

# Condensing Units



## > Condensing Unit Range

Incorporating

- > Close Control Applications
- > Comfort Cooling Applications

[www.airedale.com](http://www.airedale.com)

# Condensing Units

Airedale International Overview

## Airedale

Airedale designs and manufactures a complete range of air conditioning products for a global market and is part of the Modine group of companies.

Modine Manufacturing Company, based in Wisconsin, USA, has been a global leader in thermal management solutions for 90 years. Modine designs, tests and manufactures heat transfer products for a wide range of applications and markets. The company employs 8,200 people worldwide at 35 facilities located in North America, Europe and Asia.

## Industry Leader

Airedale was founded in 1974 and has grown to become an industry leader in the research, design and manufacture of an extensive range of chillers, close control and comfort products. Airedale's 25,000 m<sup>2</sup> production facility and £2 million test centre in Leeds, UK, is regarded as a centre of excellence for air conditioning.

Innovative product development is key to Airedale's success, setting industry standards and giving Airedale the edge when it comes to manufacturing expertise and addressing industry, economic and environmental challenges.

Fine-tuning products to meet the demands of a wide range of market and customer needs has ensured that Airedale remains a first choice for air conditioning in telecommunications, banking and commerce and in the leisure, retail, defence, education and industrial sectors.

## Global Manufacturing

Airedale has manufacturing facilities in South Africa and China and employs 450 worldwide. Its products are distributed to more than fifty countries through a network of well-established business partners and distributors.

## R&D promotes Energy Efficiency

Airedale products are developed with skill and care to maximise their energy efficiency. 'Green' issues such as carbon reduction technology and leak detection now play a major role in all Airedale research and development programmes. Airedale products are assembled using the very best materials and most efficient components available, and are extensively tested before despatch.

## State of the Art Factory and Test Facility

Delivering air conditioning solutions to a wide variety of discerning customers with diverse requirements, demands the highest levels of investment in manufacturing technology, systems and skilled engineers. Airedale's UK facility and cutting-edge test centre feature the very best facilities. Designed and built to exceed stringent international standards, the test centre is capable of testing a complete range of air conditioning equipment for a global market. Cooling and heating capacities range from 2kW to 120kW and chillers up to 1MW, the climate temperature being fully controllable anywhere from -5°C to +55°C.



## Airedale Service

Airedale Service is a complete air conditioning service solution provider that has invested and expanded to encompass the following strategic services:

- > Individually tailored Service and Maintenance contracts
- > Emergency breakdown repairs
- > Controls upgrades on both new and existing equipment. Existing mechanically sound equipment can be upgraded to the very latest in controls technology
- > Refrigerant conversion to ensure compliance with the very latest environmental regulations
- > AsNew Refurbishment. If equipment cannot be replaced due to space restrictions, we can completely modify the unit on site
- > Energy savings through operational optimisation. Our experienced engineers will recommend alterations to unit set-up that will achieve the required conditions whilst remaining focused on reducing running costs

Airedale Service has now built up an extensive customer base throughout the UK, comprising many of the country's largest blue-chip PLCs as well as independent companies and in a wide range of sectors.

As would be expected from one of the leading manufacturers within the industry, Airedale's regional engineers are highly experienced and trained to exacting professional standards. This ensures a rapid response, with 24/7 emergency helpline technical support, underpinned by the continuity of service that all our customers have come to regard as the norm from such a respected organisation as Airedale International. Fully certified according to the very latest industry guidelines, our engineers ensure that work is carried out in a safe and professional manner.

Please contact Airedale Service on 0113 239 1000 for a full information pack



## AireTronix Controls Technology

Obtaining maximum performance and energy efficiency requires effective controls technology. Airedale's AireTronix controls solutions ensure that systems operators get the very best return on their investment. Airedale specialists design, install and commission sophisticated controls solutions to ensure that every installation delivers the maximum benefit available and AireTronix can be integrated into a wide range of control protocols. Remote monitoring enables engineers to supervise the operation of many components, adjust set points and amend operational parameters without the need to arrange site visits.

A large number of Airedale units are equipped with the very latest AireTronix microprocessor technology. These fully programmable controllers are specifically developed for use with Airedale air conditioning systems, offering powerful analogue and digital control to meet a wide range of monitoring and control features.

