



Product Guide



Большая библиотека технической документации
<http://splitoff.ru/tehn-doc.html>
каталоги, инструкции, сервисные мануалы, схемы.

Quick reference

Find the right solution for your application

Six product ranges supported by an extensive number of models and exceptional configuration flexibility means that when selecting an Airedale system, your choice of variants is considerable, enabling you to precisely match your application.

We apply the latest technology led by smart control logic to ensure our products offer you the highest efficiency, resilience and quality. First and foremost, they are designed to be stand-

alone, but when integrated, they share intelligence and further reduce energy through combined efficiencies.

Our breadth of expertise enables us to engineer innovative, integrated cooling solutions across commercial and public sectors - in data centres and other critical environments; industrial process cooling or comfort cooling in retail, leisure and office applications.

Airedale - Your first choice

Airedale is a British manufacturer with over 40 years industry experience. As the UK's number one provider of chillers, precision air conditioning and IT cooling solutions and at the forefront of controls software design and optimisation, we are experts in integrating our products to reduce your total cost of ownership.

We can help you select the optimum specification tailored to your application and provide the support which will enable you to manage your cooling system for best performance, maximum longevity and lower operating costs.

Global company

Airedale is a world leader in the design and manufacture of innovative, high efficiency cooling solutions. We manufacture in three continents and export to customers in over sixty countries through a network of more than seventy business partners.

Precision Air Conditioning

6kW

233kW



SmartCool™ 11 - 233kW



PAGE 03



EasiCool™ 6 - 64kW



PAGE 03



AlphaCool™ 8 - 101kW



PAGE 04



Ecotel™ 5 - 19kW



PAGE 04

IT Cooling

2kW

67kW



OnRak™ 3 - 35kW



PAGE 05



InRak™ 10 - 67kW



PAGE 05



ACE (ECHO) 2 - 20kW per rack



SYSTEM SPECIFIC

PAGE 06

AireTile™ Up to 1.2m³/s

SYSTEM SPECIFIC

PAGE 06

Air Handling Units

100kW

300kW



AireFlow™ 100 - 300kW



PAGE 05

Comfort

2kW

77kW



StoreMaster™ 50 - 77kW



PAGE 07



Cassette 2 - 12kW



PAGE 07

Chillers 6kW 1830kW

SCROLL

	DeltaChill™ 110 - 1010kW D/Chill. FreeCool 140 - 1080kW		PAGE 09
	Ultima™ Compact 30 - 450kW Ult. Compact FreeCool 75 - 450kW		PAGE 11
	Ultima™ Remote Air Cooled & Ultima™ Water Cooled 75 - 450kW		PAGE 12
	EcoChill™ 6 - 44kW cooling / 6 - 46kW heating		PAGE 10
	LogiCool™ FreeCool 20 / 40kW		PAGE 11

CENTRIFUGAL

	TurboChill™ 200 - 1775kW TurboChill™ FreeCool 200 - 1830kW		PAGE 09
--	--	--	---------

SCREW

	OptiChill™ 500 - 1140kW OptiChill™ FreeCool 750 - 1330kW		PAGE 10
--	--	--	---------

Condensers / CUs / Dry Coolers 3kW 450kW

	BluCube™ 10 - 48kW		PAGE 13
	Air Cooled Condensers & Dry Coolers CR 12 - 174kW (R410A)		
	C/CS 11 - 105kW (R407C)		
	DR 10 - 100kW		PAGE 13
	Ultima™ Compact Condensing Unit 30 - 450kW THR		PAGE 14
	Condensing Units 3 - 80kW THR		PAGE 14

PRODUCT KEY*

*See product pages 3 - 14 inclusive for a reference to which icons represent standard or optional features

Total support, whenever you need it

Controls PAGE 16

Complete control of your site

- Intelligent component optimisation
- Energy analysis and monitoring
- ACIS™ building management system
- Chiller sequencing, networking, integration
- Remote monitoring across sites
- Control/component/switchgear upgrades

Service PAGE 18

24/7 support

- Flexible service and maintenance plans: F Gas compliance
- On call engineers for immediate response
- Energy saving upgrades
- Flat pack solutions/unit refurbishment

Quick replacement spares

- Genuine components
- Express delivery to UK/overseas locations
- Manufacturer's warranty
- Rapid parts identification and technical support

Training PAGE 18

Develop your skills

- AC&R Modules 1,2 & 3
- Regulatory industry courses including:
 - CITB F Gas J11
 - CITB JO4 & JO% Pipework & Brazing
 - CITB Essential & Refrigeration Electrics

