator trace heating and control circuits, **FAILURE** to do so could **INVALIDATE WARRANTY**.

pLAN Termination



CAUTION ⚠

The plugged termination ensures that the connections are made simultaneously. Failure to attached the cables this this way may cause damage to the controller.

Installation Interconnecting Wiring With Pumps

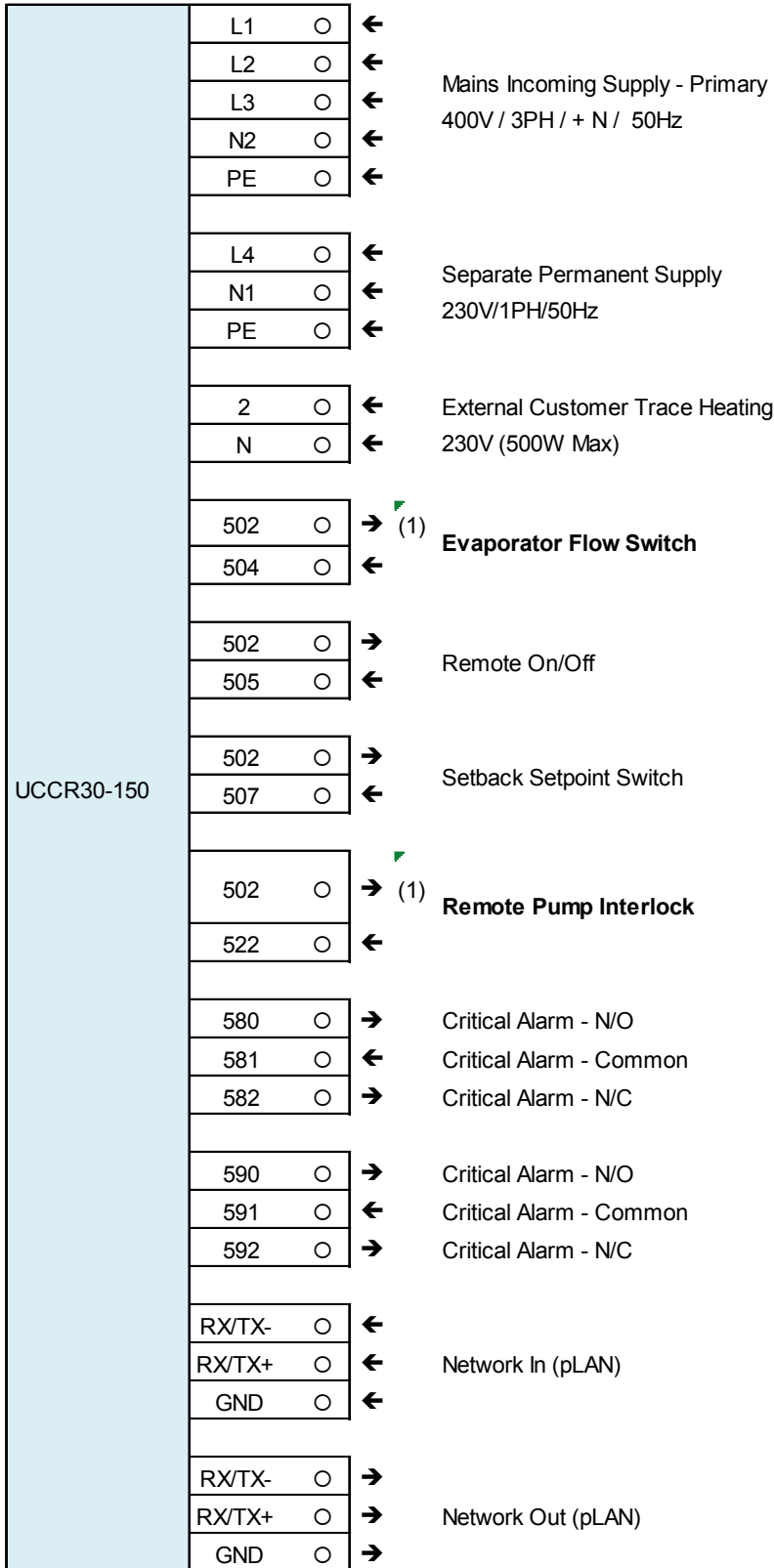
UCCR30-150	L1	○	←	Mains Incoming Supply - Primary 400V / 3PH / + N / 50Hz
	L2	○	←	
	L3	○	←	
	N2	○	←	
	PE	○	←	
				Separate Permanent Supply 230V/1PH/50Hz
	L4	○	←	
	N1	○	←	
	PE	○	←	External Customer Trace Heating 230V (500W Max)
	2	○	←	
	N	○	←	Remote On/Off
	502	○	→	
	505	○	←	Pumps Remote On/Off
	502	○	→	
	506	○	←	Setback Setpoint Switch
	502	○	→	
	507	○	←	Critical Alarm - N/O Critical Alarm - Common Critical Alarm - N/C
	580	○	→	
	581	○	←	
	582	○	→	Critical Alarm - N/O Critical Alarm - Common Critical Alarm - N/C
	590	○	→	
	591	○	←	
	592	○	→	Network In (pLAN)
	RX/TX-	○	←	
	RX/TX+	○	←	
	GND	○	←	Network Out (pLAN)
	RX/TX-	○	→	
	RX/TX+	○	→	
	GND	○	→	

Installation

Interconnecting Wiring

No Pumps

Installation



CAUTION ⚠

(1) MUST be directly wired to the chiller to validate warranty.

Ecodesign Appendix

The following tables of Ecodesign data is based on the following common information:

SEPR (Seasonal Energy Performance Ratio)

- Type of Condensing - Air Cooled Standard EC Fans.
- Refrigerant Fluid - R410A.
- Operating Temperature - +7°C (Outlet water).
- Operating Control - Variable.
- Outdoor Side Heat Exchanger - Air.
- Indoor Heat Exchanger - Water.
- Type Driven - Vapour Compression.
- Driver of Compressor - Electric Motor.
- Degradation Coefficient - 0.9

Part load conditions for SEPR calculation for air cooled high temperature process chillers

Rating Point	Part load ratio (%)	Outdoor side heat exchanger	Indoor side heat exchanger
		Inlet air temperature (°C)	Evaporator inlet/ outlet water temperatures (°C)
			Fixed outlet
A	100	35	12/7
B	93	25	(*)/7
C	87	15	(*)/7
D	80	5	(*)/7

EU 2016/2281 Table 22.

(*) With the water flow rate determined during "A" test for units with a fixed water flow rate or with a variable flow rate.