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# Condensing Units

Condensing Unit Range



- > Close Control Applications
- > Comfort Cooling Applications

## Condensing Units



### Condensing Units CU1 - CUS4

- > 2.8 - 13kW nominal THR capacities
- > 8 models
- > Small footprint with slimline design
- > Wall mountable
- > Cooling only and heat pump variants
- > Mains isolator and head pressure control as standard



### Condensing Units CUS / CUSH5 - 12

- > 14 - 35kW nominal THR capacities
- > 5 models
- > Cooling only and heat pump variants
- > Floor mounted
- > Heat pump with heating capacities ranging from 14- 23kW
- > Scroll compressors offering lower noise, reduced vibration and lower electrical starting currents
- > Low profile



### Condensing Units CUS15 - 60D

- > 40 - 161kW nominal THR capacities
- > 7 models
- > Small footprint
- > Low noise levels
- > Cooling only
- > Floor mounted for external locations
- > Accessories offered for each individual application



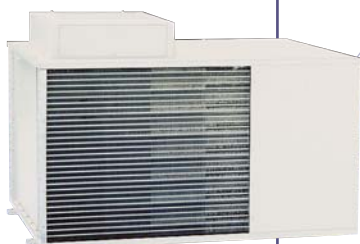
## Ultima Compact Condensing Unit

- > 30 – 450kW nominal THR capacities
- > 75 models
- > Standard, Quiet and Super Quiet variants
- > Advanced AireTronix controls technology
- > Multiple scroll-compressors
- > Dual independent refrigeration circuit (single option on UCCU30-80)



## Horizontal Condensing Units

- > 54 - 80kW nominal THR capacities
- > 3 models (double circuit)
- > Small footprint
- > Floor mounted
- > Low noise levels
- > Ideal for restricted space applications



## Centrifugal Fan Condensing Units

- > 14 - 30kW nominal THR capacities
- > 4 models
- > Small footprint
- > Designed to be located within a plant room
- > Low noise levels
- > Factory piped, ducted air option

# Condensing Units

## Technical Information

Condensing Units CU1 - CUS4							
Model No.	Nominal Cooling capacity (kW) <sup>1</sup>	Nominal Input Power (kW) <sup>2</sup>	EER	Global Sound Pressure @ 10m dB(A) <sup>3</sup>	Dimensions (H x W x L) mm	Operating Weight (kg)	Rec Mains Fuse (A)
CUH1	3.5	1.1	3.13	33	845 x 940 x 395	51.0	16
CUH1.5	4.8	1.6	3.03	33	845 x 940 x 395	59.0	16
CUHS2	5.2	1.3	3.94	42	845 x 940 x 395	60.2	16
CUHS2.5S	7.7	2.1	3.67	42	845 x 940 x 395	75.7	20
CUHS2.5T	7.7	2.1	3.69	42	845 x 940 x 395	75.7	16
CUHS3	8.9	2.6	3.42	42	1130 x 940 x 395	88.1	16
CUHS3.5	11.0	3.0	3.78	45	1130 x 940 x 395	101.6	16
CUHS4	13.3	3.2	4.14	45	1130 x 940 x 395	104.1	20

Condensing Units CUS / CUSH5 – 12							
Model No.	Nominal Cooling capacity (kW) <sup>1</sup>	Nominal Input Power (kW) <sup>2</sup>	EER	Global Sound Pressure @ 10m dB(A) <sup>3</sup>	Dimensions (H x W x L) mm	Operating Weight (kg)	Rec Mains Fuse (A)
CUS5	14.5	3.5	4.13	51	700 x 1150 x 865	141.0	20
CUS6	18.9	5.1	3.69	51	700 x 1150 x 865	144.0	25
CUS7.5	20.2	6.0	3.37	53	700 x 1150 x 865	208.5	32
CUS10	30.7	6.7	4.56	53	955 x 1705 x 865	261.0	40
CUS12	37.5	9.8	3.82	53	955 x 1705 x 865	266.0	40
CUHS5	13.9	3.4	4.12	51	700 x 1150 x 865	168.0	20
CUHS6	18.1	4.9	3.69	51	700 x 1150 x 865	171.0	25
CUHS7.5	19.4	5.8	3.37	53	700 x 1375 x 995	222.5	32
CUHS10	29.5	6.5	4.55	53	955 x 1705 x 865	272.0	40
CUHS12	36.1	9.4	3.82	53	955 x 1705 x 865	277.0	40

Condensing Units CUS15 - 60D							
Model No.	Nominal Cooling capacity (kW) <sup>1</sup>	Nominal Input Power (kW) <sup>2</sup>	EER	Global Sound Pressure @ 10m dB(A) <sup>3</sup>	Dimensions (H x W x L) mm	Operating Weight (kg)	Rec Mains Fuse (A)
CUS15D	43.5	12.4	3.52	56	1440 x 2300 x 1100	450	50
CUS 20D	56.4	15.9	3.56	57	1440 x 2300 x 1100	550	50
CUS 25D	74.7	21.4	3.49	58	1440 x 2300 x 1100	560	80
CUS 30D	84.9	26.3	3.23	58	1440 x 2300 x 1100	705	80
CUS 40D	109.1	31.5	3.47	73	1695 x 2440 x 1800	993	100
CUS 50D	137.5	40.8	3.37	75	1695 x 2440 x 1800	1139	100
CUS 60D	169.5	48.1	3.52	77	1695 x 2440 x 1800	1381	125