More details of courses on page 18

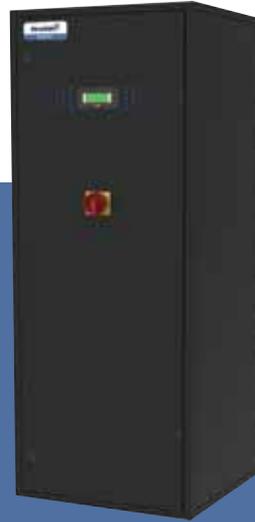
Find out more:

Email training@airedale.com for further course details

Precision Air Conditioning



SmartCool™ 11 - 233kW



EasiCool™ 6 - 64kW

KEY SPECIFICATIONS:



46% energy saving in free-cooling
dual cool variant



Up to 88% saving in power input
with hot gas re-heat option



+ DX air cooled (16 - 140kW); water cooled (50 - 127kW); chilled water (11 - 233kW) and free-cooling models; single and dual circuits



+ EER up to 52.4 with CW range



+ Up to 6 stages of tandem scroll compressor DX cooling

+ Direct drive, speed controllable AC fans

OPTIONS INCLUDE



+ Automatic adjustment of air volume: Faced with system resistance, fan speed modulates to give constant air volume



+ High efficiency de-humidification

+ Electronic expansion valves for up to 30% increase in system efficiency



+ Thyristor-controlled electric heating for precise control



+ Suction throttle valve technology for variable capacity

+ Dual power supply for redundancy and flexibility

+ Optimised for EC fan



OPTIONS:



KEY SPECIFICATIONS:



50 - 100% variable capacity control
with suction throttle valve option



Up to 70% more efficiency with EC fans
optional upgrade on all indoor and outdoor units



+ 76 DX (38 air cooled and 38 water cooled) and 34 chilled water models, in 6 case sizes



+ Tandem scroll compressors for reduced sound and part load efficiencies (models 20 - 64kW)



+ AV mounted, direct drive, speed controllable EC fan technology (models 6 - 27kW)

+ Variable humidification for precisely conditioned air

+ Full 360° service and maintenance access



OPTIONS INCLUDE

+ Hot gas re-heat efficiently re-heats cool air during dehumidification

+ Electric heating can be upgraded with thyristor control



+ Direct drive backward curved EC fan upgrade for all indoor and outdoor units

OPTIONS:



AlphaCool™ 8 - 101kW



Ecotel™ 5 - 19kW

KEY SPECIFICATIONS:



Up to 30% increase in system efficiency
with optional electronic expansion valves



- + DX, chilled water and glycol free-cooling systems
- + 102 models in 5 case sizes
- + AV mounted fans



- + Direct drive, speed controllable fans (models 9 - 19kW)



- + Reduced sound and vibration emission levels
- + Single, dual and triple circuit systems for stage cooling control



- + Variable humidification for precisely conditioned air



- + G4 as standard filter; optional G3/F6 for higher efficiency filtration

KEY SPECIFICATIONS:



100% free-cooling
for up to 67% of the year (UK)



Up to 70% energy saving
with free-cooling mode



- + Energy efficient outdoor cabin cooler
- + Ideal for telecoms cabins, internet service providers, computer rooms, trackside signalling cabins, re-locatable signalling cabins or switching and relay stations.



- + Five model sizes; 5 - 19kW



- + Single or dual system offers up to three stages of cooling

- + Emergency back up 48v DC cooling option

- + Secure, tamper-proof fixings

IT Cooling



OnRak™ 3 - 35kW



InRak™ 10 - 67kW

KEY SPECIFICATIONS:



88% saving in power input
an OnRak™ with EC fan and an EER of 144.7



EER 114.45 (n); 183.02 (n+1)
n+1 fan configuration for increased efficiency and resilience

Over 50% saving in energy
when integrated with a free-cooling chiller

- + Efficient rear door heat exchanger with 200mm footprint
- + Two configurations: (n) 35kW cooling (100% air volume); optional (n+1) 30kW cooling (75% air volume)
- + Designed to fit 42 - 47U racks
- + Supplied with integrated rack or adapted to fit a customer specific rack, with simple connections
- + Pressure differential management - maintaining pressure in the rear of the rack within the server design envelope
- + Flexible water connections maintain cooling when door is open
- + Hot swappable fan management
- + Water detection and automatic isolation
- + Self-regulating constant flow control eases commissioning
- + High efficiency aluminium fin heat exchanger with integral coil guard

