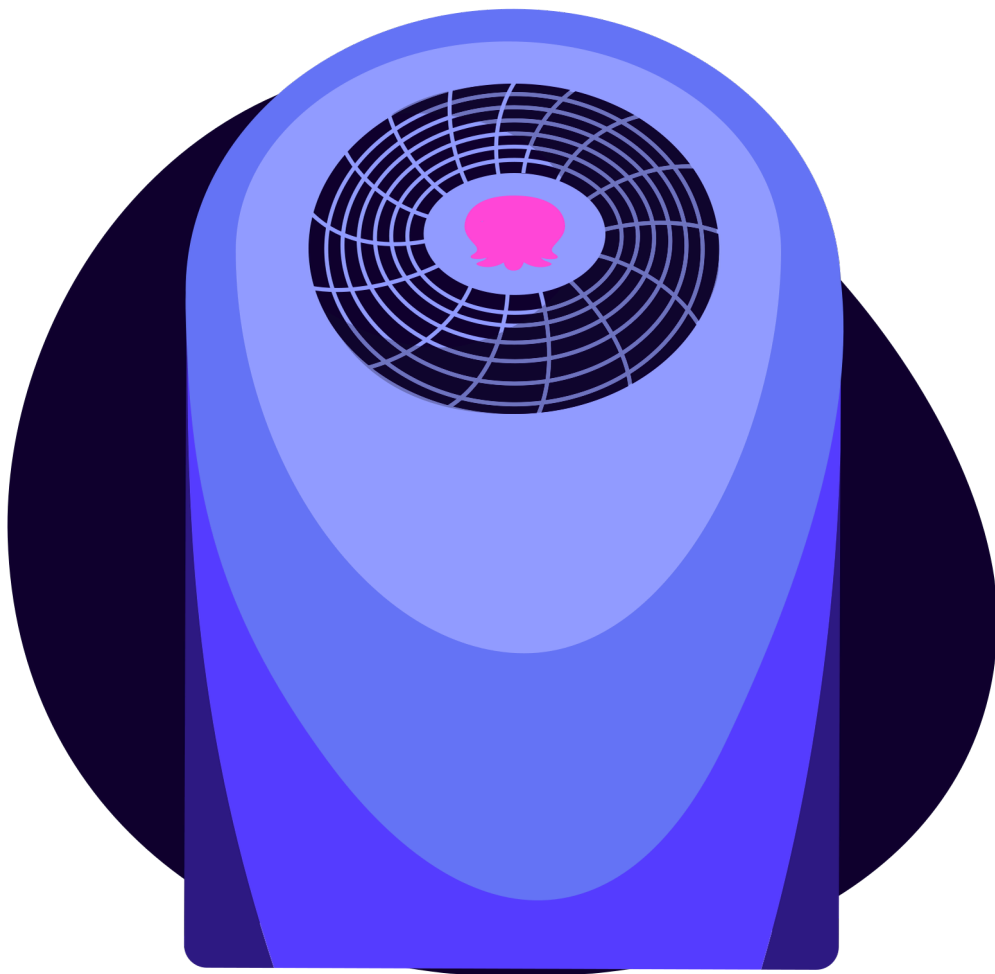


Get to know your Cosy heat pump

Come on in, it's lovely and warm!



octopusenergy

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1. Before Getting Started

About this guide

Welcome! Think of this guide as your go-to for getting the very best out of your Cosy heat pump. It'll help you understand how Cosy works, how to control your heating and hot water, and what your day-to-day should look like.

You'll find simple explanations of how heat pumps work, how to set efficient and cost-cutting schedules and how to use the Octopus app. We'll also look at clever features like weather compensation, hot-water priority, and defrost cycles, so you're fully up to speed.

Dip into this guide when you need answers or reassurance, and if you're ever stuck, our team of experts are always on hand to help keep your home warm, efficient, and—most of all—Cosy.

Contact us

The easiest way to reach us is by emailing aftercare@octopus.energy.

Prefer to chat? Call our helpline for free on [0808 196 6842](tel:08081966842). Our aftercare phone lines are open for all general enquiries and emergencies from:

- 9 am - 5 pm Monday to Thursday
- 9 am - 4 pm Friday

2. Safety Information

Unlike gas boilers, heat pumps don't burn fossil fuels to produce heat, so they are safer to use. But there are a few things to keep in mind so you and your home stay safe.

Kids aged 8+ and those with reduced physical, sensory or mental capabilities can use the Cosy, but please make sure they're supervised, understand the risks, and have been shown how to use the system correctly. Children shouldn't play with the Cosy, and any cleaning or maintenance should be done by a well-informed adult.

Call in the professionals

Please call our team of Octopus experts for all servicing and repairs.



Don't remove any covers or perform any maintenance yourself. The inside of a heat pump gets extremely hot and can cause severe burns even after the unit has been switched off. Damage to the covers or supply cord could lead to an electric shock.

Electrical connections

Do not fiddle with your heat pump, Cosy Hub or pipework in any way. Avoid any cutting, piercing, burning or grinding near your pipework. If you notice a leak from the Cosy unit, never try to stop it yourself, as any leaking refrigerant can cause severe burns and frostbite. If you do spot a leak from your heat pump, stay well away and contact our helpline immediately.

Keep away from fire



Your new heat pump doesn't burn fossil fuels, but it does contain flammable materials. Keep it fully clear of open flames, smoke and anything that could start a fire. We're looking at you, barbecues, patio heaters and fireworks.

Take care with ice build-up

If there's ice build-up on your heat pump, don't interfere as this can damage the system. Trust that it knows what it's doing. See User Maintenance (section 6) for more details on ice build-up and taking care when cleaning.