SSCEE (Seasonal Space Cooling Energy Efficiency)

- Capacity Control - Variable.
- Standard Rating Condition - Low Temperature Operation.
- Crankcase heater fitted

Air to water comfort chillers

Rating Point	T ₁ (°C)	Part load ratio (%)	Outdoor air dry bulb temperature (°C)	Fan coil application inlet/ outlet water temperature (°C)		Cooling floor application inlet/ outlet water temperatures (°C)
				Fixed outlet	Variable outlet (*)	
A	35	100 %	35	12/7	12/7	23/18
B	30	74 %	30	(*)/7	(*)/8.5	(*)/18
C	25	47 %	25	(*)/7	(*)/10	(*)/18
D	20	21 %	20	(*)/7	(*)/11.5	(*)/18

EU 2016/2281 Table 21.

Technical Data

UCCR030SR-1AE0, UCCR030SR-2AE0, UCCR040SR-1AH0

Ecodesign

	Notes:	Units	UCCR030SR-1AE0	UCCR030SR-2AE0	UCCR040SR-1AH0
SEPR	1,3,5		5.3	6.6	5.4
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	40104.0	34618.0	50029.0
Rated Refrigerant Capacity P _A	1,3,5	kW	28.9	30.7	36.2
Rated Power Input D _A		kW	10.2	9.4	14.7
Rated EER _{DC,A}			2.82	3.26	2.47
Declared Refrigerant Capacity P _B	1,3,5	kW	32.6	34.2	41.1 / 23.0
Declared Power Input D _B		kW	8.6	7.8	12.2 / 5.7
Declared EER _{DC,B}			3.80	4.41	3.37 / 4.02
Declared Refrigerant Capacity P _C	1,3,5	kW	36.0	37.6	45.5 / 24.8
Declared Power Input D _C		kW	7.0	6.1	10.0 / 4.8
Declared EER _{DC,C}			5.13	6.13	4.53 / 5.19
Declared Refrigerant Capacity P _D	1,3,5	kW	39.0	40.6	49.3 / 26.6
Declared Power Input D _D		kW	5.4	4.3	8.0 / 3.8
Declared EER _{DC,D}			7.24	9.47	6.16 / 7.00

SSCEE	2,3,5	%	123.4%	145.4%	144.0%
SSCEE Tier			NOT Compliant	NOT Compliant	NOT Compliant
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	n/a	n/a	n/a
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	n/a	n/a	n/a
Declared EER _d 35°C			n/a	n/a	n/a
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	n/a	n/a	n/a
Declared EER _d 30°C			n/a	n/a	n/a
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	n/a	n/a	n/a
Declared EER _d 25°C			n/a	n/a	n/a
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	n/a	n/a	n/a
Declared EER _d 20°C			n/a	n/a	n/a
Sound Power Level		dB(A)	n/a	n/a	n/a
Air Volume		m³/h	n/a	n/a	n/a
Off mode P _{OFF}		kW	n/a	n/a	n/a
Thermostat-off mode P _{TO}		kW	n/a	n/a	n/a
Standby Mode P _{SB}		kW	n/a	n/a	n/a
Crankcase heater mode P _{CK}		kW	n/a	n/a	n/a
Capacity Control			n/a	n/a	n/a

(1) Nominal conditions as stated in EU 2016/2281 Table 22.

(2) Nominal conditions as stated in EU 2016/2281 Table 21.

(3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.

(4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.

(5) All performance data based upon standard waterside configuration.

(6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR040SR-2AH0, UCCR040DR-1ACC, UCCR040DR-2ACC

Ecodesign

	Notes:	Units	UCCR040SR-2AH0	UCCR040DR-1ACC	UCCR040DR-2ACC
SEPR	1,3,5		6.4	4.7	6.0
SEPR Tier			Tier 2 (2021)	Tier 1 (2018)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	46341.0	56997.0	49452.0
Rated Refrigerant Capacity P _A	1,3,5	kW	40.0	36.4	40.2
Rated Power Input D _A		kW	13.2	14.6	13.1
Rated EER _{DC,A}			3.04	2.50	3.07
Declared Refrigerant Capacity P _B	1,3,5	kW	44.5 / 23.8	41.4 / 20.6	44.7 / 21.9
Declared Power Input D _B		kW	10.8 / 5.3	12.1 / 6.5	10.7 / 5.8
Declared EER _{DC,B}			4.11 / 4.52	3.43 / 3.18	4.18 / 3.81
Declared Refrigerant Capacity P _C	1,3,5	kW	48.6 / 25.6	45.9 / 22.8	48.9 / 24.0
Declared Power Input D _C		kW	8.6 / 4.3	9.8 / 5.4	8.4 / 4.6
Declared EER _{DC,C}			5.64 / 5.97	4.66 / 4.26	5.82 / 5.21
Declared Refrigerant Capacity P _D	1,3,5	kW	52.2 / 27.4	49.9 / 24.8	52.7 / 26.0
Declared Power Input D _D		kW	6.3 / 3.2	7.7 / 4.3	5.9 / 3.4
Declared EER _{DC,D}			8.27 / 8.50	6.50 / 5.81	8.89 / 7.61

SSCEE	2,3,5	%	166.1%	115.7%	141.2%
SSCEE Tier			Tier 2 (2021)	NOT Compliant	NOT Compliant
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	40.3	n/a	n/a
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	40.0	n/a	n/a
Declared EER _d 35°C			3.04	n/a	n/a
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	44.6 / 23.4	n/a	n/a
Declared EER _d 30°C			3.70 / 4.09	n/a	n/a
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	25.9 / 0.0	n/a	n/a
Declared EER _d 25°C			5.02 / 0.00	n/a	n/a
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	28.5 / 0.0	n/a	n/a
Declared EER _d 20°C			6.38 / 0.00	n/a	n/a
Sound Power Level		dB(A)	76	n/a	n/a
Air Volume		m³/h	21427	n/a	n/a
Off mode P _{OFF}		kW	0.035	n/a	n/a
Thermostat-off mode P _{TO}		kW	0.279	n/a	n/a
Standby Mode P _{SB}		kW	0.050	n/a	n/a
Crankcase heater mode P _{CK}		kW	0.064	n/a	n/a
Capacity Control			Staged	n/a	n/a

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR050SR-2AK0, UCCR050DR-2ADD, UCCR060SR-2AL0

Ecodesign

	Notes:	Units	UCCR050SR-2AK0	UCCR050DR-2ADD	UCCR060SR-2AL0
SEPR	1,3,5		6.0	5.4	5.8
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	63101.0	70122.0	73278.0
Rated Refrigerant Capacity PA	1,3,5	kW	51.4	51.5	57.7
Rated Power Input DA		kW	17.9	17.9	20.3
Rated EERDC,A			2.87	2.88	2.84
Declared Refrigerant Capacity PB	1,3,5	kW	57.7 / 31.2	57.8 / 28.2	64.8 / 35.3
Declared Power Input DB		kW	14.9 / 7.1	14.8 / 8.0	17.1 / 8.2
Declared EERDC,B			3.88 / 4.37	3.91 / 3.55	3.79 / 4.29
Declared Refrigerant Capacity PC	1,3,5	kW	63.3 / 33.8	63.5 / 31.1	71.3 / 38.3
Declared Power Input DC		kW	12.0 / 5.9	11.8 / 6.5	14.1 / 6.9
Declared EERDC,C			5.29 / 5.73	5.36 / 4.79	5.06 / 5.55
Declared Refrigerant Capacity PD	1,3,5	kW	68.3 / 36.3	68.6 / 33.7	77.1 / 41.1
Declared Power Input DD		kW	9.1 / 4.6	8.9 / 5.0	11.0 / 5.4
Declared EERDC,D			7.50 / 7.91	7.70 / 6.69	7.00 / 7.62