KEY SPECIFICATIONS:



EER up to 108.03
n + 1, CW



70% energy saving p.a.
with EC fan



17 - 100% fully modulated cooling
for substantial energy savings when operating at part load



- + Efficient in-row cooling solution for medium to high density applications
- + Positioned next to a single rack or within a row of racks
- + Directs cool air horizontally to the front of the racks, maintaining even cooling
- + n+1 fan configuration for increased efficiency and resilience
- + Aisle differential pressure control for resilience
- + Hot swappable fan management
- + Over 50% saving in energy when integrated with a free-cooling chiller
- + Up to 70% more efficiency with EC fans
- + Compact design for increased cooling per square metre

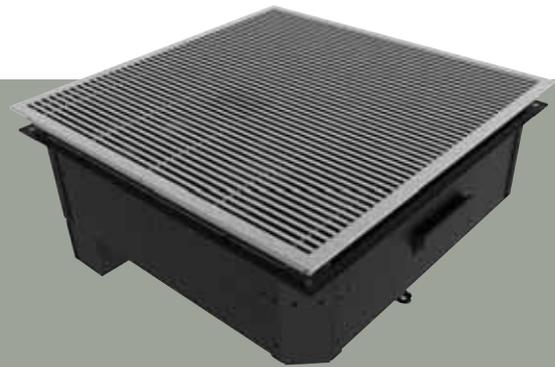


Options Include

- + Dual power supply/static transfer switch



ECHO High efficiency IT cooling system



AireTile™ Up to 1.2m³/s

KEY SPECIFICATIONS:



67% energy saving
compared with a conventional downflow system



50% less air volume, using less power
by varying the air volume

Up to 95% free-cooling per annum

- + Ensures the correct air quantity, temperature and pressure is fed to the server inlet
- + Variable rack load densities to a maximum of 20kW per rack
- + No chilled water/refrigerant connections at the rack or in the IT space
- + Control is led from rack level, rescheduling the Airedale ECHO CRAC and free-cooling chiller to optimise performance
- + n + 1 fans for complete confidence
- + Pressure differential management so ACE fans mirror the server fans
- + Eliminates hot spots
- + With no hot/cold aisle configuration, the technical space available for IT equipment is increased

EER: Energy Efficiency Ratio

KEY SPECIFICATIONS:



Dynamic fan floor tile
Boosts cooling efficiency via active air distribution

Four model types
with different levels of functionality

- + Two fan types; low air flow EC fan (<0.74m³/s) and high air flow EC fan (1.2m³/s)
- + Active air distribution maximises cooling efficiency
- + Eliminates hot spots, cool air directly targets heat load
- + Ideal pre or retrofit solution for additional cooling of high density racks and aisle containment
- + Reduces system running costs
- + Easy installation – units sit on raised access floor pedestals within floor void, minimum floor depth of 300mm (temperature control) or 400mm (constant air volume) required
- + Units can be standalone or networked (up to 64 units) via intelligent controls
- + Two power supplies as standard - 0 (230V / 1ph/ 50H3), -1 (220V / 1ph / 60H3)

Air Handling Units



AireFlow™ 100 – 300kW

A highly versatile range of air handling units, including R410A, free-cooling and indirect adiabatic cooling systems, maximising efficiency and minimising operational costs for data centre, retail and commercial environments.

KEY SPECIFICATIONS:



Indirect adiabatic AHU

No potential contaminants enter the data centre



Optimised for supply air temperature of 26°C / 27°C



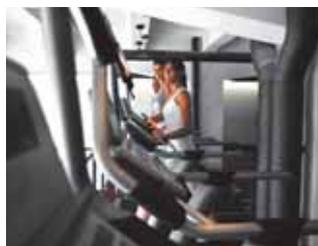
+ Two model configurations, roof or wall mounted; 100kW 4.1m x 5m x 2.3m (h x l x w) and 150kW 4.1m x 5m x 3.4m (h x l x w) – units can be matched to 300kW



+ Integrated inlet for fresh air for room pressurisation and air quality (F7 contaminant filtration available)



- + Saturated media adiabatic system requires low water consumption and no water treatment
- + Adiabatic activation temperature can be specified by user to prioritise energy consumption or water consumption
- + Extensive free cooling capability significantly decreases operating costs
- + No air mixing within the system prevents contaminants entering your environment and eliminates need for 100% DX back-up cooling
- + N+1 redundancy
- + If water supply fails, DX or CW system has the capability to provide total required cooling load which removes need for water storage on site
- + G3 / G4 filtration
- + High efficiency EC fans with optimised control