3. Heat Pumps 101

If you're new to heat pumps, you'll notice they're totally different to a traditional gas boiler, but in a good way. In this section, we'll cover the basics of all heat pumps and then get into some Cosy specifics.

So, how do heat pumps work? Great question. They work a bit like a fridge, but in reverse. Instead of pushing heat out, they collect it from the air outside (yes, even when it's -20°C!), use electricity to boost it, then move that warmth into your home and hot water cylinder.

The main difference between heat pumps and boilers is that boilers burn fossil fuels to make heat, while heat pumps don't burn anything at all. They generally run at lower radiator temperatures and work best by keeping your home at a steady and comfy temperature. The result is super-efficient heating, lower carbon emissions, and a much greener way to stay cosy.

Key principles and terminology

System design and room temperatures

Your Cosy heat pump is part of a total heating system, which is made up of a combination of radiators, a hot water cylinder, the Cosy heat pump, and the Cosy controls. Your Cosy system was designed for your home according to MCS specifications, with design temperatures specified on a room-by-room basis (unless you requested a different design).

Room design temperatures are used during your Cosy heating system design to help accurately size radiators. Design temperatures must follow MCS rules for each room type.

Typical MCS design temperatures are:

- 22°C for bathrooms and shower rooms
- 21°C for communal areas, e.g. living rooms and dining rooms
- 18°C for lower-use areas, e.g. hallways, landings and kitchens
- 18°C for bedrooms (as most prefer a cooler room at night)

These are the minimum temperatures each room must reach on a cold day, depending on your home's location. For design purposes, the outdoor temperature for a cold day comes from MCS rules per the CIBSE heating design guide.

Both the room design temperatures and the outdoor temperature used for your system can be found on the radiator schedule that came with your installation agreement.

The room design temperatures are intended as a performance guarantee. When the weather is at the outdoor temperature used for your home, your rooms should be able to achieve the indoor design temperatures specified as a minimum. When it's warmer outside, your rooms will likely be able to achieve even higher temperatures.

When you set a target temperature in the app, you're telling Cosy what you'd prefer to feel every day. Most of the year, your system will easily heat rooms above their design temperature. On colder days, the design temperature shows what your system is able to reasonably maintain.

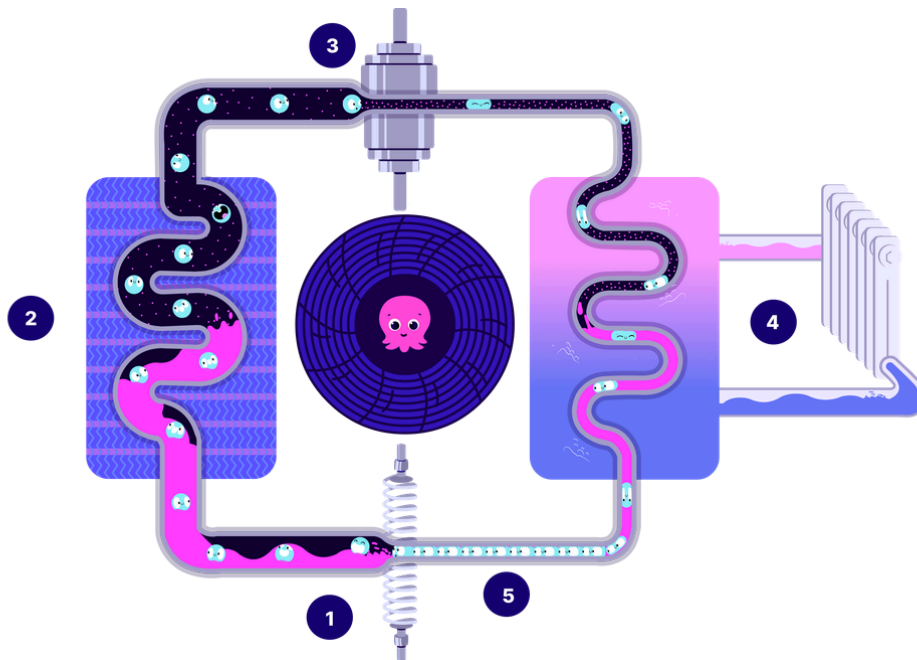
How your Cosy makes heat

Your Cosy will heat your home by producing hot water in the outdoor unit. This water then travels into your radiators, where it delivers the heat into your rooms, before travelling back to the outdoor unit to be reheated. Alternatively, the water may travel to your water cylinder, where it heats up the existing water in the tank so you can shower, bathe, and do the washing up (that somehow never seems to end).

Your Cosy heat pump uses a special gas called R290 refrigerant, which is a colourless, odourless form of propane. Propane is a naturally occurring compound with a very low global warming potential (GWP) – a measure of environmental impact in the atmosphere. Older heat pumps used artificial refrigerants called *fluorinated gases*, which don't perform as well as propane and have a much higher impact on the climate if released into the air. While it would be extremely rare for refrigerant to escape from a heat pump, using very low GWP refrigerant like R290 provides an extra layer of protection for the planet *and* delivers peak performance.

Unlike a boiler, your Cosy does not burn this propane. The R290 is contained in a series of pipes, valves, and other components called a refrigerant circuit that allows your Cosy to harness the physical properties of R290 to produce clean, electrified heat. R290 has a really low boiling point under normal conditions (-42°C), making it perfect for absorbing heat from that chilly winter air. By changing the pressure of the propane at different points in the refrigerant circuit, your Cosy can move the boiling point up and down to efficiently capture heat energy (even in sub-zero weather) and move it into your home.