SSCEE	2,3,5	%	160.3%	131.9%	157.3%
SSCEE Tier			Tier 1 (2018)	NOT Compliant	Tier 1 (2018)
Rated Cooling Capacity Prated,c	2,4,5	kW	51.7	n/a	58.1
Declared Cooling Capacity 35°C Pdc	2,3,5	kW	51.4	n/a	57.7
Declared EERd 35°C			2.87	n/a	2.84
Declared Cooling Capacity 30°C Pdc	2,3,5	kW	57.4 / 30.7	n/a	64.4 / 34.8
Declared EERd 30°C			3.49 / 3.97	n/a	3.41 / 3.91
Declared Cooling Capacity 25°C Pdc	2,3,5	kW	34.0 / 0.0	n/a	38.4 / 0.0
Declared EERd 25°C			4.84 / 0.00	n/a	4.73 / 0.00
Declared Cooling Capacity 20°C Pdc	2,3,5	kW	37.5 / 0.0	n/a	42.4 / 0.0
Declared EERd 20°C			6.07 / 0.00	n/a	5.88 / 0.00
Sound Power Level		dB(A)	78	n/a	79
Air Volume		m³/h	23307	n/a	23307
Off mode POFF		kW	0.035	n/a	0.035
Thermostat-off mode PTO		kW	0.353	n/a	0.389
Standby Mode PSB		kW	0.050	n/a	0.050
Crankcase heater mode PCK		kW	0.064	n/a	0.064
Capacity Control			Staged	n/a	Staged

(1) Nominal conditions as stated in EU 2016/2281 Table 22.

(2) Nominal conditions as stated in EU 2016/2281 Table 21.

(3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.

(4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.

(5) All performance data based upon standard waterside configuration.

(6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR060DR-2AEE, UCCR070SR-2AM0, UCCR070DR-2AFF

Ecodesign

	Notes:	Units	UCCR060DR-2AEE	UCCR070SR-2AM0	UCCR070DR-2AFF
SEPR	1,3,5		5.2	5.7	5.1
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	82388.0	85378.0	95089.0
Rated Refrigerant Capacity P _A	1,3,5	kW	57.8	65.2	65.6
Rated Power Input D _A		kW	20.3	24.0	23.8
Rated EER _{DC,A}			2.85	2.72	2.76
Declared Refrigerant Capacity P _B	1,3,5	kW	65.0 / 31.9	73.5 / 40.5	74.1 / 36.7
Declared Power Input D _B		kW	17.0 / 9.2	20.1 / 9.5	19.8 / 10.7
Declared EER _{DC,B}			3.82 / 3.48	3.66 / 4.26	3.75 / 3.43
Declared Refrigerant Capacity P _C	1,3,5	kW	71.6 / 35.1	81.0 / 43.8	81.8 / 40.4
Declared Power Input D _C		kW	13.9 / 7.6	16.6 / 8.0	16.1 / 8.8
Declared EER _{DC,C}			5.14 / 4.61	4.89 / 5.47	5.07 / 4.57
Declared Refrigerant Capacity P _D	1,3,5	kW	77.6 / 38.1	87.4 / 46.9	88.7 / 43.8
Declared Power Input D _D		kW	10.7 / 6.0	13.3 / 6.4	12.6 / 7.1
Declared EER _{DC,D}			7.23 / 6.30	6.58 / 7.29	7.05 / 6.20

SSCEE	2,3,5	%	128.9%	154.9%	126.7%
SSCEE Tier			NOT Compliant	Tier 1 (2018)	NOT Compliant
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	n/a	65.6	n/a
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	n/a	65.2	n/a
Declared EER _d 35°C			n/a	2.72	n/a
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	n/a	72.8 / 39.9	n/a
Declared EER _d 30°C			n/a	3.28 / 3.88	n/a
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	n/a	44.0 / 0.0	n/a
Declared EER _d 25°C			n/a	4.67 / 0.00	n/a
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	n/a	48.4 / 0.0	n/a
Declared EER _d 20°C			n/a	5.75 / 0.00	n/a
Sound Power Level		dB(A)	n/a	79	n/a
Air Volume		m³/h	n/a	23307	n/a
Off mode P _{OFF}		kW	n/a	0.035	n/a
Thermostat-off mode P _{TO}		kW	n/a	0.424	n/a
Standby Mode P _{SB}		kW	n/a	0.050	n/a
Crankcase heater mode P _{CK}		kW	n/a	0.064	n/a
Capacity Control			n/a	Staged	n/a

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR075SR-2AN0, UCCR075SR-2AP0, UCCR075DR-2AGG

Ecodesign

	Notes:	Units	UCCR075SR-2AN0	UCCR075SR-2AP0	UCCR075DR-2AGG
SEPR	1,3,5		5.4	5.3	4.8
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 1 (2018)
Annual Electricity Consumption		kWh/a	98060.0	111423.0	110375.0
Rated Refrigerant Capacity P _A	1,3,5	kW	70.9	79.2	71.5
Rated Power Input D _A		kW	27.6	32.6	27.3
Rated EER _{DC,A}			2.57	2.43	2.62
Declared Refrigerant Capacity P _B	1,3,5	kW	80.2 / 45.0	89.8 / 65.7	81.1 / 40.3
Declared Power Input D _B		kW	23.2 / 10.9	27.5 / 17.6	22.8 / 12.3
Declared EER _{DC,B}			3.45 / 4.14	3.26 / 3.74	3.55 / 3.28
Declared Refrigerant Capacity P _C	1,3,5	kW	88.3 / 48.5	71.8 / 38.5	89.6 / 44.5
Declared Power Input D _C		kW	19.3 / 9.2	14.8 / 7.2	18.7 / 10.2
Declared EER _{DC,C}			4.57 / 5.27	4.85 / 5.38	4.78 / 4.35
Declared Refrigerant Capacity P _D	1,3,5	kW	95.1 / 51.8	77.4 / 41.3	96.9 / 48.0
Declared Power Input D _D		kW	15.9 / 7.6	12.0 / 5.7	15.0 / 8.3
Declared EER _{DC,D}			5.98 / 6.82	6.46 / 7.29	6.47 / 5.77