Offices

Shopping malls

Retail outlets

Leisure environments

Commercial applications

Distribution centres

Comfort



StoreMaster™ 50 - 77kW



Cassette 2 - 12kW

KEY SPECIFICATIONS:



Up to 70% more efficiency
with EC fans



0 - 100% free-cooling as standard
using full design air volume



+ ETL listed* (models featuring an inverter-driven condenser fan and return air fan)

+ Cooling and heat pump variants



+ 57 - 75kW heating capacity with reverse cycle (dual circuit heat pump variant only)

+ Packaged or split modules (evaporator / condenser)



+ Tandem scroll compressors on a single circuit for improved efficiency at part load (cooling-only version)



KEY SPECIFICATIONS:



Smaller models fit the space of a standard ceiling tile
measuring 600mm²

- + 11 models for flexibility in heating, cooling and air flow
- + Available in 2 pipe and 4 pipe configurations
- + Efficient AC backward curved fan technology
- + Low sound
- + Neat, compact design
- + Smart, unobtrusive
- + Fresh air connection

Options Include

- + Heating based on a LPHW heating coil
- + Electric heating (two pipe variant only)



*ETL: Energy Technology List www.eca.gov.uk

Chillers



Scroll



DeltaChill™ (DCC) 110 - 1010kW
DeltaChill™ FreeCool (DCF) 140 - 1080kW



Centrifugal



TurboChill™ (TCC) 200 - 1775kW
TurboChill™ FreeCool (TCF) 200 - 1830kW

KEY SPECIFICATIONS:

ESEER up to 5.03

with EC fan option

Class A EER up to 3.60

- + ETL listed* (DCC and DCF \leq 450kW)
- + 282 models: 151 models (DCC) and 131 models (DCF)
- + Single, dual or triple independent refrigeration circuits, allowing 2 - 9 stages of cooling
- + Up to 95% free-cooling with DCF
- + Up to 38% more cooling/m² than Airedale's previous generation free-cooling chillers
- + Low sound ranges: Quiet and Extra Quiet
- + E-coated micro-channel coils reduce life cycle costs and footprint (all DCF models and DCC 450 - 960kW)
- + Modular, efficient 'V' frame fan coil module
- + Direct Effect Life Cycle (DELCO) CO₂ equivalent emissions of \leq 1000 kgCO₂e/kW cooling capacity enable the DCC and DCF to contribute to a building achieving 1 BREEAM point

Options Include

- + Inverter-controlled pump ensures constant water flow
- + Automatic refrigerant pump down combined with leak detection enable the DCC and DCF to contribute to a building achieving 1 BREEAM point

OPTIONS:



KEY SPECIFICATIONS:

ESEER up to 6.23

Free-cooling for up to 95% per annum

with TCF

EER over 15.0 at part load

an increase of 22%



Up to 23% saved in operating costs p.a compared to the leading competitor screw chiller

(based on an annual cycle in Leeds, UK at 50% load)

- + More than 230 models to choose from
- + TurboChill™ range designed for use with both R134a and the new low Global Warming Potential refrigerant R1234ze
- + Latest EC fan technology provides up to 20% energy savings
- + TT300, TT350 and TG310 oil-free compressors for enhanced heat exchange and variable speed control
- + Flooded evaporator for optimum system efficiency
- + Modular V-frame coil design and large surface area of micro channel heat exchangers



*ETL: Energy Technology List www.eca.gov.uk



Screw



OptiChill™ (OPC) 500 - 1140kW
OptiChill™ FreeCool (OFC) 750 - 1330kW



Scroll



EcoChill™ 6 - 44kW cooling / 6 - 46kW heating

KEY SPECIFICATIONS:



ESEER up to 4.21

with OPC, for optimum operating efficiency



Up to 30% increase in system efficiency

with electronic expansion valves (option)



- + ETL listed* (all OPC models)
- + 52 models (OPC) and over 200 models (OFC)
- + Quiet and Extra Quiet ranges
- + Dual independent refrigeration circuits for resilience
- + Up to 95% free-cooling with OFC
- + 12.5°C increase in operational evaporating temperature range allowing supply water temperatures to be increased, thus raising the free-cooling threshold and giving enhanced compressor efficiency and reduced power input (OFC)
- + Intelligent head pressure control, optimises performance (OFC only)
- + Latest fan technology reduces sound and power input
- + 8 stages of cooling for more precise capacity match
- + Large surface area condensing coils
- + High efficiency shell and tube evaporator