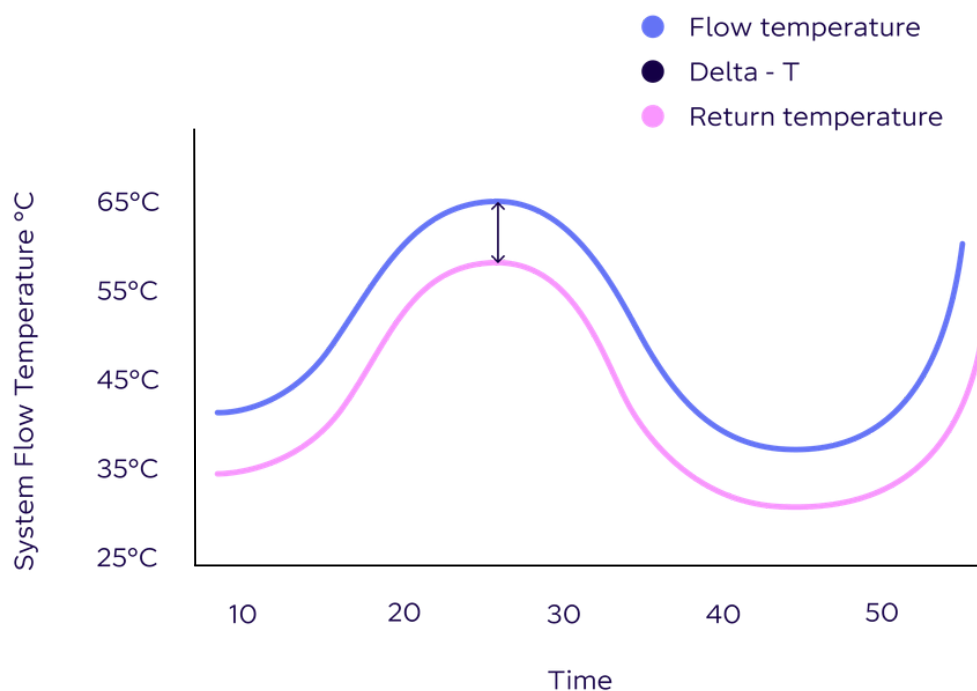
To understand how this all happens, it's useful to follow R290 on its journey through your heat pump.



1. Liquid R290 refrigerant passes through a device called an expansion valve, which forces the liquid through a small hole. This lowers the pressure and temperature, turning the liquid R290 into a very cold, low-pressure liquid-gas mix. The low pressure also sets the boiling point somewhere *below* the outside air temperature.
2. Very cold, low-pressure liquid-gas R290 flows through the evaporator at the back of your Cosy, travelling through pipes hidden within the heat-conducting metal fins. The very cold R290 absorbs heat as the fan pulls air over the fins and boils into a warm gas.
3. Next, the warmed refrigerant gas is sucked into the compressor. The compressor squeezes the gas, raising the pressure and causing the R290 gas to become very hot – up to 78°C.
4. Very hot R290 gas then moves through a heat exchanger (called a condenser), where it passes a large portion of its heat to the water in your heating system. The gas and water never touch – they remain safely separated by metal plates. This is what makes the water warm for your radiators, taps and showers. As the R290 gas loses its heat to the water, it condenses back into a liquid.
5. Finally, liquid R290 returns to the same expansion valve, where another pressure drop further cools the refrigerant and converts it to a liquid-gas mix. Then it heads back to the evaporator to collect more heat from the air and begin the cycle all over again.

This is where heat pumps get their name. Your Cosy **evaporates, compresses, condenses, and expands** its refrigerant to **pump heat** from outside into your home. Only a bit of heat is actually “made” in the Cosy through compression. Most of the heat energy is moved (pumped, really) from the air rather than created through burning, like a boiler.

Flow temperatures, return temperatures and Delta-T



The hot water created in the condenser (step 4) flows to your radiators or water cylinder. The temperature of this water as it leaves the condenser is called the *flow temperature*. Under normal operations, your Cosy will keep raising the flow temperature until it reaches the *Target Flow Temperature* defined by your system settings. You'll see more on this in the next section.

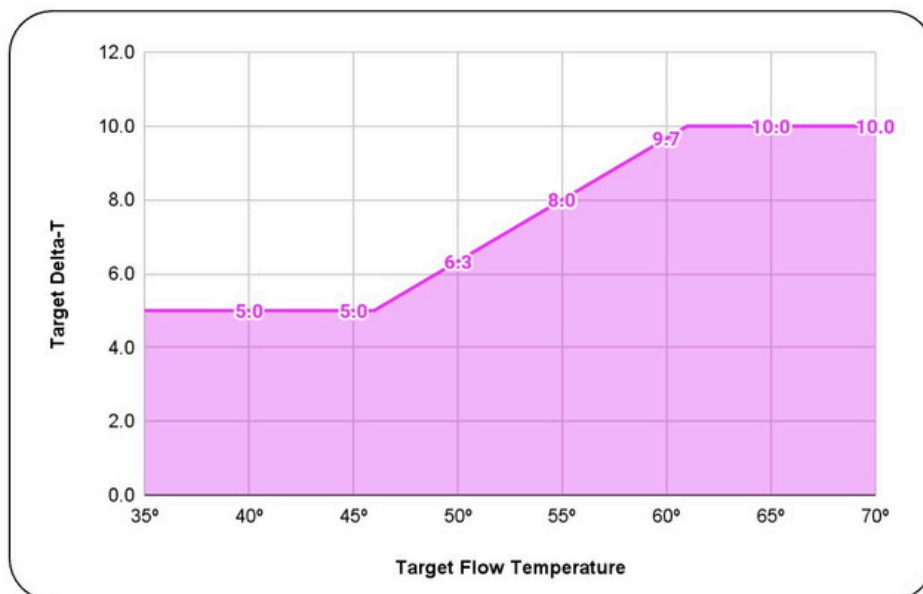
As the actual flow temperature of your system nears the Target Flow Temperature, your Cosy will modulate its output to keep the actual flow temperature at or near the Target Flow Temperature for peak efficiency.