SSCEE	2,3,5	%	149.5%	154.4%	120.9%
SSCEE Tier			Tier 1 (2018)	Tier 1 (2018)	NOT Compliant
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	71.4	79.8	n/a
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	70.9	79.2	n/a
Declared EER _d 35°C			2.57	2.43	n/a
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	79.3 / 44.4	64.7 / 34.6	n/a
Declared EER _d 30°C			3.08 / 3.78	3.39 / 3.80	n/a
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	48.9 / 0.0	38.2 / 0.0	n/a
Declared EER _d 25°C			4.54 / 0.00	4.57 / 0.00	n/a
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	53.8 / 0.0	42.1 / 0.0	n/a
Declared EER _d 20°C			5.51 / 0.00	5.62 / 0.00	n/a
Sound Power Level		dB(A)	79	79	n/a
Air Volume		m³/h	23307	23307	n/a
Off mode P _{OFF}		kW	0.035	0.035	n/a
Thermostat-off mode P _{TO}		kW	0.455	0.455	n/a
Standby Mode P _{SB}		kW	0.050	0.052	n/a
Crankcase heater mode P _{CK}		kW	0.064	0.096	n/a
Capacity Control			Staged	Staged	n/a

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR085SR-2AP0, UCCR085DR-2AHJ, UCCR100SR-2AQ0

Ecodesign

	Notes:	Units	UCCR085SR-2AP0	UCCR085DR-2AHJ	UCCR100SR-2AQ0
SEPR	1,3,5		5.8	5.7	5.8
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	106289.0	104487.0	126964.0
Rated Refrigerant Capacity P _A	1,3,5	kW	83.5	80.5	99.5
Rated Power Input D _A		kW	31.2	30.5	35.5
Rated EER _{DC,A}			2.68	2.64	2.80
Declared Refrigerant Capacity P _B	1,3,5	kW	94.2 / 67.9	90.9 / 69.9	111.9 / 78.8
Declared Power Input D _B		kW	26.1 / 16.8	25.4 / 18.1	29.8 / 19.2
Declared EER _{DC,B}			3.61 / 4.03	3.58 / 3.86	3.76 / 4.09
Declared Refrigerant Capacity P _C	1,3,5	kW	74.3 / 39.3	76.5 / 54.9	122.7 / 85.7
Declared Power Input D _C		kW	14.0 / 6.9	14.9 / 10.1	24.3 / 15.9
Declared EER _{DC,C}			5.32 / 5.72	5.14 / 5.46	5.04 / 5.38
Declared Refrigerant Capacity P _D	1,3,5	kW	80.2 / 42.4	82.4 / 59.0	92.0 / 48.4
Declared Power Input D _D		kW	10.8 / 5.2	11.5 / 7.8	12.6 / 6.2
Declared EER _{DC,D}			7.42 / 8.08	7.19 / 7.61	7.33 / 7.86

SSCEE	2,3,5	%	163.8%	152.0%	166.5%
SSCEE Tier			Tier 2 (2021)	Tier 1 (2018)	Tier 2 (2021)
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	84.0	81.0	100.1
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	83.5	80.5	99.5
Declared EER _d 35°C			2.68	2.64	2.80
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	67.0 / 35.2	69.1 / 50.0	77.8 / 40.5
Declared EER _d 30°C			3.65 / 3.96	3.47 / 3.82	3.70 / 4.01
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	74.1 / 38.9	55.3 / 24.3	85.9 / 44.6
Declared EER _d 25°C			4.39 / 4.80	4.64 / 4.08	4.45 / 4.84
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	42.9 / 0.0	26.9 / 0.0	49.1 / 0.0
Declared EER _d 20°C			5.98 / 0.00	5.03 / 0.00	5.96 / 0.00
Sound Power Level		dB(A)	79	81	84
Air Volume		m³/h	24851	24851	37009
Off mode P _{OFF}		kW	0.035	0.035	0.035
Thermostat-off mode P _{TO}		kW	0.527	0.527	0.549
Standby Mode P _{SB}		kW	0.052	0.053	0.054
Crankcase heater mode P _{CK}		kW	0.096	0.128	0.096
Capacity Control			Staged	Staged	Staged

(1) Nominal conditions as stated in EU 2016/2281 Table 22.

(2) Nominal conditions as stated in EU 2016/2281 Table 21.

(3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.

(4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.

(5) All performance data based upon standard waterside configuration.

(6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR100DR-2AJK, UCCR125SR-3AR0

Ecodesign

	Notes:	Units	UCCR100DR-2AJK	UCCR125SR-3AR0
SEPR	1,3,5		5.8	6.0
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	123231.0	144592.0
Rated Refrigerant Capacity P _A	1,3,5	kW	96.5	116.3
Rated Power Input D _A		kW	34.8	39.4
Rated EER _{DC,A}			2.77	2.95
Declared Refrigerant Capacity P _B	1,3,5	kW	108.5 / 82.5	129.8 / 90.5
Declared Power Input D _B		kW	29.1 / 21.0	32.6 / 21.2
Declared EER _{DC,B}			3.73 / 3.93	3.98 / 4.28
Declared Refrigerant Capacity P _C	1,3,5	kW	90.1 / 63.8	141.8 / 98.2
Declared Power Input D _C		kW	17.2 / 11.5	26.5 / 17.5
Declared EER _{DC,C}			5.24 / 5.56	5.35 / 5.60
Declared Refrigerant Capacity P _D	1,3,5	kW	97.1 / 68.6	105.0 / 54.4
Declared Power Input D _D		kW	13.2 / 8.9	14.1 / 7.1
Declared EER _{DC,D}			7.35 / 7.74	7.44 / 7.67
SSCEE	2,3,5	%	155.4%	172.2%
SSCEE Tier			Tier 1 (2018)	Tier 2 (2021)
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	97.0	116.9
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	96.5	116.3
Declared EER _d 35°C			2.77	2.95
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	81.6 / 57.9	89.4 / 46.0
Declared EER _d 30°C			3.54 / 3.87	3.85 / 4.11
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	64.1 / 28.8	98.7 / 50.7
Declared EER _d 25°C			4.71 / 4.11	4.65 / 4.96
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	31.8 / 0.0	55.6 / 0.0
Declared EER _d 20°C			5.04 / 0.00	6.06 / 0.00
Sound Power Level		dB(A)	85	84
Air Volume		m³/h	37009	52593
Off mode P _{OFF}		kW	0.035	0.035
Thermostat-off mode P _{TO}		kW	0.549	0.598
Standby Mode P _{SB}		kW	0.055	0.059
Crankcase heater mode P _{CK}		kW	0.128	0.096
Capacity Control			Staged	Staged

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR125DR-3ALL, UCCR150DR-3ANN

Ecodesign

	Notes:	Units	UCCR125DR-3ALL	UCCR150DR-3ANN
SEPR	1,3,5		5.9	5.4
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	149114.0	202349.0
Rated Refrigerant Capacity P _A	1,3,5	kW	119.4	147.5
Rated Power Input D _A		kW	40.8	54.6
Rated EER _{DC,A}			2.93	2.70
Declared Refrigerant Capacity P _B	1,3,5	kW	133.3 / 102.2	166.1 / 128.6
Declared Power Input D _B		kW	34.1 / 25.4	45.9 / 34.1
Declared EER _{DC,B}			3.91 / 4.03	3.62 / 3.77
Declared Refrigerant Capacity P _C	1,3,5	kW	111.8 / 77.7	139.8 / 98.1
Declared Power Input D _C		kW	20.9 / 13.6	28.5 / 18.2
Declared EER _{DC,C}			5.34 / 5.72	4.91 / 5.39
Declared Refrigerant Capacity P _D	1,3,5	kW	120.7 / 83.5	149.7 / 104.8
Declared Power Input D _D		kW	16.2 / 10.6	23.3 / 15.0
Declared EER _{DC,D}			7.44 / 7.90	6.42 / 7.00

SSCEE	2,3,5	%	161.4%	153.6%
SSCEE Tier			Tier 2 (2021)	Tier 1 (2018)
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	120.0	148.2
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	119.4	147.5
Declared EER _d 35°C			2.93	2.70
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	101.2 / 70.5	127.4 / 89.5
Declared EER _d 30°C			3.63 / 4.00	3.40 / 3.85
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	77.9 / 37.3	98.8 / 47.2
Declared EER _d 25°C			4.85 / 4.26	4.62 / 4.07
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	41.2 / 0.0	52.0 / 0.0
Declared EER _d 20°C			5.22 / 0.00	4.92 / 0.00
Sound Power Level		dB(A)	85	86
Air Volume		m³/h	53009	55518
Off mode P _{OFF}		kW	0.035	0.035
Thermostat-off mode P _{TO}		kW	0.598	0.716
Standby Mode P _{SB}		kW	0.060	0.060
Crankcase heater mode P _{CK}		kW	0.128	0.128
Capacity Control			Staged	Staged

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR030SX-1AE0, UCCR030SX-2AE0, UCCR040SX-1AH0

Ecodesign

	Notes	Units	UCCR030SX-1AE0	UCCR030SX-2AE0	UCCR040SX-1AH0
SEPR	1,3,5		5.5	6.7	5.5
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	39398.0	34266.0	49454.0
Rated Refrigerant Capacity P _A	1,3,5	kW	29.0	30.9	36.5
Rated Power Input D _A		kW	10.1	9.4	14.5
Rated EER _{DC,A}			2.87	3.30	2.52
Declared Refrigerant Capacity P _B	1,3,5	kW	32.7	34.4	41.4 / 23.1
Declared Power Input D _B		kW	8.4	7.7	12.0 / 5.7
Declared EER _{DC,B}			3.87	4.46	3.43 / 4.07
Declared Refrigerant Capacity P _C	1,3,5	kW	36.1	37.7	45.7 / 25.0
Declared Power Input D _C		kW	6.9	6.1	9.9 / 4.7
Declared EER _{DC,C}			5.24	6.21	4.63 / 5.28
Declared Refrigerant Capacity P _D	1,3,5	kW	39.1	40.7	49.5 / 26.7
Declared Power Input D _D		kW	5.3	4.2	7.8 / 3.7
Declared EER _{DC,D}			7.44	9.66	6.32 / 7.14

SSCEE	2,3,5	%	125.7%	147.1%	146.3%
SSCEE Tier			NOT Compliant	NOT Compliant	NOT Compliant
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	n/a	n/a	n/a
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	n/a	n/a	n/a
Declared EER _d 35°C			n/a	n/a	n/a
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	n/a	n/a	n/a
Declared EER _d 30°C			n/a	n/a	n/a
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	n/a	n/a	n/a
Declared EER _d 25°C			n/a	n/a	n/a
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	n/a	n/a	n/a
Declared EER _d 20°C			n/a	n/a	n/a
Sound Power Level		dB(A)	n/a	n/a	n/a
Air Volume		m³/h	n/a	n/a	n/a
Off mode P _{OFF}		kW	n/a	n/a	n/a
Thermostat-off mode P _{TO}		kW	n/a	n/a	n/a
Standby Mode P _{SB}		kW	n/a	n/a	n/a
Crankcase heater mode P _{CK}		kW	n/a	n/a	n/a
Capacity Control			n/a	n/a	n/a

(1) Nominal conditions as stated in EU 2016/2281 Table 22.

(2) Nominal conditions as stated in EU 2016/2281 Table 21.

(3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.

(4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.

(5) All performance data based upon standard waterside configuration.

(6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR040SX-2AH0, UCCR040DX-1ACC, UCCR040DX-2ACC

Ecodesign

	Notes:	Units	UCCR040SX-2AH0	UCCR040DX-1ACC	UCCR040DX-2ACC
SEPR	1,3,5		6.5	4.9	6.1
SEPR Tier			Tier 2 (2021)	Tier 1 (2018)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	46089.0	55925.0	48863.0
Rated Refrigerant Capacity P _A	1,3,5	kW	40.2	36.7	40.4
Rated Power Input D _A		kW	13.1	14.4	12.9
Rated EER _{DC,A}			3.08	2.55	3.12
Declared Refrigerant Capacity P _B	1,3,5	kW	44.7 / 23.9	41.6 / 20.7	45.0 / 22.0
Declared Power Input D _B		kW	10.7 / 5.3	11.9 / 6.4	10.6 / 5.7
Declared EER _{DC,B}			4.17 / 4.54	3.50 / 3.25	4.25 / 3.86
Declared Refrigerant Capacity P _C	1,3,5	kW	48.8 / 25.7	46.1 / 22.9	49.1 / 24.1
Declared Power Input D _C		kW	8.5 / 4.3	9.7 / 5.3	8.3 / 4.6
Declared EER _{DC,C}			5.73 / 6.00	4.76 / 4.36	5.92 / 5.28
Declared Refrigerant Capacity P _D	1,3,5	kW	52.4 / 27.5	50.1 / 24.9	52.9 / 26.1
Declared Power Input D _D		kW	6.2 / 3.2	7.5 / 4.2	5.8 / 3.4
Declared EER _{DC,D}			8.46 / 8.58	6.68 / 5.99	9.12 / 7.76

SSCEE	2,3,5	%	167.3%	118.3%	143.0%
SSCEE Tier			Tier 2 (2021)	NOT Compliant	NOT Compliant
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	40.5	n/a	n/a
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	40.2	n/a	n/a
Declared EER _d 35°C			3.08	n/a	n/a
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	44.8 / 23.5	n/a	n/a
Declared EER _d 30°C			3.75 / 4.11	n/a	n/a
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	25.9 / 0.0	n/a	n/a
Declared EER _d 25°C			5.06 / 0.00	n/a	n/a
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	28.6 / 0.0	n/a	n/a
Declared EER _d 20°C			6.43 / 0.00	n/a	n/a
Sound Power Level		dB(A)	75	n/a	n/a
Air Volume		m³/h	22795	n/a	n/a
Off mode P _{OFF}		kW	0.035	n/a	n/a
Thermostat-off mode P _{TO}		kW	0.282	n/a	n/a
Standby Mode P _{SB}		kW	0.052	n/a	n/a
Crankcase heater mode P _{CK}		kW	0.064	n/a	n/a
Capacity Control			Staged	n/a	n/a

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR050SX-2AK0, UCCR050DX-2ADD, UCCR060SX-2AL0

Ecodesign

	Notes:	Units	UCCR050SX-2AK0	UCCR050DX-2ADD	UCCR060SX-2AL0
SEPR	1,3,5		6.1	5.6	5.9
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	62429.0	68972.0	72430.0
Rated Refrigerant Capacity P _A	1,3,5	kW	51.6	51.7	58.0
Rated Power Input D _A		kW	17.7	17.6	20.1
Rated EER _{DC,A}			2.91	2.93	2.88
Declared Refrigerant Capacity P _B	1,3,5	kW	57.9 / 31.4	58.0 / 28.4	65.1 / 35.5
Declared Power Input D _B		kW	14.6 / 7.1	14.6 / 7.9	16.9 / 8.2
Declared EER _{DC,B}			3.95 / 4.42	3.98 / 3.61	3.86 / 4.34
Declared Refrigerant Capacity P _C	1,3,5	kW	63.5 / 33.9	63.7 / 31.2	71.6 / 38.4
Declared Power Input D _C		kW	11.8 / 5.9	11.7 / 6.4	13.9 / 6.8
Declared EER _{DC,C}			5.40 / 5.79	5.46 / 4.88	5.16 / 5.63
Declared Refrigerant Capacity P _D	1,3,5	kW	68.5 / 36.4	68.8 / 33.8	77.3 / 41.3
Declared Power Input D _D		kW	8.9 / 4.5	8.7 / 4.9	10.8 / 5.3
Declared EER _{DC,D}			7.69 / 8.02	7.90 / 6.85	7.17 / 7.75

SSCEE	2,3,5	%	162.2%	134.2%	159.3%
SSCEE Tier			Tier 2 (2021)	NOT Compliant	Tier 1 (2018)
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	52.0	n/a	58.3
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	51.6	n/a	58.0
Declared EER _d 35°C			2.91	n/a	2.88
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	57.6 / 30.9	n/a	64.7 / 35.0
Declared EER _d 30°C			3.54 / 4.01	n/a	3.47 / 3.96
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	34.1 / 0.0	n/a	38.6 / 0.0
Declared EER _d 25°C			4.90 / 0.00	n/a	4.79 / 0.00
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	37.6 / 0.0	n/a	42.6 / 0.0
Declared EER _d 20°C			6.15 / 0.00	n/a	5.97 / 0.00
Sound Power Level		dB(A)	76	n/a	77
Air Volume		m³/h	24225	n/a	24225
Off mode P _{OFF}		kW	0.035	n/a	0.035
Thermostat-off mode P _{TO}		kW	0.356	n/a	0.392
Standby Mode P _{SB}		kW	0.052	n/a	0.052
Crankcase heater mode P _{CK}		kW	0.064	n/a	0.064
Capacity Control			Staged	n/a	Staged

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR060DX-2AEE, UCCR070SX-2AM0, UCCR070DX-2AFF

Ecodesign

	Notes	Units	UCCR060DX-2AEE	UCCR070SX-2AM0	UCCR070DX-2AFF
SEPR	1,3,5		5.3	5.8	5.2
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	80989.0	84441.0	93444.0
Rated Refrigerant Capacity P _A	1,3,5	kW	58.1	65.5	66.0
Rated Power Input D _A		kW	20.0	23.6	23.5
Rated EER _{DC,A}			2.90	2.77	2.81
Declared Refrigerant Capacity P _B	1,3,5	kW	65.3 / 32.1	73.9 / 40.7	74.5 / 37.0
Declared Power Input D _B		kW	16.8 / 9.1	19.8 / 9.4	19.5 / 10.6
Declared EER _{DC,B}			3.89 / 3.54	3.73 / 4.31	3.81 / 3.50
Declared Refrigerant Capacity P _C	1,3,5	kW	71.9 / 35.4	81.3 / 43.9	82.2 / 40.7
Declared Power Input D _C		kW	13.7 / 7.5	16.3 / 7.9	15.9 / 8.7
Declared EER _{DC,C}			5.24 / 4.71	4.99 / 5.55	5.17 / 4.67
Declared Refrigerant Capacity P _D	1,3,5	kW	77.8 / 38.4	87.7 / 47.0	88.9 / 44.0
Declared Power Input D _D		kW	10.5 / 5.9	13.0 / 6.3	12.3 / 6.9
Declared EER _{DC,D}			7.42 / 6.47	6.73 / 7.42	7.22 / 6.37

SSCEE	2,3,5	%	131.3%	157.1%	129.4%
SSCEE Tier			NOT Compliant	Tier 1 (2018)	NOT Compliant
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	n/a	66.0	n/a
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	n/a	65.5	n/a
Declared EER _d 35°C			n/a	2.77	n/a
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	n/a	73.2 / 40.1	n/a
Declared EER _d 30°C			n/a	3.33 / 3.93	n/a
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	n/a	44.2 / 0.0	n/a
Declared EER _d 25°C			n/a	4.74 / 0.00	n/a
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	n/a	48.7 / 0.0	n/a
Declared EER _d 20°C			n/a	5.84 / 0.00	n/a
Sound Power Level		dB(A)	n/a	77	n/a
Air Volume		m³/h	n/a	24225	n/a
Off mode P _{OFF}		kW	n/a	0.035	n/a
Thermostat-off mode P _{TO}		kW	n/a	0.429	n/a
Standby Mode P _{SB}		kW	n/a	0.052	n/a
Crankcase heater mode P _{CK}		kW	n/a	0.064	n/a
Capacity Control			n/a	Staged	n/a

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR075SX-2AN0, UCCR075SX-2AP0, UCCR075DX-2AGG

Ecodesign

	Notes:	Units	UCCR075SX-2AN0	UCCR075SX-2AP0	UCCR075DX-2AGG
SEPR	1,3,5		5.4	5.4	4.9
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 1 (2018)
Annual Electricity Consumption		kWh/a	97049.0	110172.0	108546.0
Rated Refrigerant Capacity P _A	1,3,5	kW	71.4	79.8	72.0
Rated Power Input D _A		kW	27.4	32.3	27.1
Rated EER _{DC,A}			2.61	2.47	2.66
Declared Refrigerant Capacity P _B	1,3,5	kW	80.6 / 45.3	90.4 / 65.9	81.5 / 40.5
Declared Power Input D _B		kW	22.9 / 10.8	27.2 / 17.3	22.5 / 12.1
Declared EER _{DC,B}			3.52 / 4.20	3.32 / 3.80	3.62 / 3.35
Declared Refrigerant Capacity P _C	1,3,5	kW	88.7 / 48.8	72.0 / 38.6	89.9 / 44.7
Declared Power Input D _C		kW	19.0 / 9.1	14.6 / 7.1	18.5 / 10.1
Declared EER _{DC,C}			4.66 / 5.35	4.94 / 5.45	4.87 / 4.45
Declared Refrigerant Capacity P _D	1,3,5	kW	95.5 / 52.0	77.6 / 41.5	97.2 / 48.3
Declared Power Input D _D		kW	15.6 / 7.5	11.7 / 5.6	14.7 / 8.2
Declared EER _{DC,D}			6.11 / 6.94	6.61 / 7.41	6.61 / 5.92

SSCEE	2,3,5	%	151.8%	156.5%	123.5%
SSCEE Tier			Tier 1 (2018)	Tier 1 (2018)	NOT Compliant
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	71.8	80.3	n/a
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	71.4	79.8	n/a
Declared EER _d 35°C			2.61	2.47	n/a
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	79.7 / 44.6	65.0 / 34.7	n/a
Declared EER _d 30°C			3.14 / 3.84	3.44 / 3.84	n/a
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	49.2 / 0.0	38.4 / 0.0	n/a
Declared EER _d 25°C			4.61 / 0.00	4.62 / 0.00	n/a
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	54.1 / 0.0	42.3 / 0.0	n/a
Declared EER _d 20°C			5.61 / 0.00	5.70 / 0.00	n/a
Sound Power Level		dB(A)	77	77	n/a
Air Volume		m³/h	24225	24225	n/a
Off mode P _{OFF}		kW	0.035	0.035	n/a
Thermostat-off mode P _{TO}		kW	0.460	0.460	n/a
Standby Mode P _{SB}		kW	0.052	0.054	n/a
Crankcase heater mode P _{CK}		kW	0.064	0.096	n/a
Capacity Control			Staged	Staged	n/a

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR085SX-2AP0, UCCR085DX-2AHJ, UCCR100SX-3AQ0

Ecodesign

	Notes:	Units	UCCR085SX-2AP0	UCCR085DX-2AHJ	UCCR100SX-3AQ0
SEPR	1,3,5		6.1	6.0	6.2
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	103166.0	101408.0	120421.0
Rated Refrigerant Capacity P _A	1,3,5	kW	84.5	81.5	100.2
Rated Power Input D _A		kW	30.5	29.9	34.1
Rated EER _{DC,A}			2.77	2.73	2.94
Declared Refrigerant Capacity P _B	1,3,5	kW	95.3 / 68.5	91.9 / 70.6	112.7 / 80.0
Declared Power Input D _B		kW	25.5 / 16.4	24.8 / 17.7	28.2 / 18.5
Declared EER _{DC,B}			3.74 / 4.17	3.71 / 3.99	3.99 / 4.32
Declared Refrigerant Capacity P _C	1,3,5	kW	74.8 / 39.6	77.1 / 55.4	123.9 / 86.9
Declared Power Input D _C		kW	13.5 / 6.7	14.4 / 9.8	22.8 / 15.2
Declared EER _{DC,C}			5.53 / 5.94	5.35 / 5.68	5.43 / 5.73
Declared Refrigerant Capacity P _D	1,3,5	kW	80.8 / 42.8	83.0 / 59.4	93.1 / 48.4
Declared Power Input D _D		kW	10.3 / 5.0	11.0 / 7.4	11.8 / 6.0
Declared EER _{DC,D}			7.82 / 8.54	7.58 / 8.02	7.86 / 8.10

SSCEE	2,3,5	%	170.2%	158.6%	173.5%
SSCEE Tier			Tier 2 (2021)	Tier 1 (2018)	Tier 2 (2021)
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	85.0	81.9	100.8
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	84.5	81.5	100.2
Declared EER _d 35°C			2.77	2.73	2.94
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	67.6 / 35.5	69.7 / 50.5	79.1 / 40.8
Declared EER _d 30°C			3.77 / 4.08	3.59 / 3.94	3.90 / 4.13
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	74.8 / 39.2	55.8 / 24.6	87.4 / 45.0
Declared EER _d 25°C			4.54 / 4.96	4.80 / 4.25	4.72 / 5.01
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	43.3 / 0.0	27.2 / 0.0	49.5 / 0.0
Declared EER _d 20°C			6.22 / 0.00	5.26 / 0.00	6.21 / 0.00
Sound Power Level		dB(A)	77	79	78
Air Volume		m³/h	26623	26623	39905
Off mode P _{OFF}		kW	0.035	0.035	0.035
Thermostat-off mode P _{TO}		kW	0.440	0.440	0.556
Standby Mode P _{SB}		kW	0.054	0.055	0.059
Crankcase heater mode P _{CK}		kW	0.096	0.128	0.096
Capacity Control			Staged	Staged	Staged

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR100DX-3AJK, UCCR125SX-4AR0

Ecodesign

	Notes:	Units	UCCR100DX-3AJK	UCCR125SX-4AR0
SEPR	1,3,5		6.2	6.3
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	116530.0	137132.0
Rated Refrigerant Capacity P _A	1,3,5	kW	97.1	117.1
Rated Power Input D _A		kW	33.4	37.7
Rated EER _{DC,A}			2.91	3.11
Declared Refrigerant Capacity P _B	1,3,5	kW	109.3 / 83.8	131.3 / 91.8
Declared Power Input D _B		kW	27.6 / 20.1	31.1 / 20.4
Declared EER _{DC,B}			3.96 / 4.17	4.23 / 4.49
Declared Refrigerant Capacity P _C	1,3,5	kW	91.5 / 64.4	143.8 / 99.5
Declared Power Input D _C		kW	16.3 / 11.0	25.0 / 16.8
Declared EER _{DC,C}			5.62 / 5.85	5.74 / 5.93
Declared Refrigerant Capacity P _D	1,3,5	kW	98.4 / 69.0	106.4 / 55.1
Declared Power Input D _D		kW	12.3 / 8.5	13.3 / 7.0
Declared EER _{DC,D}			8.02 / 8.13	8.02 / 7.89
SSCEE	2,3,5	%	163.2%	179.1%
SSCEE Tier			Tier 2 (2021)	Tier 2 (2021)
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	97.7	117.7
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	97.1	117.1
Declared EER _d 35°C			2.91	3.11
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	82.8 / 58.6	90.8 / 46.4
Declared EER _d 30°C			3.75 / 4.04	4.05 / 4.24
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	64.8 / 29.2	100.2 / 51.2
Declared EER _d 25°C			4.94 / 4.31	4.91 / 5.13
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	32.2 / 0.0	56.2 / 0.0
Declared EER _d 20°C			5.33 / 0.00	6.29 / 0.00
Sound Power Level		dB(A)	80	79
Air Volume		m³/h	39905	53207
Off mode P _{OFF}		kW	0.035	0.035
Thermostat-off mode P _{TO}		kW	0.556	0.605
Standby Mode P _{SB}		kW	0.060	0.064
Crankcase heater mode P _{CK}		kW	0.128	0.096
Capacity Control			Staged	Staged