OPTIONS:

EER: Energy Efficiency Ratio

ESEER: European Seasonal Energy Efficiency Ratio

COP: Coefficient of performance

KEY SPECIFICATIONS:



Heat pump or cooling only

ESEER up to 4.25

due to excellent part load efficiencies



Class A EER up to 3.38

- + 6 - 44kW nominal cooling capacity
- + 6 - 46kW nominal heating capacity
- + 11 models available
- + Quiet axial fans with fan speed control
- + Compact configuration: greater cooling per m²
- + Condensate drip tray (heat pump units only)

Options Include

- + Heat pump ideal for comfort applications
- + Full and flexible hydronics package available
- + Soft start to reduce transient starting peaks

Chillers



Scroll



LogiCool™ FreeCool 20kW / 40kW



Scroll



Ultima™ Compact (UCC) 30 - 450kW
Ultima™ Compact FreeCool 75 - 450kW

KEY SPECIFICATIONS:

HFC
R410A

Up to 95% free-cooling
per annum

%
DIGITAL

Over 50% saving in energy
compared with a conventional chiller

FREE
COOL

Compact footprint from 1.5m²
minimises space claim

OPTIONS

EC

- + ETL listed*
- + Variable capacity control for exact capacity match
- + Exceptional part load efficiencies
- + Direct-drive axial fan
- + Efficient plate evaporator with EEV refrigerant controls
- + Large surface area condensing coils maximise energy efficiency
- + Connects to direct rack cooling systems (individual or multi-rack)
- + Expandable, flexible solution as load increases
- + Modular design plus condensing coils and water connections at the rear, allow close side-by-side positioning
- + Reduced minimum system water volumes

KEY SPECIFICATIONS:

HFC
R407C

Up to 62% free-cooling
of UCFC DX performance

%

+ ETL listed*

+ 75 models (UCC) and 45 models (UCFC)

+ Standard, Quiet and Super Quiet variants

+ Single and dual circuit models (UCC 30 - 80kW);
dual circuit on UCFC and all larger UCC models

+ Modulating head pressure control

FREE
COOL

OPTIONS INCLUDE

- + Electronic expansion valves for up to 30% increase in system efficiency

OPTIONS



*ETL: Energy Technology List www.eca.gov.uk



Scroll



Ultima™ Remote Air Cooled** Ultima™ Water Cooled 75 - 450kW

"

Our target is to reduce building energy costs by 7% annually which we have achieved over the past two years. Airedale's free-cooling chillers are already contributing to 3% of this annual saving. We make the equipment work through a complete and positive partnership with Airedale, from design through to service and maintenance.

Paul Lovegrove,
General Affairs Assistant Manager, Epson

"

KEY SPECIFICATIONS:

Up to 30% increase in system efficiency with optional electronic expansion valves

- + ETL listed*
- + 75 - 450kW nominal cooling capacities
- + 45 models
- + Standard, Quiet and Extra Quiet variants
- + Dual independent refrigeration circuits
- + Compact unit footprint
- + High efficiency plate heat exchangers

**Pictured

EER: Energy Efficiency Ratio

ESEER: European Seasonal Energy
Efficiency Ratio



Data centres
Clean rooms
Offices
Retail outlets
Leisure environments
Process cooling



*ETL: Energy Technology List www.eca.gov.uk

Condensers Condensing Units



BluCube™

Heat pump (10 - 48kW) / Cooling only (13 - 40kW)



Air Cooled Condensers & Dry Coolers

CR 12 - 174kW (R410A), C/CS 11 - 105kW (R407C), DR 10 - 100kW

KEY SPECIFICATIONS:

HFC
R410A

Up to 30% increase in system efficiency

with remote electronic expansion valve (REEV); standard with digital scroll compressor, an option on fixed capacity models

AIR
DX

44% more cooling per m²

average compared with a conventional CU system

°C
HEAT PUMP

- + ETL listed* (cooling only models)
- + Integrates with industry standard air handling units
- + 2 case sizes; 24 models

DIGITAL

- + Operating envelope -20°C to +25°C in heating or -20°C to +48°C in cooling

OPTIONS:

DIGITAL

- + Two pipe system reducing installation time and cost

EC

- + Digital scroll compressor for 16 - 100% variable capacity (model dependent)

- + Modulating head pressure control for increased efficiency

- + Short-cased axial fan to overcome external static pressure when ductwork is required

- + Fits into a standard lift facilitating easy installation

OPTIONS INCLUDE

- + Compressor attenuation reducing compressor sound by up to 12dBA
- + Integrated condensate drip tray (heat pump models)