The temperature of the water entering the condenser from your home to be reheated by your Cosy is the *return temperature*. The return temperature is always cooler than the flow temperature during normal operation.

The difference between the flow temperature and return temperature is called *Delta-T*, and is a measure of how much heat from the water was transferred into your rooms or water cylinder. Heat pumps adjust their output and the speed of the water through the system (flow rate) to maintain the correct Delta-T.

Many heat pumps use a Delta-T of 5°C, meaning the return temperature should be 5°C colder than the flow temperature. Your Cosy uses a dynamic Delta-T, meaning the temperature difference the system maintains changes based on the Target Flow Temperature of the water.

This means the Delta-T will widen from 5°C to 10°C as the Target Flow Temperature increases. This is to ensure you get full heat output (kW - kilowatts of output) at lower flow rates (L/min - litres per minute) through your home – an important factor in reducing pipe noise and avoiding capacity restrictions.



Target flow temperatures – fixed vs. weather compensation

Fixed Flow Temperature mode means your Cosy will use the same Target Flow Temperature, no matter what the weather's doing outside. That's how traditional boilers usually work – simple, but not very smart. On milder days, this often means your system is working harder than it needs to, using extra energy to deliver more heat than your home actually needs.

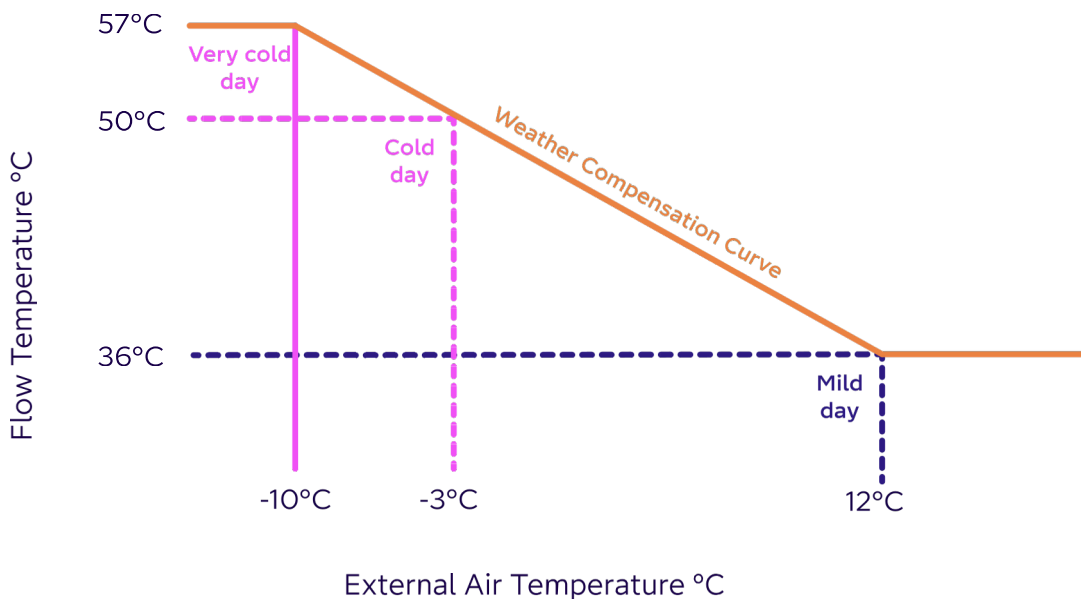


Tip: Although this setting may occasionally be useful at times when you need to get a lot of heat into your home, it's less efficient and can cause more wear and tear over time, so it should be used sparingly.

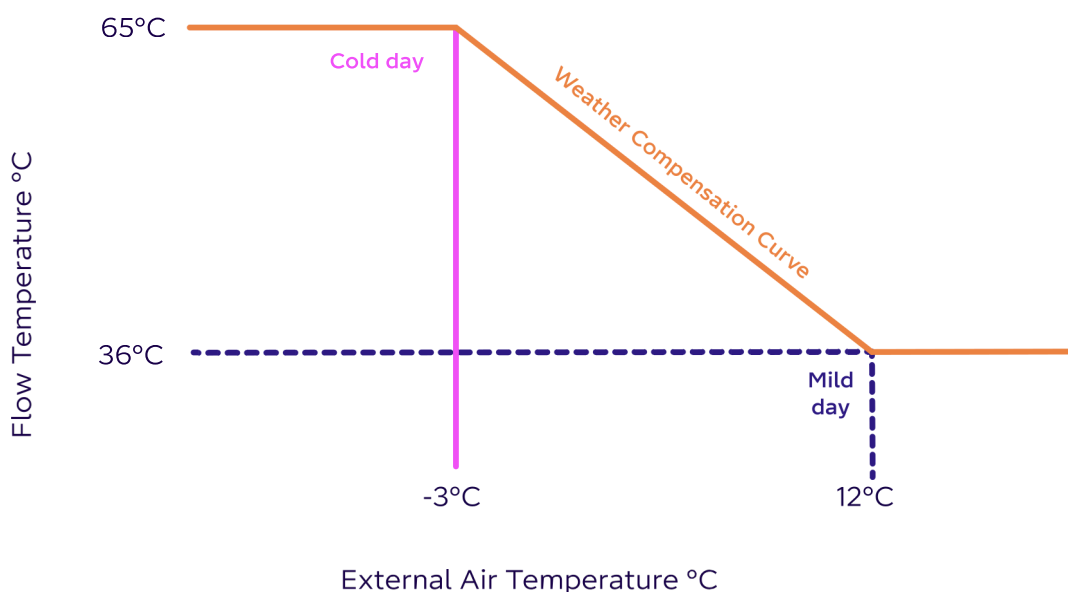
Weather-compensated Flow Temperature is the smarter way to run your Cosy. Instead of sticking to one Target Flow Temperature, Cosy adjusts its Target Flow Temperature automatically based on the outdoor air temperature. When it's mild, Cosy uses lower temperatures to save energy. When it's colder, it gently increases the Target Flow Temperature to keep your home nice and snug.

