

Cool Britannia

Beat the heat at home this summer with one of our Best Buy air conditioners

The weather is a very British preoccupation and as the mercury rises, conversations will turn to the best ways to keep cool. But for some, keeping cool isn't a luxury – it's a necessity.

Babies sleep better in rooms no warmer than 20°C, and older people need to take care when the heat rises. As people age their bodies don't react to the heat as quickly as a younger person's – this puts them more at risk of health problems as it gets hotter. A cooling air conditioner would be a solution.

There are three main types of air conditioner:

■ **Mono blocks** Mono blocks (also known as

single units) are fairly cheap, but they didn't do as well as split models in our test. Monos are mostly portable and can be moved from room to room, providing coolness where you need it. They have a hose that needs to be vented outside – poke it through a window or drill a hole in the wall.

There are also fixed versions that are about the size of a fat radiator. They are hung up and vent through a hole in the wall.

■ **Split units** Split-unit air conditioners are becoming more popular in homes where one room gets unbearably hot.

These models are made up of two separate units connected by a pipe

containing refrigerant. The slim internal cooling unit is hung inside, while the noisy fan is outside.

■ **Central air conditioning** These control the temperature in your entire home from one dial. As there are very few on the market, we haven't tested them for this report.

Chilling cost

Air conditioners can have a significant effect on your electricity bill (see 'Cost of cool', opposite), as well as on the environment – go to www.which.co.uk/airconditioners for more information. But if you or family members are affected by the heat, our Best Buys are efficient and great at keeping you cool.



↑ SPLIT MODEL

91% LG Art Cool A09AW1 £880

The LG Art Cool is brilliant at cooling quickly and quietly. It dehumidifies well and has a heater function for year-round use. A 'chaos swing' setting mimics a natural breeze by moving the louvres (slats) so the airflow is directed up and down. The sleep mode allows you to set a time for the air conditioner to switch off, and it also slows the fan speed – this means it runs quieter with less screen illumination. Two further timer settings set exact on and off times when it's not in sleep mode. This wall-mounted model needs to be professionally installed by a specialist – contact LG for details.

WE LIKE This model is disguised as a framed picture. You can personalise it by sliding in your own photo or print.

Available Online and independents Number of fan speeds 4 Cost per 3 hours 26p Heater Yes

WHICH?
BEST
BUY

For some, keeping cool isn't a luxury – it's a necessity

Buying advice Essential air-conditioning questions answered

Q How can I cool my home fast?

A A mono model is fairly cheap and doesn't require you to drill a hole in the wall, as the hose can be fed through an open window. However, this

allows cooled air to leak out and warm air to creep back in. It also compromises your security.

They are quite noisy – most are as loud as a fridge on its cooling cycle – but you can cool any room you want.

Some models come with a window gap accessory that minimises the amount you need to open your window. They work best with sash or sliding windows.

Q What if I don't want to leave a window open?

A You have two options: both require drilling a hole into the outside wall.

■ A fixed split unit is wall mounted and takes up much less space than a single mobile model. One part of the unit is in your room; the other, noisy part is on the outside wall.

■ You can vent all mono blocks through a hole in the wall.

There's no unit to fit on the outside wall – which makes them easier to install – and you can plug the hole in winter. The hose concertinas: make sure it's less than 1.5m from the hole, as warm air pools in a long hose and radiates heat back into the room.

Fixed models, like the Unicos (14 and 18), take up less room.

Q What will I need to fit a split unit?

A If you're installing on the first floor or higher, use a ladder or scaffolding. An SDS drill, diamond bit corer and extension bar will enable you to bore a hole through the wall. You can rent these from a hire shop for about £30 to £40 an hour.

Alternatively, use a lump hammer and brick bolster to remove a square section of brick. Fill in the resulting gaps with pieces of brick and mortar.

Check your model comes with a three-pin plug – if it needs to be wired in you will have to consult an electrician. And if personally bashing holes in your home doesn't sound ideal, get an expert in.

Q Is a timer useful?

A Yes – you can save electricity by setting it to switch off while you are asleep. If your model doesn't have a timer, use a separate plug timer between the air conditioner and the plug socket.



**2 SPLIT MODEL****87% Amcor
HW-12EZ £600**

The fixed, wall-hung Amcor is great at cooling and dehumidifying. This high-end model has lots of modes that you can set to your own personal taste. These include a sleep mode that helps you to nod off at night – lights dim on the main unit and the fan slows to reduce noise. The fan can be activated to swing up and down as well as from left to right, allowing you to direct the cooling breeze in different directions. The airflow strength is also adjustable. And condensed water from the dehumidifier is automatically piped outside, so you don't have to drain it away.

