



BEST BUY

Philips AC3256/30 84%

STORE **£380** ONLINE **£350**

PROS This Philips air purifier removed more than 19 times more dust from the air than the least effective machine in our table (p63). It's brilliant at capturing particles such as smoke and pollen in its three layers of filters. It can be set to switch on automatically when it senses pollution, and it has a silent-running night mode.

CONS Nothing significant.

OUR VERDICT An outstanding air purifier.

Cheapest store John Lewis



BEST BUY

GREAT VALUE

Vax ACAMV101 84%

STORE **£250** ONLINE **£239**

PROS This cylindrical tower purifier does a sensational job of sucking pollutants from the air. The dust, smoke and pollen we used in our tests didn't really stand a chance. It comes with a remote control, and its air sensor means it can be set to automatically clean the air.

CONS Nothing major.

OUR VERDICT A first-class air purifier that's cheaper than its rivals.

Cheapest stores Argos, John Lewis



Dyson Pure Cool Link

DPO1 53%

STORE & ONLINE **£350**

PROS If style is your highest priority, this innovative-looking Dyson has certainly been turning heads. It's quiet to run and, like its stablemate on p62, can be set via an app on your smartphone and has an air sensor and an automatic mode. It can also be used as a fan.

CONS It can't rival the Philips and Vax Best Buys – it's only mediocre at purifying air and was noticeably poor at capturing pollen.

OUR VERDICT Not a match for our Best Buys. Style over substance.

Cheapest stores Argos, Currys, John Lewis

A BREATH OF FRESH AIR

Our first ever test of air purifiers has identified which models will reduce allergens in your home, but we've also uncovered some dubious manufacturer claims

WHAT'S ON TEST?

We've tested 10 air purifiers to see how well they remove pollen, dust and smoke from the atmosphere. For more, see which.co.uk/air

Which? member Nigel Heriz-Smith has a problem with air quality – he lives right beside the A2 in Kent and he's allergic to tree pollen. He's owned an air purifier for 11 years and told us: 'Vehicle pollution was a concern, and so too was pollen. But our air purifier has been worth every penny.'

Other Which? members have written in similarly glowing terms about their purifiers, but in a recent survey four in ten owners told us they wouldn't recommend their air purifier to a friend*.

So to find out why some purifiers are loved and others aren't, for the first time ever we've sent a selection of leading models off to our lab for testing.

Exaggerated claims

Our results were surprising. Based on our tests, we've uncovered exaggerated manufacturer claims which, if believed, could leave you with a product that just can't clean the air in your home effectively.

We also discovered that more power doesn't necessarily mean more effective air purification.

In our tests, three machines with a similar wattage to our Best Buys – including a Dyson – failed to impress us with their test scores.

Save money

You don't have to pay more to get a great machine. You'll save yourself £379 by opting for our cheapest Best Buy, the £250 Vax, instead of the pricey £629 Blueair 480i. And the air purifier itself isn't all you have to fork out for. Replacement filters can cost from £20 to £50 and, based on suggested usage, will need to be changed every six months. But you can cut costs – see p63 for a neat solution to save money and extend filter life.

Help with allergies

If you're an allergy sufferer, the best four machines on test did spectacularly well at removing pollen from the air, with the Best Buy Vax ACAMV101 (84%, £250) proving to be more than eight times more effective than the Dyson Pure Cool Link DP01 (53%, £350) and more than five times more effective than the DeLonghi AC150 (57%, £260). The worst for pollen in our test was the Meaco Airvax 33X2 – see 'Lab secrets', right, for more.

Keep reading to find out which air purifier to buy, and which to avoid, plus we bring you up to speed with what you need to know about manufacturer claims.

LAB SECRETS



Matt Stevens,
Which? air
purifiers expert

Air purifiers are essentially fans with filters attached. Air is sucked in and passed through the filters to capture floating particles.

We use pollen, smoke and dust to record the clean air delivery rate (CADR) of each machine – this measures the reduction of particles in the air. We also calculate the percentage of particles removed by the machines and compare this with the particles that are naturally removed from the air with the machines switched off.

From the CADR we measured for smoke, we worked out the size of room that each model would be suitable for. And we found some of the manufacturers' claims to be wide of the mark.

Coverage claims

Meaco claims the AirVax 33X2 'covers 28 cubic metres based on three air cleans per hour'. But, based on our tests, we don't think it's nearly effective enough to match these claims.