On the next page, you'll see two examples of how weather compensation works in practice.

Example 1: A Cosy system that has been designed at a flow temperature of 50°C when it's -3°C outside and 36°C when it's 12°C outside.



Example 2: A Cosy system that has been designed at a flow temperature of 65°C when it's -3°C outside and 36°C when it's 12°C outside.



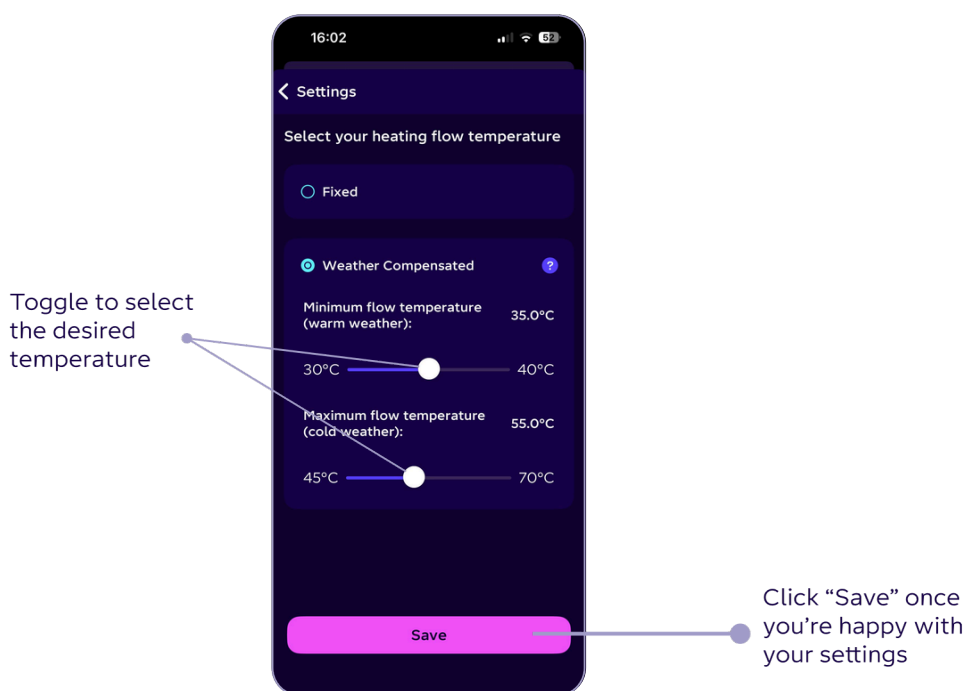
- **On milder days** when the external air temperature is at or above 12°C, Cosy sticks to its minimum flow temperature because your home doesn't need much help staying warm.
- **On colder days** when the air is at the design temperature, the curve will be at the designed flow temperature. For high-temperature designs, this will be up to 65°C. For low-temperature designs, this will typically be 50°C. You can fine-tune these in your settings.

This means your Cosy is constantly adjusting its Target Flow Temperature based on the weather to match your energy usage to your home's needs throughout the season.

Although your Coefficient of Performance (CoP) will change throughout the year, your heat pump's smart weather compensation feature will allow it to achieve a Seasonal Performance Factor (SPF) of 300–400% (around 3–4 times more efficient than a boiler).



Note: Seasonal Performance Factor (SPF) is the long-term efficiency of your Cosy in your home. You may have heard the term SCoP, or “Seasonal Coefficient of Performance”. SCoP is a laboratory number based on a fixed set of conditions. SPF is the total heat produced by your Cosy for your home divided by the total energy consumed. Think of it as “real-world SCoP” – an accurate measure of your heat pump's total performance.



Tip: You can also adjust your Weather Compensation using the Octopus app. Just go to Devices → Settings → Heating flow temperature. Slide the dot to the temperatures you'd like and tap 'Save'. Just make sure they're not set too low during cold snaps and are in line with the temperatures your system has been designed to reach.

How and when your Cosy runs (and when it takes a breather)

Like any good athlete, your Cosy is smart about when it runs, so it won't be on all the time. If your home is already warm enough and you've got plenty of hot water, Cosy will quietly slip into standby mode to save energy.

Cosy heats your home when it gets a call for heat from your primary Pod. That's how it knows your home temperature has dropped below what you've asked for, and it's time to top things up.

There are three main reasons your Cosy might go into standby:

1. Your target temperature has been reached

If the room with your primary Pod has reached its set temperature, Cosy will stop heating. That's why it's worth thinking carefully about where your primary Pod is placed. Every room is designed for a certain temperature. For example, if your Pod is in a room designed to run at 19°C, you might be able to push it warmer – but doing so can risk overheating other rooms in the house.