KEY SPECIFICATIONS:

HFC
R410A

Up to 70% more efficiency with EC fans

option on R410A models

AIR
DX

- + CR: 8 models (R410A)
- + C/CS: 10 models (R407C)

HFC
R407C

- + Dry coolers: 14 models
- + Small footprint, low profile for minimum space claim

OPTIONS:

EC

- + Floor-mounted
- + Horizontal or vertical unit design for flexibility
- + Coil guards
- + Low sound levels
- + Discharge and liquid shut-off valves



*ETL: Energy Technology List www.eca.gov.uk



Condensing Units (CU)

3 - 80kW



Ultima™ Compact Condensing Unit

30 - 450kW THR

KEY SPECIFICATIONS:



CU1 - CUS4

3 - 13kW total heat rejection



- + 8 models: Cooling only and heat pump variants
- + Reciprocating compressor
- + Wall mountable, freeing up floor space
- + Small footprint with slimline design
- + Head pressure control optimising efficiency



KEY SPECIFICATIONS:



CUS5 - 12

14 - 35kW total heat rejection



- + 5 models: Cooling only and heat pump variants
- + Floor mounted for external location



- + Low profile



KEY SPECIFICATIONS:



CUS15 - 30D

40 - 80kW total heat rejection



- + 7 models: Cooling only
- + Scroll compressors for reduced sound, higher efficiency and lower electrical starting currents



- + Floor-mounted for external locations
- + Small footprint

KEY SPECIFICATIONS:



Up to 30% increase in system efficiency

with remote electronic expansion valve (REEV) option



- + 75 models for configuration flexibility
- + Standard, Quiet and Super Quiet variants



- + Dual independent refrigeration circuit for resilience and reduced operating costs (single circuit option on 30 - 80kW)

OPTIONS:



THR: Total Heat of Rejection

Performance tested

And proven

Quality is assured by our on-site world class testing and production facilities and the application of the latest manufacturing techniques and continuous improvement.

Airedale's dedicated test facility is the only purpose-built one of its kind in the UK. Here all our product lines are performance tested for a global market. Accurate test data is produced anywhere from -5°C to +55°C in controlled ambient environments. The climate test chambers include a hemi-anechoic chamber for accurate measurement of sound data.

Load conditions are simulated from early development of a new product through to final assembly. Customers can witness-test products to verify duty and energy performance to ensure they will meet operational requirements.



“ **We have a positive, responsible partnership with Airedale in which we share knowledge**

It is only through Airedale's continued site involvement that we can fine tune the system to such an extent. We don't mind spending capital expenditure to recoup such significant energy savings as these.

Paul Lovegrove - General Affairs Assistant Manager, Epsom

”

“ **Energy efficiency was the crucial factor**

Airedale proved that its free-cooling chiller can save energy and is the right system for us. Anything that improves payback is of interest to the Society. We have also had good service from other Airedale products.

Steven Ward - Premises Engineer, Yorkshire Building Society

”

“ **EDF Energy is already seeing a PUE of 1.2**

I believe we are the first company in the world to install Airedale's advanced technology, the TurboChill™ FreeCool chiller. When the data centre is operating in free-cooling mode, the PUE has been measured at 1.2 and we expect that to reduce further as we install more equipment.

Bob Finn - Programme Manager, EDF Energy

”

“ **Iceland Frozen Foods (IFF) has realised savings of £1.5m to date**

The typical payback is between six and nine months per store, making Airedale Controls' solution extremely attractive operationally and financially. Its flexibility has enabled IFF to carry out a progressive implementation strategy, integrating existing Airedale equipment, as well as new and old systems from other OEMs.

Graham Ireland - Building Services Manager, IFF

”

Intelligent controls

Seamlessly managing your system

The control centre of each of our cooling systems is a sophisticated electronic microprocessor specially developed by Airedale. The intelligent microprocessor uses sensors which allow active components to interact. By integrating and sequencing components, the controller manages and optimises the system's performance, availability and power draw, giving the operator complete system control.