**WHICH?
BEST
BUY**

WATCH OUT It can be used as a heater, but only if the outside temperature is above 10°C.

Available Online and independents Number of fan speeds 4 Cost per 3 hours 27p Heater Yes

The high-end Amcor has lots of modes that you can set to your own personal taste

**7 MONO MODEL****83% DeLonghi
Pinguino PAC
W 130A £690**

This is the only mobile air conditioner we tested that you add water to – this enhances cooling ability and reduces noise. However, water tanks need regular filling and have to be descaled when put away for winter. You can fill the tank directly from the tap by using either the handy extendable hose or the jug provided. It is highly effective at cooling and dehumidifying. As the model is quite heavy, you will want to confine it to one floor rather than trying to carry it up and down stairs.

**WHICH?
BEST
BUY**

WORTH KNOWING If you don't add water, this model isn't as efficient.

Available Online and independents Number of fan speeds 4 Window accessory Yes Cost per 3 hours 27p Heater No

**8 MONO MODEL****75% Issimo
9 HE £549**

The Issimo is very mobile. It's light enough to carry up and down stairs and has a good, grippable handle behind the control panel. A large rear wheel helps with manoeuvrability and a retractable fabric lead makes it easy to pull along on flat surfaces – this makes the small and squat Issimo look like a dog on a lead when you tow it between rooms. This model has many different functions, including dehumidification, varying fan speeds and night modes that reduce noise. You can also set the start and stop times.

**WHICH?
BEST
BUY**

WORTH KNOWING The £450 Best Buy 8 HE version scored 81% in a previous test (see www.which.co.uk/airconditioners) and is still available.

Available Online and independents Number of fan speeds 4 Window accessory Yes Cost per 3 hours 30p Heater No

How we test

It took more than 40 days to assess all the units

We check the energy consumption of each model by running it on the maximum cooling and airflow speed for one hour in a special climate-controlled 35°C test room.

Noise

We rate how noisy the machines are. This can range from a gentle hum to a great gurgling that makes the unit sound as if it is

about to take off. We also rate the airflow strength.

Big easy

Finally, we check how easy each model is to use, examining ease of programming and carrying out end-of-season maintenance. Filters must be cleaned regularly and, on portable models, the unit must be drained before it's put away for winter.

**COST OF COOL****The scoop on energy ratings**

The average air conditioner uses enough energy in a day to power a fridge for a week. Every model is rated A to D for energy efficiency by the manufacturer, except the DeLonghi (7). But the current system allows a 12 to 15 per cent margin of accuracy. We see this as misleading.

Ignore the energy ratings and look at our costs in the table, p66. The worst offender is the Wickes (12). It costs 37p to run for three hours – almost double the 19p cost of the Prem-i-air (3). Fans cost about 1p a day to run and use a fraction of the power of air conditioners, but they only move the air around – they don't cool it.

How many cooling ice-cream scoops could you eat instead of running an air conditioner or fan for three hours a day?



Costs based on Wall's ice-cream from Tesco, £1.60 for a two-litre tub



9 MONO MODEL

74% Wickes
156311 £169

This cheap but basic model is exclusive to Wickes, and it cools fast and dehumidifies really well. There is no remote control or night mode, but it does have a countdown timer which can be set to between one and 12 hours, so rooms can be cooled before you need them. The slats have to be moved manually to change the direction of the fairly moderate airflow. **WORTH KNOWING** The bung on the water pipe is tricky to release.

Available Wickes (instore only) Number of fan speeds 3 Window accessory Yes Cost per 3 hours 31p Heater No

EXCEPTIONAL
VALUE which?

WHICH?
BEST
BUY



10 MONO MODEL

71% DeLonghi
NF 170 £200

This is the cheapest DeLonghi we tested, and it can quickly cool and dehumidify. It has no night mode, but you can set its delay timer to automatically turn off to avoid wasting energy while you sleep. Three fan speeds can be used separately from the air conditioner to freshen up the room, and it has a dehumidification setting. **WATCH OUT** As this is our noisiest Best Buy, you may want to avoid installing it in a bedroom.

Available Online and independents Number of fan speeds 3 Window accessory Yes Cost per 3 hours 26p Heater No

WHICH?
BEST
BUY



Facts & scores

Extra titbits uncovered in our tests

More money

At £1,200, the Unico 8.5 (14) is the most expensive machine we tested. For your money, you get a fixed mono model that automatically drains condensed water.

Free flow

No fiddly water pipes here – the Draper (26) is the easiest to drain as it has a removable water tank. Go to www.which.co.uk/airconditioners to find out more about it. This Draper model is about to be discontinued, but if you do have your heart set on it, rest assured that stocks should be in the shops until the early summer.

OUR RESEARCH

When selecting products to test, we consult manufacturers, market intelligence reports and industry experts, then check availability on the high street and online. Tested models include top sellers from the most popular brands, products with innovative features and models from some lesser-known brands.

MODEL

SPLIT MODELS

- 1 LG Art Cool A09AW1^a
- 2 AMCOR HW-12EZ^a
- 3 PREM-I-AIR PMSF09^a
- 4 AIRFORCE 3545379^a (B&Q^b)
- 5 CHALLENGE 4140083 (Argos^b)
- 6 PREM-I-AIR ACS 16 E

MONO MODELS

- 7 DELONGHI Pinguino PAC W 130A
- 8 ISSIMO 9 HE
- 9 WICKES 156311
- 10 DELONGHI NF 170
- 11 AIRFORCE 5110193
- 12 WICKES 156415
- 13 HOMEBASE 614151
- 14 UNICO 8.5 HP HE UK^a
- 15 B&Q 5087969
- 16 DELONGHI Pinguino PAC C110
- 17 PROLINE NW 70 (Comet^b)
- 18 UNICO Easy HE^a
- 19 HOMEBASE 619615
- 20 PROLINE CL 220 (Comet^b)
- 21 DELONGHI Pinguino PAC L41 AH
- 22 ELECTROLUX EXP09CS1WI
- 23 PREM-I-AIR TC-N9KM
- 24 PROLINE SAC 100 E (Comet^b)
- 25 TESCO AMP 10KM-410
- 26 DRAPER AC 9000

^a Fixed model ^b Available exclusively from

Which should you choose?

Best portable

HOMEBASE 614151 £200 This model (13) is the lightest on test at 23kg. It has good grippable handles and a long 250cm cable.

Best for a good night's sleep

LG ART COOL £880 The noisy part of this split, wall-hung model (1) goes on the external wall. The internal part gently hums.

Most energy efficient

PREM-I-AIR £605 (3) It costs about 6p an hour to run.



Contacts

Airforce (See B&Q)

Ambcor 020 8232 6370
www.ambcorgroup.com

Argos 0845 640 2020
www.argos.co.uk

B&Q 0845 609 6688
www.diy.com

Challenge (See Argos)

Comet 0870 542 5425
www.comet.co.uk

DeLonghi 0845 600 6845
www.delonghi.co.uk

Draper 023 8049 4333
www.draper.co.uk

EHS International
0870 744 0161
www.ehs-intl.co.uk

Electrolux 0870 595 0950
www.electrolux.co.uk

Homebase 0845 077 8888
www.homebase.co.uk

Issimo (See Rapid Climate Control)

LG 0870 873 5454
www.lge.com

Prem-i-air (See EHS International)

Proline (See Comet)

Rapid Climate Control
0800 174 1871
www.rapidclimatecontrol.com

Tesco 0845 600 4411
www.tesco.com

Unico (See Rapid Climate Control)

Wickes 0500 300328
www.wickes.co.uk

TABLE NOTES

The more stars the better.

Specification

Price For Best Buys we give the cheapest widely available price as we went to press. If we couldn't find them at major high-street retailers we give the most common online price. Prices for other models are a

guide to what you should expect to pay. Go to www.which.co.uk/airconditioners for the most up-to-date prices. **Timer range** Eight-hour timers count down to off only. Twelve-hour ones count down to on and off. Twenty-four hour timers can be set to switch on and off at set times. **Size** For internal units only, not including