2. Your home is fully heated (even if the setpoint isn't quite there yet)

Cosy keeps an eye on the Delta-T, which is the actual difference between the flow and return temperatures in your heating system.

If your rooms are already very warm, your radiators may not be able to release any more heat, even when Cosy is running at its lowest output and slowest flow rate. When the Delta-T becomes too small, Cosy takes this as a sign that your home is fully heated and will go into standby, even if the primary Pod temperature hasn't quite been reached.

3. There isn't enough water flowing through the system

Cosy also needs a minimum flow of water to run properly. In some cases, the flow rate will fall below the minimum required rate.

This can happen if:

- Thermostatic radiator valves (TRVs) close down because rooms are already warm
- Parts of an underfloor heating system are closed off by pipe thermostats or actuators

When the flow starts to drop, Cosy's internal pump speeds up to compensate. If it still can't maintain enough flow, Cosy will pause and go into standby, giving valves and underfloor loops time to reopen before starting up again.



Tip: Do not turn off radiators using the TRVs, as this can cause flow issues.

Why turning the flow temperature up doesn't give instant heat

With Cosy, the flow temperature setting isn't an "instant heat" button – it's a maximum target, not the current temperature of the water. When you increase the flow temperature, Cosy doesn't suddenly send hotter water to your radiators. Instead, it gradually builds the water temperature up to that new target in the most efficient way.

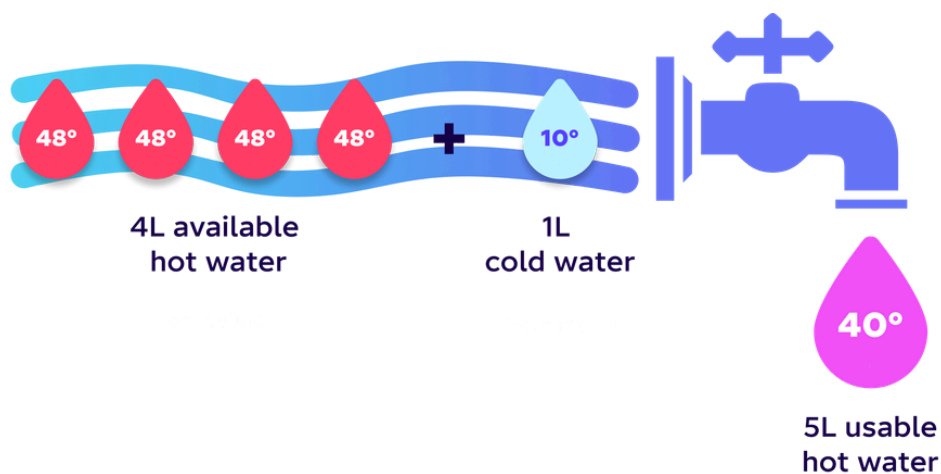
If your system has cooled down, for example, after the heating's been off, Cosy is reheating a large volume of cooler water. Raising the flow temperature limit won't create immediately hotter radiators, because the water still needs time to warm up.

This is a key difference from a gas boiler, which can burn extra fuel to produce very hot water quickly. Cosy works more gently and efficiently, steadily lifting temperatures rather than blasting heat. That's why consistent heating and steady settings give the best comfort and performance. You can find more on recommended temperature setpoints and setbacks in Scheduled and Smart Tariffs (section 5).

Hot water cylinders and usable hot water

To make sure you have enough hot water, we size your cylinder using the industry standard MCS calculation, which suggests most homes need 45 litres (L) of usable hot water per day, per person. To be extra safe, we like to add another 45L whenever the available space allows – though this depends on your home.

Cylinders store hot water most efficiently at 48–50°C. But you won't want the water to come out of the tap at that temperature, as it's too hot. Usable hot water is recommended at 40°C for safety and comfort. To get usable hot water at 40°C from a cylinder of 48°C water, the water from your cylinder will be mixed with cold mains water by the mixing taps in your kitchen or bathrooms.



Defrost cycles

Defrost cycles are a normal part of how Cosy works, especially in cold or damp weather. This is most common in external temperatures between 7°C and -5°C. Above 7°C, the evaporator usually isn't sub-zero, and below -5°C, the air is usually too dry for much ice to build up.

As Cosy pulls heat from the outside air, a thin layer of ice can build up on the outdoor unit. When this happens, Cosy briefly switches into defrost mode to melt the ice and keep everything running efficiently.

How often this happens depends on the weather – colder, wetter days mean more frequent defrosts. During a defrost, heating may pause for a short time, but it'll automatically resume once the ice has cleared. It's all built in, fully automatic, and something you can blissfully ignore.

Short-cycling

Short cycling is when a heat pump turns on and off very rapidly – usually every few minutes – without delivering much heat. That's not normal and can reduce efficiency.

In general, 5 or more start-ups of your heat pump in a 60-minute period would be considered short-cycling. Your Cosy turning itself on and off over longer periods to maintain temperature, heat water, or defrost is completely normal and nothing to worry about.

What this means for your home

Cooler radiators

Because of weather compensation, your Cosy uses cooler water to heat your home compared to a traditional gas boiler. That means your radiators won't feel as hot as the ones you're used to, and that's a good thing! Your old boiler may have heated your home quickly, but only by burning a lot of extra gas.

The trick with your Cosy is to set your heating to come on before you get home or wake up. The perfect preheating time depends on your home, so you might need a few trial runs to get it just right. See Scheduled and Smart Tariffs (section 5) for more tips.