Fully-programmable via the control panel's user-friendly display, the microprocessor can be linked with all standard BMS protocols to:

-  Trigger alarm messages
-  Send alarm/service messages via email or SMS using an interface
-  Operate time scheduling
-  Allow adjustment of temperature setpoints

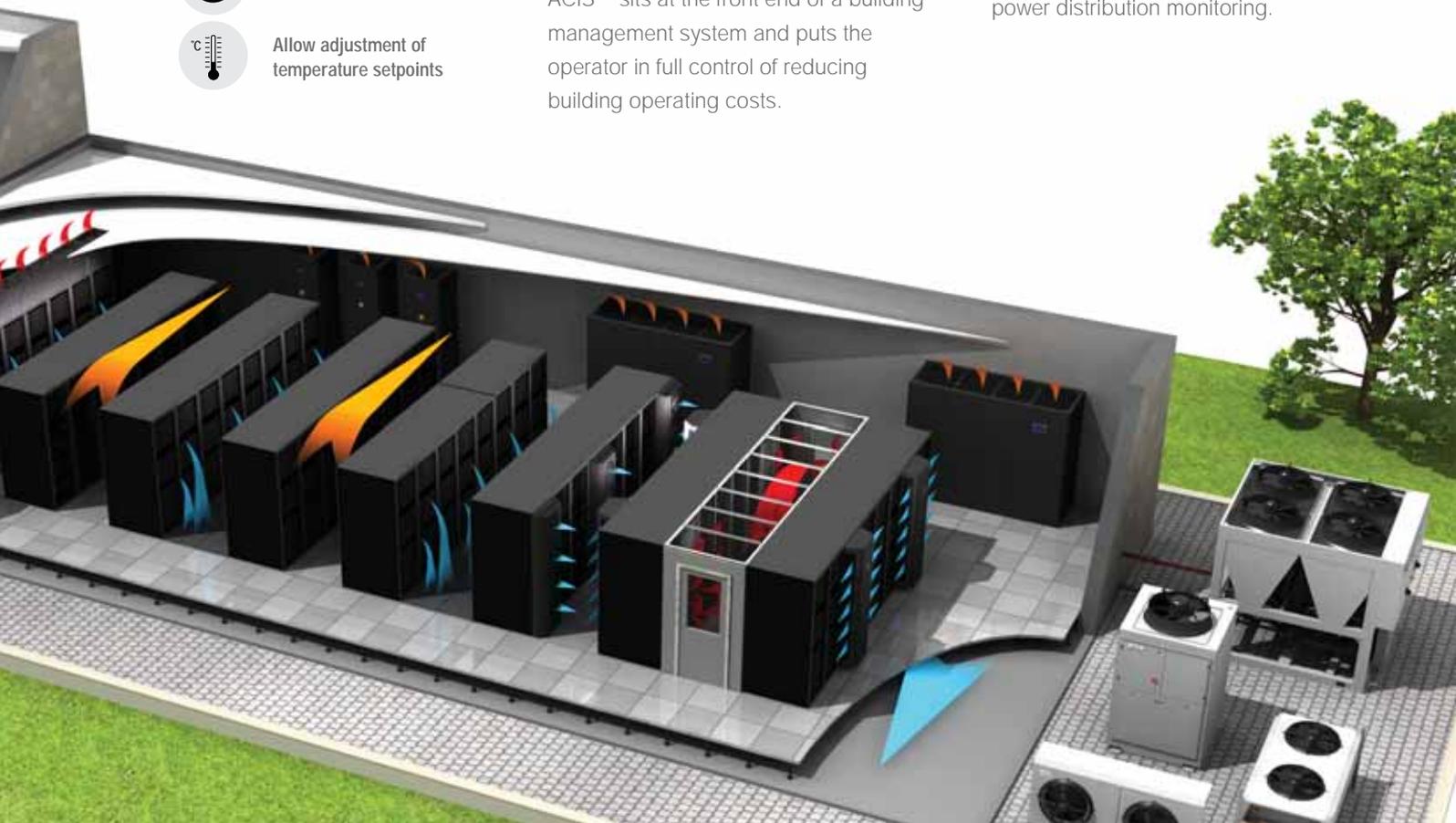


ACIS™

ACIS™ is a building management system developed by Airedale, which enables smart cooling and other building services, from any manufacturer, to be managed through a single, integrated solution across multiple sites and communication protocols.

ACIS™ sits at the front end of a building management system and puts the operator in full control of reducing building operating costs.

Through the click of a button on a PC, tablet or phone, intelligent information can be retrieved automatically allowing informed, data driven decisions to be made. With 24/7 access, ACIS™ provides an ideal solution for remote monitoring and maintenance, including live PUE, EER and COP calculations and power distribution monitoring.