In our tests in a 28-cubic-metre chamber with a 2.4-metre-high ceiling, we found it was only effective over a footprint of less than



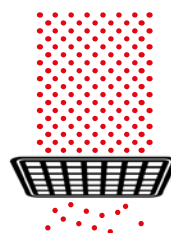
1.5 square metres – roughly the size of a single wardrobe (see p62 for more). Meaco told us we'd tested its machine using the wrong method, which it said shouldn't be used when testing small air purifiers. It says our findings are no surprise given the test method is designed for larger cleaners that move air differently. However, we're confident that the methods we've used can be applied fairly to Meaco's machine and we stand by our results.

Bionaire recommends using its BAP1700-IUK in rooms up to 74 square metres. But we found that it was only effective in a 7-square-metre room. Bionaire told us that it has an 'established history of providing air solutions for UK consumers that are tried, tested and trusted.'

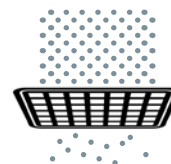
But our test results told a different story.

WHICH? DIFFERENCE PARTICLES REMOVED

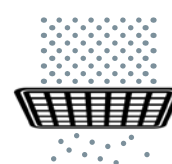
How do the Dysons compare with the best on test?



93%
BEST ON TEST
Vax ACAMV101



69%
Dyson Pure
Cool Link TP02



66%
Dyson Pure
Cool Link DP01

Online survey: 1,337 Which? members, January 2017

Other models on test



WORTH A LOOK

Blueair 480i 78%

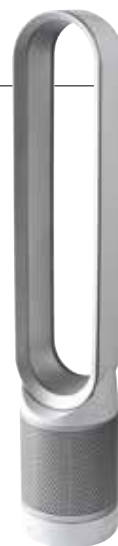
ONLINE £629

PROS Blueair's power-packed 480i air purifier is right up there with the best machines we've seen at removing particles from the air. The hefty price brings with it smart features, three speeds and an air sensor for automatic air purification.

CONS The price, plus it's quite energy hungry.

OUR VERDICT A superb air purifier but very pricey.

Cheapest store Online only



Dyson Pure Cool Link TPO2 54%

STORE & ONLINE £450

PROS This striking-looking Dyson doubles as a fan and doesn't do a bad job of filtering air, and it's nice and quiet on its lowest power setting. We like the smart app and it has an air sensor for automatic air purification.

CONS It removed 21% to 26% fewer particles than our Best Buys.

OUR VERDICT We expected more.

Cheapest stores Argos, Currys, John Lewis

Electrolux EAP450 78%

ONLINE £322

PROS This is the most powerful purifier on test and it used every one of its 100 watts to make short work of removing pollutants. Set it to auto, and the light sensor checks for darkness and switches to the quieter night mode.

CONS Nothing major but energy use is on the high side.

OUR VERDICT Powerful and effective.

Cheapest store Online only

WORTH A LOOK



Bionaire BAP1700-IUK 49%

STORE & ONLINE £175

PROS This tower air purifier isn't bad at filtering dust, but it's less successful with pollen and smoke. It has a timer, an air sensor and it can be set to run automatically.

CONS It captured half as many particles as our two Best Buys.

OUR VERDICT It's cheaper than our Philips and Vax Best Buys, but it's also half as effective.

Cheapest stores Argos, John Lewis



Smallest and cheapest model on test is just not up to the job



DON'T BUY

Meaco Airvax 33X2 24%

STORE & ONLINE £130

We're struggling to find a scenario where we think this purifier would do a decent job of improving air quality – we've estimated it to be effective only in spaces smaller than 1.5 square metres (assuming a standard ceiling height of 2.4 metres).

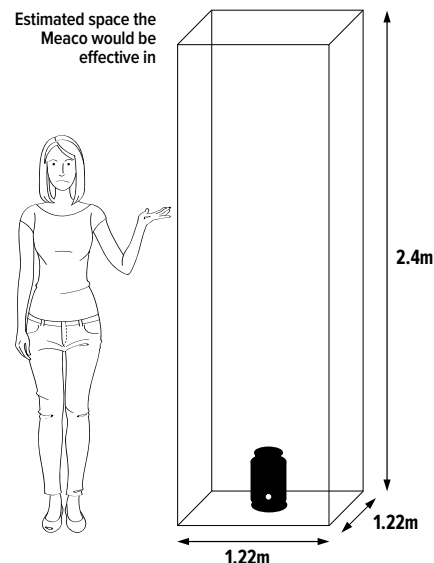
It's the smallest purifier on test and Meaco notes that it's 'popular with customers in a bedroom or similar small room'. So it's not designed to purify the air of a large open-plan living space.

But it just isn't powerful enough to clean much air at all, with some of our test results too low to be officially reported.

And, even though it's compact, it's no quieter than larger machines.

It could work on a bedside table while you sleep, but it would have to be close to have any discernible effect on the quality of the air you breathe. We've made it a Don't Buy because, even though it is smaller than other models on test, £130 is a lot to pay for a machine that struggles to clean air effectively.

Estimated space the Meaco would be effective in



What you need to know about air purifiers

How to choose the right model for your needs, and tips on how to cut filter costs

Noise

One in ten owners we spoke to told us that their machine affected their sleep. So we test models on their highest and lowest settings so you'll know which ones are the least likely to disturb you. For four of the ten we tested, the lowest setting was noticeably quieter, and the Philips was the quietest Best Buy.



Automatic mode & air sensors

Purifiers with air sensors sniff out pollutants, switch themselves on and set their power levels according to the air quality.

Timers & night mode

Purifiers with timers (pictured left) can be set to switch on and turn off after a set time. Night mode should mean quiet air purification, but it's not always quieter than the lowest setting.

Fast filtration

We award higher test scores to those models that quickly remove pollen, dust and smoke particles.

Smart capabilities

You can set both of the Dyson air purifiers and the Blueair 480i using a smartphone (as



pictured, above). We like how easy the Dyson app is to use when setting the purifiers. The Blueair app was as versatile as the Dyson's, but we found it harder to use.

Replacement filters

Air purifiers use filters (pictured right) to capture pollutants. Manufacturers often advise that they should be replaced every six months to keep the purifiers working efficiently. Replacement filters for the Best Buy Vax ACAMV101 and the two Dysons are £50. Filters for the Best Buy Philips cost £30. The DeLonghi AC150 filters are cheapest, at £20.

Make filters last for longer

One way to save money is to clean the filters yourself. Which? member Brian from Watford told us that: 'A gentle vacuum once a month keeps them going for up to a year.' But it's best to do this outside, to avoid re-introducing any captured allergens to your home.

Keep your home clear of allergens

Before buying an air purifier, consider minimising the polluting particles in your home in the first place. Turn to p20 to find our tips on how to do this.



AIR PURIFIERS ON TEST

SPECIFICATION	WHICH? TEST PERFORMANCE													
	Price	Power (W)	Auto mode	Remote control	Annual running costs	Smart	Dust	Pollen	Smoke	Ease of use	Noise – low setting	Noise – max setting	Particles removed overall	TEST SCORE
Philips AC3256/30	£380	58	✓		£42		★★★★★	★★★★★	★★★★★	★★★	★★★★	★★★	★★★★★	84%
Vax ACAMV101	£250	55	✓	✓	£39		★★★★★	★★★★★	★★★★★	★★★	★★★★	★★★	★★★★★	84%
Blueair 480i	£629	83	✓		£59	✓	★★★★★	★★★★★	★★★★★	★★★	★★★★	★★★	★★★★★	78%
Electrolux EAP450	£322	100	✓	✓	£72		★★★★★	★★★★★	★★★★★	★★	★★★★	★★★	★★★★★	78%
HoMedics AR-29A-GB	£160	57			£41	✓	★★★★	★★★★	★★★★	★★	★★★★	★★★	★★★★★	68%
DeLonghi AC150	£260	57	✓		£41		★★★★	★★★	★★★★	★★	★★★★	★★★★	★★★★	57%
Dyson Pure Cool Link TP02	£450	52	✓	✓	£37	✓	★★★	★★★	★★★	★★	★★★★	★★★	★★★★	54%
Dyson Pure Cool Link DP01	£350	36	✓	✓	£29	✓	★★★	★★	★★★	★★	★★★★	★★★★	★★★★	53%
Bionaire BAP1700-IUK	£175	55	✓		£36		★★★★	★★★	★★★	★★★	★★★★	★★★	★★★★	49%
Meaco Airvax 33X2	£130	4		✓	£3		★	n/a	n/a	★★★	★★★	★★★	n/a	24%

USING THE TABLE

Best Buys (in red) must score at least 84%.

SPECIFICATION Auto mode Can switch on automatically when the air is polluted. **Smart** Can control

purifier from a smartphone.

Annual running costs Based on 12 hours of use every day for a year.

PERFORMANCE n/a = scores too low to be reported on. **Dust, pollen and smoke** Effectiveness of

removing these particles from the air based on CADR. **Particles removed overall** Based on the percentage of particles removed during our tests. The more stars, the more effective the machine. **Ease of use** How easy

it is to set the machine, remove the filter, use the remote or smart app, and how clear the display is. **Noise** We tested each appliance on its lowest and highest settings. **★★★★** audible but not intrusive,

★★★★ louder and rumbling.

SCORE Ignores price. Based on:

Particle removal**60%**
Noise.....**20%**
Ease of use.....**10%**
Energy**10%**