Turn it down, don't turn it off

It takes more energy to heat up than it does to maintain a set temperature. Your Cosy is most efficient when it runs consistently, gently keeping your home warm without working overtime. So if you want to save energy, it's better to turn the set temperature down a bit rather than switching the heat pump off altogether.

Hot water always takes priority

When it's time to heat your hot water cylinder, your space heating will switch itself off. When the cylinder has hit its target temperature, the space heating will turn itself back on. You don't need to do anything, and you shouldn't feel a difference in comfort. However, be careful when setting hot water targets that are very high and/or too long. If you set a multi-hour hot water period with a temperature your cylinder might not easily reach — like 60–65°C — your Cosy may spend too long making hot water.



Tip: We recommend your hot water schedule be no more than 90 minutes for cylinders under 250L and no more than 2 hours for cylinders 250L and above.

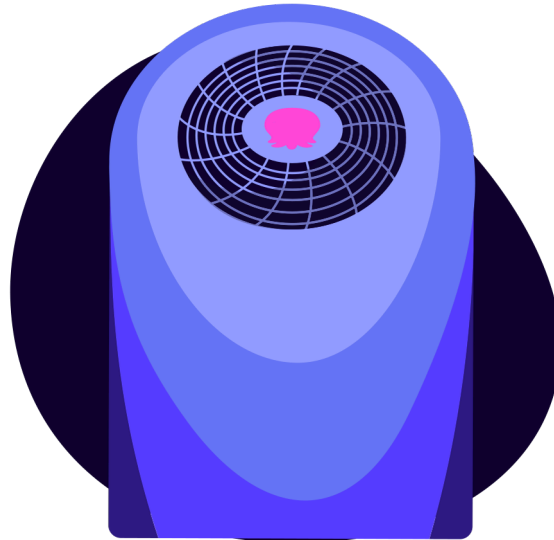
Your Cosy heat pump needs some breathing room

Your Cosy needs space to work efficiently. Keep the area around it clear of garden furniture, pots, leaves, snow or anything else that could block airflow. A gentle wipe with a damp cloth is fine, but avoid harsh chemicals, and don't touch the fins at the back.

4. All Things Cosy

Key Components

Cosy heat pump



This is the unit outside your property which will generate 100% of your space heating and hot water demand, all while saving the planet.

There are three models:

- Cosy 6
- Cosy 9
- Cosy 12

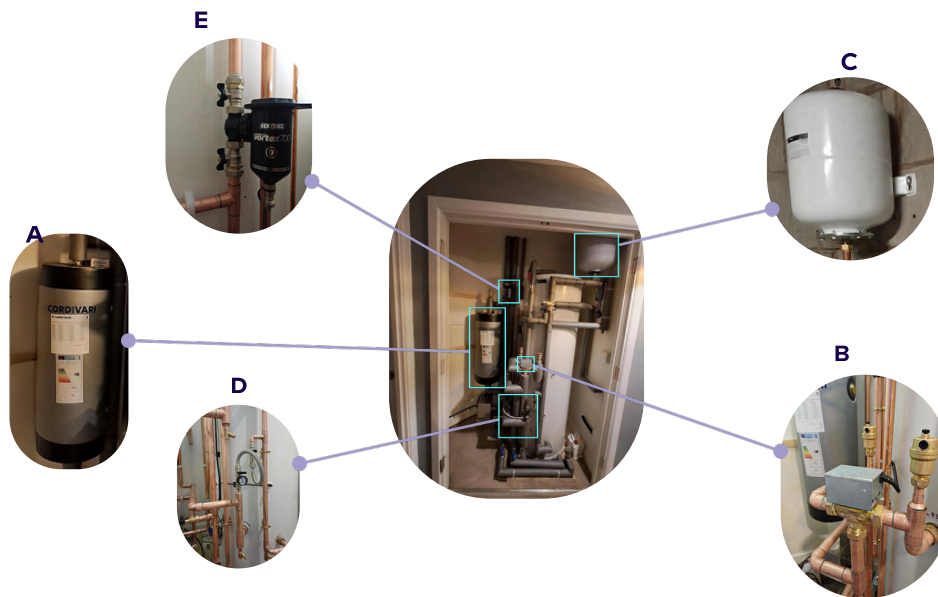
All three models are made from a sturdy, corrosion-resistant, fully recyclable material, so no need to worry about rust.

Other than the difference in how much heat they can generate, physically, they are very similar. The Cosy 9 & 12 are actually identical in size, while the Cosy 6 is shorter by 150mm.

Hot water cylinder

Your cylinder will store any hot water your Cosy generates. This allows your Cosy to spend more time heating your home. But don't worry, heating a hot water cylinder doesn't take long!

A Cosy 9 can reheat a 200L cylinder from 10°C to 50°C in about an hour. In most cases, your whole cylinder won't be 10°C, so you'll usually be reheating a partially cold cylinder.



A - Volumiser or 4-pipe buffer

This is a medium-sized tank (about the size of a golf bag) that holds extra water for various system functions. The same tank will be used whether it's configured as a volumiser or buffer in your system.

- The volumiser increases the amount of water in the system. Heat pumps require a certain minimum volume to run smoothly. A volumiser helps prevent Cosy from switching on and off too often and provides extra water for defrost cycles.
- When configured as a 4-pipe buffer, the same component still adds water volume, but it also hydraulically separates the heat pump from the rest of your heating system. That means your Cosy can circulate water at the flow rate it needs, while your radiators operate independently. This is especially useful in homes with multiple zones, long pipe runs, and lots of radiators.

B - Diverter & zone valves

Depending on the layout of your home and your heating system, we'll install one or more valves.