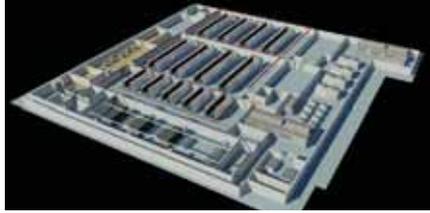
Tailor-made for you

Working in partnership

Customer focus is central to our core principles at Airedale. We will work closely with you to adapt our flexible systems to fit exactly to your specific cooling needs and energy requirements.

Communication is key to understanding your requirements so we ensure you are kept informed and actively involved every step of the way.

Our ability to handle complex projects worldwide and meet the toughest of deadlines ensures we always deliver quality assured products and service, no matter how challenging the task.



London Data Exchange

£5m colocation facility

4 x 280kW DeltaChill™ FreeCool chillers supplying chilled water to 10 x chilled water 110kW SmartCool™ precision air conditioning units, each providing under floor cold aisle delivery at a constant 22°C to contained aisles

Benefits:

- PUE less than 1.3
- Free-cooling for up to 95% of the year
- 13% less space claim
- N + 1 redundancy



The University of Leeds

HPC facility

3 x OnRak™ rear door heat exchangers each providing 28kW high density cooling

2 x 240kW Ultima™ Compact FreeCool chillers

Benefits:

- OnRak™ is ideal for high density HPC facilities
- Slots into existing cooling loop; expandable
- Eliminated need to build a new computer room
- Extremely compact 200mm profile
- Free-cooling for up to 95% of the year
- 35% savings in energy



National Gallery

6 x TurboChill™ chillers supplying chilled water to a primary circuit

The TurboChill™ replace existing R22 chillers with a bespoke, sequenced chiller solution, integrating new technologies; modern refrigerant and design criteria and increased control

Benefits:

- ESEER 5.87
- £16,000 energy saving in first year
- Enhanced reliability and less maintenance
- Matches existing rooftop space and connections



Victoria & Albert Museum

Computer room

4 x 40kW EasiCool™ downflow precision air conditioning units

Each EasiCool™ provides under-floor cold aisle delivery of 120kW cooling and reliable environmental control of the data centre space.

Benefits:

- N+1 redundancy
- Scalable and future proof

Total support

Whenever you need it

At Airedale, we don't just manufacture and supply cooling and refrigeration products; we also provide a broad range of supporting services to ensure our customers receive the best possible aftersales care.

With more than 40 years' experience in business critical cooling, investing in an Airedale cooling or refrigeration solution means that you can benefit from our advice, expertise and technical support too. From design and selection, through to commissioning and beyond, we make sure your system reduces your total cost of ownership, whilst providing maximum availability and longevity.

Service plans Maximising your system's effectiveness 24/7



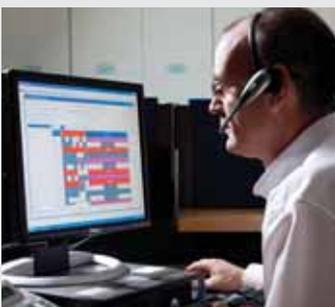
An Airedale service plan provides a planned, preventative maintenance package to sustain the optimum efficiency of your system, enabling the user to see real savings in energy costs and reduced carbon emissions.

With Airedale, you can rest assured that help is never far away. Our 24/7 emergency helpline and call out service is available 365 days of the year, ensuring that we are always on hand to provide expert advice and immediate help, day or night.

A guaranteed emergency response time means that a qualified Airedale engineer will be with you in no time, therefore maximising your system's uptime. Service plans also ensure F Gas compliance and incorporate a full parts and labour warranty for the first 12 months.

For more information visit www.airedale.com

* For customers outside the UK, our international distributors trained by Airedale would be pleased to offer service on Airedale units



**Talk directly with
an experienced
engineer**

Find out how we design our systems to reduce your whole life costs. Our highly experienced engineers are adept at tailoring our systems to suit your requirements.

+44 (0)113 239 1000



**Have complete
control of your site**

Customers with critical sites can benefit from our remote monitoring facility. Aftersales services include chiller sequencing, network setup and integration as well as a live demonstration and training centre at our head office.



**24/7 support;
maintenance and
spares**

Immediate help on hand to keep your critical cooling system operational. Realise the full potential of your system; improve its longevity and efficiency and be F Gas compliant. Avoid downtime with our fast, efficient spares service.



**Develop
your skills**

Learn more about your cooling system by attending an air conditioning and refrigeration course in our purpose-built training school. Train on high-tech cooling systems and fully operational rigs in our dedicated workshops. Industry recognised courses also available. Email training@airedale.com for further details.

Distributed by:

