

Getting warmer

Temperatures are rising – but so are sales of portable heaters

More and more of us have conservatories and garages that need year-round heating. This is a major reason why we bought 2.6 million portable heaters in the year to May 2006 – 12 per cent up on the year before.

There are three main types of heater: convector, oil-filled and fan. Each is suitable for different uses (see p62). One of the first things to look for when choosing a heater is the power output, measured in watts (W).

Higher-powered models are better for heating big rooms. Be warned, though. Our tests showed that the power claimed by manufacturers was not always achieved. This is particularly true for oil-filled heaters. These switch themselves off once the oil inside reaches a set temperature, and switch on again when it cools. The heater appears to be on throughout, but the on/off process means that the top claimed power isn't always achieved and it may not heat the size of room you hope. So check the actual power figure we found.

Running costs can vary: our 3,000W De Longhi (1) costs about 25p an hour to run, while our 500W De Longhi (10) costs 4p an hour. The higher the output, the more the heaters cost to run.

Fan heaters did much better overall than the other types, but we have included oil-filled and convector Best Buys, too, should you prefer to choose one of those types.

THE WAY WE WERE

When we tested portable heaters in 1980, five out of 11 were potentially dangerous. One had a case that could become live, with possibly serious consequences for anyone touching it. And three other heaters had covers that could be partially removed, exposing live parts and/or allowing the front grille to fall off, revealing super-hot heating elements. You'll be pleased to hear that time is a healer – and that all 30 of the heaters we tested this time were perfectly safe.



How we conduct heating tests

We build a well-insulated chamber measuring 3.5mx3.5mx2.5m to simulate a living room. Next to it, we build a second, smaller, space which is chilled to sub-zero temperatures to simulate a cold outdoor winter. Vents are also built to allow cold air to flow between the two. Thermometers are set up and linked to monitoring equipment outside the test rooms.

Each heater starts at room temperature. We switch it on and see how long it takes for the room to reach a steady temperature – that is, when it doesn't rise by more than 2°C in a 15-minute period. Once this happens, we see how hot room surfaces such as walls and ceilings become.

Our temperature stability tests measure how good each heater is at keeping the 'living room' warm if cold air passes into it. The best heaters maintain the temperature within 1°C.

OUR RESEARCH

We select the products we test by talking to manufacturers about their biggest-selling models and future plans, consulting industry experts and market intelligence reports, and checking what is available in the main high-street shops and on popular websites. The models tested in this report are the most recently launched top-sellers from brands with the largest market share. We also may include models with innovative features from less well-known brands. However, in this test they didn't do as well overall as the well-known models.

What you should look for

TIMER

A timer, available on some models such as this Prem-i-Air (22), is useful for setting a heater to turn on just before you get home or wake up



COLD-AIR SETTING

Some heaters can help you cool down, too. This isn't as effective as a dedicated air conditioner, but a light breeze is better than nothing

CLIMATE CONTROL

With this the heater tries to keep the room temperature stable after you've warmed up the room, working harder if a blast of cold air enters, for example. A few models (1, 2, 16, 19, 22, 30) have a more advanced system where you can set a specific level and the heater tries to maintain that temperature



**1 CONVECTOR****74% De Longhi HCA530FTS £50**

The De Longhi's climate-control system maintains a stable temperature well, while the heater pumps out 3,000 watts of power – great for larger rooms. It's a well-built model with easy-to-fit, clip-on feet for stability. It has a 24-hour timer and is wall mountable. It's cheapest at Currys.

WE FOUND It's the only convector with a cold-air setting, but it's more a trickle than a blast.

Available Argos, Comet, Currys, John Lewis
Weight 5.2kg Timer Yes Climate control Yes

**2 CONVECTOR****71% Bionaire BCV3100 £60**

This is an excellent heater with good climate control and a timer. It's one of the noisier convectors but not noisy enough to get in the way of a conversation. It's also got a remote control, although those with poor sight or dexterity may struggle to operate it. Cheapest at Argos.

WE LIKE Like the De Longhi (1), it has a tilt safety feature: if the unit is tilted or knocked over, power is cut off.

Available Argos only Weight 5.7kg Timer Yes
Climate control Yes

**10 OIL FILLED****69% De Longhi Bambino 500 TRN0505M £40**

If you want to heat a smallish room, this mini oil-filled heater could be the model to choose. It uses its limited power well and is economical to run.

It's easy to use straight out of the box as there's nothing to assemble or fit.

There are only two controls: an on/off switch and a dial for setting the thermostat. It's cheapest at Argos.

WORTH KNOWING It's light and has a carrying handle and long mains cord, so it's easy to move round.

Available Argos only Weight 5.2kg Timer No
Climate control No

**11 OIL FILLED****67% De Longhi Dragon TRD0820T £80**

The Dragon weighs more than 14kg, so the ready-fitted castors and tow handle are welcome. It's powerful, so is better suited to bigger rooms, and there's a timer, too. The Dragon has grilles surrounding the heater that provide a cooler touching surface – so there's less chance of being burnt. Cheapest at Comet.

WE LIKE Its ten-year guarantee is far more than most models have.

Available Comet, Currys Weight 14.4kg Timer Yes
Climate control No

**19 FAN****83% Bionaire BCH 3220 Digital Ceramic £50**

It looks like a mini hi-fi speaker system, but this is one of the quietest heaters on test. Warmth comes from both grilles, and you can adjust the top one to point slightly left or right, to control the direction of the heat. The climate-control system is good. It's also easy to set the temperature with the digital display. Cheapest at John Lewis.

WORTH KNOWING The mains cord length is on the short side.

Available John Lewis only Weight 2.4kg Timer No
Climate control Yes



The Bionaire BCV3100 is an excellent heater with good climate control

**20 FAN****81% Bionaire BFH265 £30**

This easy-to-use fan model heats well and quickly.

However, it is noisier than most. The climate-control system is really good – but you cannot set a specific temperature as you can on its sister model, the Bionaire BCH3220 Digital Ceramic (19). The Bionaire is cheapest at Argos.

WE LIKE The main part of this heater sits on a solid plate and can be set to turn automatically left and right to give better heat round the room.

Available Argos only Weight 1.6kg Timer No
Climate control Yes



Which type of heater?

Different kinds suit various sizes of rooms

■ **FAN** The lightest and most portable heaters are easy to set up – usually you take them out of the box, plug them in and you're ready to go. They heat up quickly but can be noisy and they need an inflow of air to create heat. Sometimes, the inflow vents are on the top or bottom, but with most models they're on the back, so avoid placing the heater against a back wall.



sensible, cheap-to-run option for small rooms. They radiate heat from both sides, so you could place one in the middle of a room and move it out of the way when you're warm enough.

■ **CONVECTOR** Convector heaters are quite tall, like oil-filled heaters, but thinner and usually much lighter. They heat quickly and are quieter than fan heaters. They can usually be mounted out of the

■ **OIL FILLED** Some oil-filled heaters can be slow to warm up. Most are big and heavy, though some have castors so they're easier to move. Often you have to fit these or the little stabilising feet that they come with. A good mini oil-filled heater is a



way on a wall. Brackets and instructions for wall mounting are included with all the models we tested.

HOW TO SAVE MONEY

Switch with Which?

Visit Switch with Which? (SWW) and see what savings you could make on your gas and electricity bills. Last year, SWW? customers saved an average of £245. Our free, independent service lets you compare and switch energy suppliers online in just a few minutes. Visit www.switchwithwhich.co.uk or call 0800 533006 (Mon-Sun, 8am-8pm).

Contacts

Airforce 0845 609 6688; www.diy.com

B&Q 0845 609 6688; www.diy.com

Bonaire 0800 052 3615
www.bonaire.com

Challenge 0870 600 3030
www.argos.co.uk

De Longhi 0845 600 6845
www.delonghi.co.uk

Dimplex 0845 600 5111
www.dimplex.co.uk

Eurolec 01925 248999
www.mistraluk.co.uk

GET 01707 601601
www.getplc.com

Glen 0845 600 5111
www.dimplex.co.uk

Heat King 01452 504084
www.dad-online.co.uk

Igenix 01473 271272
www.pikapak.co.uk

Micromark 0208 829 6354
www.micromark.co.uk

Prem-i-Air 0870 742 5021
shop.prem-i-air.com



Facts & scores

Our portable heating test uncovered these pieces of information

Remote control

The **Bonaire BCV 3100 (2)** and **Prem-i-Air PCH-1033RC (22)** have handheld remotes that let you control the heater from the comfort of a chair.

Price is the key

The **Eurolec EUCH 2000T (6)** (available from Currys) and **GET G2TCHT (7)** (available from Robert Dyas), are very similar. The **B&Q 2000W Convector (5)** and **Igenix IG5150 (8)** (from Independent stores) are virtually identical – colour and branding are the only differences.

Noisy heater

The **Micromark MM53504 (25)** is the noisiest heater on test – at its worst, it can get in the way of a conversation.

USING THE HEATER

The casing of heaters gets hot. Fortunately, nearly all heaters have some kind of carry handle for moving them about. Many also have a cut-out feature – if the heater gets dangerously hot, it will switch itself off.

Never place anything on, or cover up, a portable heater as it increases the risk of a fire. Used properly (always follow the instructions), modern portable heaters are safe.

MODEL

CONVECTOR

- 1 **DE LONGHI HCA530FTS**
- 2 **BONAIRE BCV3100**
- 3 **DE LONGHI HS20-2**
- 4 **DIMPLEX 3072**
- 5 **B&Q 2000W Convector**
- 6 **EUROLEC EUCH 2000T**
- 7 **GET G2TCHT**
- 8 **IGENIX IG5150**
- 9 **GLEN G2TA**

OIL FILLED

- 10 **DE LONGHI Bambino 500 TRN0505M**
- 11 **DE LONGHI Dragon TRD0820T**
- 12 **DE LONGHI Stretto TRSW0715**
- 13 **DIMPLEX ROF2T**
- 14 **DIMPLEX OFC20**
- 15 **GET G20FH5**
- 16 **AIRFORCE 2500W Oil Filled**
- 17 **HEAT KING HK027T**
- 18 **MICROMARK MM53589**

FAN

- 19 **BONAIRE BCH3220 Digital Ceramic**
- 20 **BONAIRE BFH265**
- 21 **GLEN GT30TSN**
- 22 **PREM-I-AIR PCH-1033RC**
- 23 **DE LONGHI HVN2532B**
- 24 **DE LONGHI HVR9033 retro**
- 25 **MICROMARK MM53504**
- 26 **B&Q FH01A**
- 27 **CHALLENGE SGH-30A**
- 28 **PREM-I-AIR PERTL151**
- 29 **GET G2FH2PE Upright**
- 30 **AIRFORCE 1500W Ceramic Heater**

a These heaters don't claim to have 'climate control' but they

USING THE TABLE

The more stars the better. All ratings and total scores are comparable.