SPECIFICATION									WHICH? TEST PERFORMANCE						SCORE %
PRICE (£)	TIMER RANGE (hrs)	SIZE (cm) (hxxwxd)	HOSE LENGTH (cm)	TOTAL WEIGHT (kg)	REMOTE CONTROL	FIXED OR MOBILE	DEHUMIDIFIER		COST PER DAY (p)	AIRFLOW STRENGTH	COOLING	DEHUMIDIFICATION	NOISE	EASE OF USE	
880	24	60x60x15	n/a	49	✓	F	✓		26	★★★★	★★★★★	★★★★★	★★★★★	★★★★	91
600	24	27.5x80x22	n/a	49	✓	F	✓		27	★★	★★★★★	★★★★★	★★★★★	★★★★★	87
605	24	75x35.5x58.5	n/a	45	✓	F	✓		19	★★	★★★★★	★★★★★	★★★★★	★★★★★	82
699	24	29x100x17	n/a	56	✓	F	✓		27	★★	★★★★★	★★★★★	★★★★★	★★★★★	81
449	8	75x39.5x44	270 ^c	40		M	✓		26	★★★★	★★★★★	★★★★★	★★	★★★★	69
729	24	75x35.5x58.5	270 ^c	44	✓	M			34	★★★★	★★★★★	★★★★★	★★	★★★★	65
690	24	44.5x54x92	26.5-102	50	✓	M	✓		27	★★	★★★★★	★★★★★	★★★★	★★★★★	83
549	24	51x52.5x56	36-150	34	✓	M	✓		30	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	75
169	12	79x44x39	32-140	29		M	✓		31	★★★★	★★★★★	★★★★★	★★★★	★★★★★	74
200	12	84.5x47x33	30-125	33	✓	M	✓		26	★★	★★★★★	★★★★★	★★	★★★★★	71
279	24	92.5x48x43	36-150	38	✓	M	✓		36	★★	★★★★★	★★★★★	★★	★★★★★	70
249	24	86x49x37.5	32-140	37	✓	M	✓		37	★★	★★★★★	★★★★★	★★	★★★★★	69
200	12	75.5x29x36	36-150	23	✓	M	✓		25	★★★★	★★★★★	★★★★★	★★★★	★★★★★	68
1,200	24	87x40x29	100 ^d	42	✓	F	✓		21	★★	★★★★	★★★★★	★★★★★	★★★★	68
200	12	77x44x42	36-150	30	✓	M	✓		30	★★	★★★★★	★★★★★	★★	★★★★★	66
300	24	77.5x43x36	30-125	32	✓	M	✓		30	★★	★★★★★	★★★★★	★★★★	★★★★★	65
200	12	78.5x44x36.5	29-124	26	✓	M	✓		22	★★	★★★★★	★★	★★	★★★★★	65
808	24	65x70x28	100 ^d	44	✓	F	✓		22	★★	★★★★	★★★★	★★★★	★★★★	63
300	24	83x50x42.5	36-150	35	✓	M	✓		31	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	59
280	12	75x39x38	35-155	29	✓	M			26	★★★★	★★★★★	★★★★★	★★	★★★★★	57
449	24	82.5x47x40	26.5-102	37	✓	M	✓		26	★★	★★★★	★★★★	★★	★★★★★	56
500	12	83x47x41	37.5-143	37	✓	M	✓		20	★★★★	★★★★	★★	★★★★	★★★★★	56
300	8	74.5x39x38	34-150	28		M	✓		25	★★★★★	★★★★	★★★★	★★★★	★★★★★	54
250	12	75x39.5x38.5	35-150	28	✓	M			27	★★★★	★★★★★	★★★★★	★★	★★★★★	51
135	8	75x30x39	35-150	28		M	✓		25	★★★★★	★★★★	★★★★	★★★★	★★★★★	51
399	24	83.5x38.5x45	46.5-205	33		M	✓		28	★★★★	★★★★★	★★★★★	★★	★★★★★	49

the shop indicated in brackets c The mobile split units come with a refrigerant line, rather than a hose d Length of hose through wall

clearance space. **Hose length** Where applicable. The minimum and maximum extendable hose length is shown. **Total weight** When assembled. Weights for split models include inner and outer units, as this is the load the wall will need to bear. **Fixed or mobile** F= fixed;

M = mobile. **Dehumidifier** Whether the model has a dehumidifier mode.

Test performance
Cost per day Cost if using for three hours a day (an evening's worth of cool) with a 8.153p per kWh tariff. The lower, the better.
Airflow strength

Subjective rating of how strong the airflow feels when sitting 1m and 2m away from the front of the appliance. **Cooling** The more stars, the greater the volume of air that can be cooled. **Dehumidification** How much moisture is removed from the air when in dehumidification mode.

For those without this feature, the measurement is taken while in cooling mode – all air conditioners dehumidify automatically. **Noise** Subjective rating based on low/night and high-speed settings. Even machines with five stars are noticeably audible. **Ease of use** How easy it is

to install, set up, maintain, operate and program.

Score
 This ignores price and is based on:
 Cooling capacity **40%**
 Energy efficiency **20%**
 Ease of use **20%**
 Dehumidification **10%**
 Noise **10%**