Horizontal Condensing Units							
Model No.	Nominal Cooling capacity (kW) <sup>1</sup>	Nominal Input Power (kW) <sup>2</sup>	EER	Global Sound Pressure @ 10m dB(A) <sup>3</sup>	Dimensions (H x W x L) mm	Operating Weight (kg)	Rec Mains Fuse (A)
HCU20D	62.8	18.2	3.45	48	1995 x 2430 x 805	576	50
HCU25D	73.3	23.2	3.16	48	1995 x 2430 x 805	578	50
HCU30D	86.0	26.0	3.31	48	1995 x 2430 x 805	710	80

Centrifugal Fan Condensing Units							
Model No.	Nominal Cooling capacity (kW) <sup>1</sup>	Nominal Input Power (kW) <sup>2</sup>	EER	Global Sound Pressure @ 10m dB(A) <sup>3</sup>	Dimensions (H x W x L) mm	Operating Weight (kg)	Rec Mains Fuse (A)
CFCUS5	14.5	3.5	4.13	83	715 x 1240 x 1015	241	25
CFCUS6	19.0	5.1	3.75	85	715 x 1240 x 1015	248	32
CFCUS7.5	20.2	6.0	3.37	87	985 x 1525 x 1150	325	35
CFCUS10	28.8	7.2	4.02	89	985 x 1525 x 1150	330	40

- At 5°C dew point evaporating temperature, 30°C ambient
- Input kW refers to the compressor input power only
- Above noise levels are with the condenser fan running at full speed. Under normal operating conditions (ambients up to 35°C) noise levels will be reduced by 3 - 4 dB.



### UCCU Standard

Model No.	Nom. Cooling Capacity (kW) <sup>1</sup>	Nominal Input Power (kW) <sup>1</sup>	EER <sup>2</sup>	Global Sound Pressure @ 10m dB(A)	Dimensions (H x W x L)mm	Operating Weight (kg)	Rec Mains Fuse (A) <sup>1</sup>
UCCU30-80 Only available in Quiet and Super Quiet Models							
UCCU75D-2/1	81.9	22.1	3.70	49	2000 x 1300 x 2800	940	63
UCCU100D-2/1	104.7	30.7	3.41	49	2000 x 1300 x 2800	970	80
UCCU110D-4/2	112.0	27.2	4.11	56	2100 x 1850 x 2415	1320	100
UCCU125D-3/1	133.7	37.6	3.56	52	2000 x 1300 x 3650	1210	125
UCCU130D-4/2	135.8	36.6	3.71	56	2100 x 1850 x 2415	1370	125
UCCU150D-3/1	157.7	46.9	3.37	52	2000 x 1300 x 3650	1250	125
UCCU160D-4/2	158.2	46.6	3.39	56	2100 x 1850 x 2415	1410	125
UCCU180D-6/2	195.2	51.6	3.79	58	2100 x 1850 x 3220	1810	160
UCCU200D-6/2	215.9	59.8	3.61	58	2100 x 1850 x 3220	1810	160
UCCU225D-6/2	243.8	69.1	3.53	58	2100 x 1850 x 3220	1930	200
UCCU250D-6/2	264.0	78.0	3.39	58	2100 x 1850 x 3220	1930	200
UCCU275D-8/2	298.4	93.4	3.19	57	2180 x 2200 x 4700	2410	200
UCCU300D-8/2	324.8	104.8	3.10	57	2180 x 2200 x 4700	2530	250
UCCU330D-10/2	365.7	104.9	3.48	58	2180 x 2200 x 5550	2820	250
UCCU360D-10/2	396.3	118.0	3.36	58	2180 x 2200 x 5550	2880	315
UCCU400D-12/2	448.8	130.5	3.44	59	2180 x 2200 x 6400	3240	315
UCCU450D-12/2	490.0	149.3	3.28	59	2180 x 2200 x 6400	3340	355

### UCCU Quiet / Super Quiet

Model No.		Nom. Cooling Capacity (kW) <sup>1</sup>		Nominal Input Power (kW) <sup>1</sup>		EER <sup>2</sup>		Global Sound Pressure @ 10m dB(A)		Dimensions (H x W x L)mm	Operating Weight (kg)		Rec Mains Fuse (A) <sup>1</sup>
Q	SQ	Q	SQ	Q	SQ	Q	SQ	Q	SQ	Q / SQ	Q	SQ	Q / SQ
UCCU30(S/D)Q-1/1	SQ-1/1	33.9	34.0	10.7	10.7	3.17	3.18	46	41	1450 x 1310 x 1650	470	480	32
UCCU40(S/D)Q-1/1	SQ-1/1	39.1	39.2	12.1	12.0	3.24	3.25	46	41	1450 x 1310 x 1650	550	570	40
UCCU50(S/D)Q-2/1	SQ-2/1	52.1	53.0	15.6	15.2	3.33	3.50	48	42	1450 x 1310 x 2500	690	700	50
UCCU60(S/D)Q-2/1	SQ-2/1	61.1	60.1	17.9	18.4	3.41	3.27	48	42	1450 x 1310 x 2500	740	750	50
UCCU70(S/D)Q-2/1	SQ-2/1	69.2	69.4	20.6	20.5	3.36	3.38	48	42	1450 x 1310 x 2500	760	770	63
UCCU75DQ-2/1	SQ-3/1	79.9	81.9	23.1	22.2	3.46	3.70	45	42	2000 x 1300 x 2800	940	1150	63
UCCU80(S/D)Q-2/1	SQ-2/1	76.8	78.3	24.6	23.9	3.12	3.27	48	43	1450 x 1310 x 2500	830	870	80
UCCU100DQ-2/1	SQ-3/1	103.1	104.6	31.4	30.7	3.28	3.40	45	43	2000 x 1300 x 2800	1010	1180	80
UCCU110DQ-4/2	SQ-4/2	109.4	106.0	28.4	30.0	3.85	3.53	51	45	2100 x 1850 x 2415	1280	1300	100
UCCU125DQ-3/1	SQ-4/1	130.1	130.9	39.3	38.9	3.31	3.37	48	45	2000 x 1300 x 3650	1210	1480	125
UCCU130DQ-4/2	SQ-6/2	132.0	137.1	38.4	35.9	3.44	3.82	51	47	2100 x 1850 x 2415	1320	1600	125
UCCU150DQ-4/1	SQ-4/1	159.8	154.1	45.8	48.6	3.49	3.17	49	46	2000 x 1300 x 4500	1510	1620	125
UCCU160DQ-6/2	SQ-6/2	164.9	159.9	43.4	45.8	3.80	3.49	53	47	2100 x 1850 x 3220	1630	1650	125
UCCU180DQ-6/2	SQ-6/2	190.1	186.3	53.9	55.7	3.53	3.35	53	48	2100 x 1850 x 3220	1740	1760	160
UCCU200DQ-6/2	SQ-8/2	212.9	213.9	61.3	60.8	3.47	3.52	54	49	2100 x 1850 x 3220	1740	2030	160
UCCU225DQ-8/2	SQ-8/2	246.0	241.5	68.0	70.3	3.62	3.44	55	50	2100 x 1850 x 4025	2120	2140	200
UCCU250DQ-8/2	SQ-8/2	266.5	261.3	76.6	79.4	3.48	3.29	55	50	2100 x 1850 x 4025	2120	2140	200
UCCU275DQ-10/2	SQ-12/2	299.7	299.9	93.1	93.1	3.22	3.22	54	51	2180 x 2200 x 5550	2700	3010	200
UCCU300DQ-10/2	SQ-12/2	326.4	326.7	104.4	104.3	3.13	3.13	54	51	2180 x 2200 x 5550	2820	3120	250
UCCU330DQ-12/2	SQ-14/2	364.5	363.1	105.5	106.2	3.45	3.42	54	51	2180 x 2200 x 6400	3130	3430	250
UCCU360DQ-12/2	SQ-14/2	395.1	393.5	118.6	119.5	3.33	3.29	55	51	2180 x 2200 x 6400	3190	3480	315
UCCU400DQ-14/2	SQ-16/2	449.8	442.0	130.0	133.8	3.46	3.30	54	52	2180 x 2200 x 7250	3530	4030	315
UCCU450DQ-14/2	SQ-16/2	491.0	481.0	148.8	153.4	3.30	3.14	54	52	2180 x 2200 x 7250	3640	4130	355

<sup>1</sup> At 5°C dew point evaporating temperature, 30°C ambient

<sup>2</sup> EER = Cooling duty ÷ compressor input power

Notations used apply to Standard, Quiet and Super Quiet variants

- > For the latest information on our products please visit : [www.airedale.com](http://www.airedale.com)
- > Please refer to the technical manuals for more detailed information
- > Airedale participates in the Eurovent Certification programme as a founder member. The performance data of certified products is independently verified and identified within the relevant sales literature

Your nearest Airedale distributor is:



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A **MODINE** Company

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ENG-CU-RAN-07/06