Specification

Price For Best Buys, this is the cheapest widely available

SPECIFICATION								WHICH? TEST PERFORMANCE						SCORE %
PRICE (£)	POWER CLAIMED (W)	POWER ACHIEVED (W)	WEIGHT (kg)	SIZE (cm) (w x h x d)	CORD LENGTH (cm)	TIMER	CLIMATE CONTROL	WARMING-UP TIME	TOTAL HEATING	COOLING	NOISE	EASE OF USE	FEATURES	
50	3,000	3,000	5.2	74x48x18	174	✓	✓	★★★★	★★★★★	★	★★★★	★★★★	★★★★	74
60	3,000	3,000	5.7	75x44x17	184	✓	✓	★★★★	★★★★★	n/a	★★	★★★★	★★★★★	71
15	2,000	2,000	3.2	62x42x17	150			★★★★★	★★★★★	n/a	★★★★★	★★★★	★	65
30	2,000	2,000	3.4	57x44x20	128	✓		★★★★★	★★★★★	n/a	★★★★★	★★★★	★★★★	64
16	2,000	2,000	2.4	57x38x17	162			★★★★★	★★★★★	n/a	★★★★★	★★★★	★	62
35	2,000	2,000	3.5	54x42x20	147	✓		★★★★★	★★★★★	n/a	★★★★	★★★★	★★	62
25	2,000	2,000	3.5	54x42x20	158	✓		★★★★★	★★★★★	n/a	★★★★	★★★★	★★	62
24	2,000	2,000	2.4	57x38x17	162			★★★★★	★★★★★	n/a	★★★★★	★★★★	★	62
20	2,000	1,580	2.5	55x37x17	125			★★★★★	★★★★	n/a	★★★★★	★★★★	★★	53
40	500	500	5.2	35x38x17	163			★★	★★★	n/a	★★★★★	★★★★★	★★	69
80	2,000	2,000	14.4	44x65x28	140	✓		★★★★	★★★	n/a	★★★★★	★★★★	★★★★	67
40	1,500	1,500	10.4	39x65x27	140			★★★★	★★★★★	n/a	★★★★★	★★★★	★★★★	64
70	2,000	2,000	13.6	60x61x25	154		✓ ^a	★★	★★★	n/a	★★★★★	★★★★	★★★★	62
50	2,000	1,280	11.3	42x63x28	125		✓ ^a	★★	★★	n/a	★★★★★	★★★★	★★	51
13	700	252	4.5	32x36x14	163			★★★★	★	n/a	★★★★★	★★★★★	★	50
45	2,500	925	13.5	57x64x29	172	✓	✓	★★★★	★★	n/a	★★★★★	★★★★	★★★★★	46
25	1,500	855	8.6	36x63x23	162	✓		★★★★	★★	n/a	★★★★★	★★★★	★★	46
28	1,500	510	7.6	34x64x27	176			★★★★	★	n/a	★★★★★	★★★★	★★	44
50	2,100	2,100	2.4	17x32x18	130		✓	★★★★★	★★★★★	★★★★★	★★★★	★★★★★	★★★★	83
30	2,000	2,000	1.6	21x28x15	185		✓ ^a	★★★★★	★★★★★	n/a	★★★★	★★★★★	★★	81
25	3,000	3,000	1.3	25x24x13	180		✓ ^a	★★★★★	★★★★★	★★★★	★★★★	★★★★★	★★★★	80
40	1,800	1,800	3.8	21x55x23	198	✓	✓	★★★★★	★★★★★	★★★★★	★★★★	★★★★	★★★★★	80
25	2,400	2,400	1.6	25x32x16	184		✓ ^a	★★★★★	★★★★★	★★	★★★★	★★★★★	★★★★	77
40	3,000	3,000	1.9	31x32x24	175		✓ ^a	★★★★★	★★★★★	★	★★★★	★★★★★	★★★★	77
10	2,000	2,000	1.0	23x27x14	156		✓ ^a	★★★★★	★★★★★	★	★★	★★★★★	★★★★	74
10	2,000	2,000	1.2	22x27x15	148		✓ ^a	★★★★★	★★★★★	★	★★★★	★★★★★	★★★★	73
25	1,800	1,800	1.9	19x26x17	176		✓ ^a	★★★★★	★★★★★	★	★★★★	★★★★★	★★★★	73
37	2,000	2,000	1.9	27x36x9	180		✓ ^a	★★★★★	★★★★★	n/a	★★★★	★★★★★	★★	71
10	2,000	2,000	1.2	23x13x24	146			★★★★★	★★★★★	★	★★★★	★★★★★	★★	68
30	1,500	1,065	2.2	27x29x17	183	✓	✓	★★★★★	★★★★★	★	★★★★	★★★★	★★★★★	67

do try to keep room temperatures stable, so we mark them as having climate control. See also 'What you should look for', p60

high-street price as we went to press. Other prices are a guide to what you should pay.

Test performance

Warming-up time How long the heater takes to reach a high and stable temperature. **Total**

heating Includes how well heater heats relative to its claimed power and ability to keep room temperature

stable. **Noise** More stars, the quieter. **Ease of use** Setting up, turning on and off, setting modes, clarity of instructions.

Score

This ignores price and is based on:
 Heating **40%** Cooling **5%**
 Ease of use **35%** Noise **5%**
 Features **15%**