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

Technical Data

UCCR125DX-4ALL, UCCR150DX-4ANN

Ecodesign

	Notes:	Units	UCCR125DX-4ALL	UCCR150DX-4ANN
SEPR	1,3,5		6.4	5.8
SEPR Tier			Tier 2 (2021)	Tier 2 (2021)
Annual Electricity Consumption		kWh/a	139340.0	188892.0
Rated Refrigerant Capacity P _A	1,3,5	kW	120.1	147.9
Rated Power Input D _A		kW	39.0	52.4
Rated EER _{DC,A}			3.08	2.82
Declared Refrigerant Capacity P _B	1,3,5	kW	134.7 / 104.0	166.5 / 129.8
Declared Power Input D _B		kW	32.5 / 24.4	43.7 / 32.4
Declared EER _{DC,B}			4.15 / 4.26	3.81 / 4.01
Declared Refrigerant Capacity P _C	1,3,5	kW	113.6 / 78.7	141.5 / 99.5
Declared Power Input D _C		kW	19.8 / 13.1	26.8 / 17.4
Declared EER _{DC,C}			5.73 / 6.03	5.28 / 5.71
Declared Refrigerant Capacity P _D	1,3,5	kW	122.6 / 84.7	151.7 / 106.3
Declared Power Input D _D		kW	14.8 / 9.9	21.6 / 14.1
Declared EER _{DC,D}			8.26 / 8.58	7.02 / 7.54

SSCEE	2,3,5	%	169.4%	161.9%
SSCEE Tier			Tier 2 (2021)	Tier 2 (2021)
Rated Cooling Capacity P _{rated,c}	2,4,5	kW	120.7	148.6
Declared Cooling Capacity 35°C P _{dc}	2,3,5	kW	120.1	147.9
Declared EER _d 35°C			3.08	2.82
Declared Cooling Capacity 30°C P _{dc}	2,3,5	kW	103.0 / 71.4	128.1 / 91.0
Declared EER _d 30°C			3.84 / 4.16	3.60 / 4.04
Declared Cooling Capacity 25°C P _{dc}	2,3,5	kW	78.9 / 37.8	100.3 / 48.1
Declared EER _d 25°C			5.08 / 4.46	4.88 / 4.31
Declared Cooling Capacity 20°C P _{dc}	2,3,5	kW	41.8 / 0.0	52.9 / 0.0
Declared EER _d 20°C			5.52 / 0.00	5.22 / 0.00
Sound Power Level		dB(A)	80	80
Air Volume		m³/h	53207	53207
Off mode P _{OFF}		kW	0.035	0.035
Thermostat-off mode P _{TO}		kW	0.605	0.720
Standby Mode P _{SB}		kW	0.065	0.065
Crankcase heater mode P _{CK}		kW	0.128	0.128
Capacity Control			Staged	Staged

- (1) Nominal conditions as stated in EU 2016/2281 Table 22.
- (2) Nominal conditions as stated in EU 2016/2281 Table 21.
- (3) Performance data (Nett) is supplied in accordance with EN14511-1:2013.
- (4) Performance data (Gross) is supplied excluding absorbed pump power as per EN14511-1:2013.
- (5) All performance data based upon standard waterside configuration.
- (6) Please contact Airedale regarding Non Compliant selections.

After Sales

Warranty

All Airedale products or parts (non consumable) supplied for installation within the UK mainland and commissioned by an Airedale engineer, carry a full Parts & Labour warranty for a period of 12 months from the date of commissioning or 18 months from the date of despatch, whichever is the sooner.

Parts or Equipment supplied by Airedale for installation within the UK or for Export that are properly commissioned in accordance with Airedale standards and specification, not commissioned by an Airedale engineer; carry a 12 month warranty on non consumable Parts only from the date of commissioning or 18 months from the date of despatch, whichever is the sooner.

Parts or equipment installed or commissioned not to acceptable Airedale standards or specification invalidate all warranty.

Warranty is only valid in the event that

In the period between delivery and commissioning the equipment:

- is properly protected & serviced as per the Airedale installation & maintenance manual provided
- where applicable the glycol content is maintained to the correct level.

In the event of a problem being reported and once warranty is confirmed* as valid under the given installation and operating conditions, the Company will provide the appropriate warranty coverage (as detailed above) attributable to the rectification of any affected Airedale equipment supplied (excluding costs for any specialist access or lifting equipment that must be ordered by the customer).

*Once warranty is confirmed, maintenance must be continued to validate the warranty period.

Any spare part supplied by Airedale under warranty shall be warranted for the unexpired period of the warranty or 3 months from delivery, whichever period is the longer. To be read in conjunction with the Airedale Conditions of Sale - Warranty and Warranty Procedure, available upon request.

Procedure

When a component part fails, a replacement part should be obtained through our Spares department. If the part is considered to be under warranty, the following details are required to process this requirement. Full description of part required, including Airedale's part number, if known. The original equipment serial number. An appropriate purchase order number.

A spares order will be raised under our warranty system and the replacement part will be despatched, usually within 24 hours should they be in stock. When replaced, the faulty part must be returned to Airedale with a suitably completed and securely attached "Faulty Component Return" (FCR) tag. FCR tags are available from Airedale and supplied with each Warranty order.

On receipt of the faulty part, suitably tagged, Airedale will pass to its Warranty department, where it will be fully inspected and tested in order to identify the reason for failure, identifying at the same time whether warranty is justified or not.

On completion of the investigation of the returned part, a full "Report on Goods Returned" will be issued. On occasion the release of this complete report may be delayed as component manufacturers become involved in the investigation. When warranty is allowed, a credit against the Warranty invoice will be raised. Should warranty be refused the Warranty invoice becomes payable on normal terms.

Exclusions

Warranty may be refused for the following reasons.

- Misapplication of product or component
- Incorrect site installation
- Incomplete commissioning documentation
- Inadequate site installation
- Inadequate site maintenance
- Damage caused by mishandling
- Replaced part being returned damaged without explanation
- Unnecessary delays incurred in return of defective component

Returns analysis

All faulty components returned under warranty are analysed on a monthly basis as a means of verifying component and product reliability as well as supplier performance. It is important that all component failures are reported correctly.

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Head Office
Airedale International Air Conditioning Ltd
Leeds Road
Rawdon
Leeds LS19 6JY
Tel: +44 (0) 113 2391000
Fax: +44 (0) 113 2507219
E-mail enquiries@airedale.com
Web www.airedale.com