- Diverter valves direct heat where it's needed — either your radiators or your hot water cylinder. Because Cosy can only heat one at a time, this valve switches between heating your home and heating your hot water.
- Zone valves control which parts of your home receive heat. If you have more than one heating zone, these valves open and close based on your zone settings and schedules.

C - Expansion vessel

A small tank (about the size of a basketball) that helps maintain system pressure.

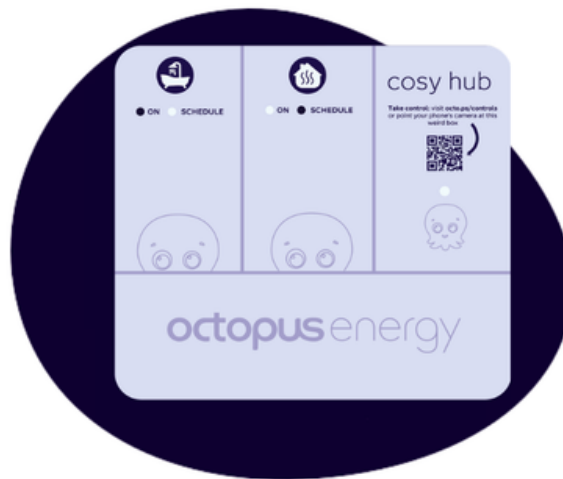
D - Mains filling loop

The filling loop is used to top up water pressure in your heating system if it drops. This will happen if you bleed any radiators or you haven't used your heating for a long time. The pressure will need to be topped back up to 1.5 bar. See how to do this in the User Maintenance (section 6) of this manual.

E - Magnetic filter

A magnetic filter combines a regular filtration element with a magnet to capture tiny metal particles and sludge that build up inside your heating system over time. This stops debris from reaching sensitive parts of your Cosy heat pump, helping it run efficiently and reliably. It's maintained by an engineer during servicing, so there's nothing you need to do.

Cosy Hub



This is the brain of your system. It sends information between your equipment and the Octopus app. You'll control your heating through the Octopus app, but the Hub has handy light indicators and buttons (more on this later) so you can check things like connection and heat status. You can also use it to control your heating in case your WiFi loses connection.

Cosy Pod



Pods are room sensors that let you monitor temperature and humidity. If you don't have your phone to hand or lose WiFi, Pods also have a 'Boost' button, which gets your Cosy to increase space heating production.

It's important you have at least one Pod connected to your Control Hub so the Cosy knows what you need.



Tip: Pods should be mounted on the wall at roughly chest-height and away from any areas with large temperature changes, like windows, external doors and radiators.

Octopus app



The Octopus app lets you control your heating and water from anywhere. You can switch your Cosy on and off, see current and target temperatures, set schedules, track performance and much more.

See the full guide to using your Octopus app here: [Cosy heat pump controls](#)

Setup

Always use the latest version of our Octopus app. You can download it from either the iOS App Store or Google Play. Your installer will help you get set up during your install. If you want to do it yourself, it's this simple:

- Go to your Octopus app and head to the Devices tab at the bottom of the page.
- Select Octopus Cosy at the top of the screen.
- Follow the setup journey in the Octopus app.

Your app will have been pre-configured during your install, so once you've completed setup, you'll be good to go.

Controls

Octopus app-based Cosy controls

The Octopus app is where your Cosy heat pump comes to life. No wall thermostat needed – just your phone.

With a few taps, you can:

- Switch heating and hot water on and off
- Set schedules to fit your routine
- Adjust temperatures whenever you like

Cosy Pods around your home send live temperature and humidity info to the app, so every room stays comfy and evenly warm. You can also check performance, manage boosts and see your system mode – whether you're at home or out and about.

On a smart tariff? The app helps Cosy use electricity when it's cheapest, keeping your home cosy and your energy bills lower.

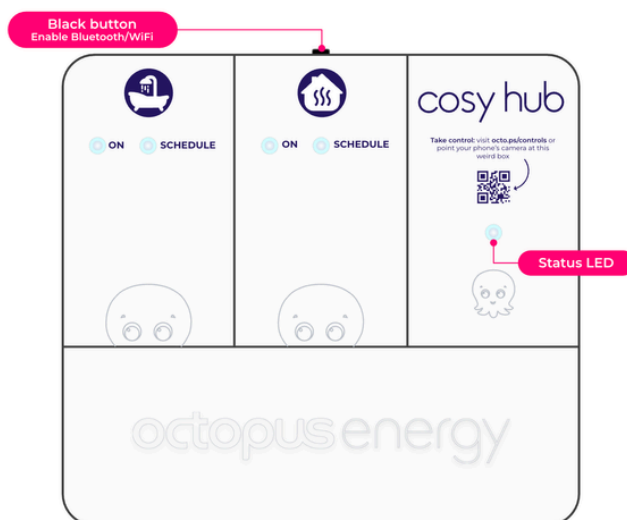
Behind the scenes, the app and your Cosy Hub quietly do the hard work, making small adjustments so your home stays comfortable, efficient and reliably cosy.

Your Cosy Hub

The Cosy Hub is a small smart device that sends information back and forth from your heat pump to your app. You'll actually control your heating through the Octopus app, but the Hub itself has easy light indicators so you can check things like connection and heating or hot water mode status.

Hub controls:

- **Set up button** - Follow the setup instructions in the Octopus app and press the button when prompted (the engineer who installs your Cosy should walk you through this process, too).
- **QR code** - Scan to set up your heating controls in the Octopus app. Simply open your phone's camera, scan the QR code, tap the link and follow the setup journey in the Octopus app. Alternatively, you can also go to the Octopus app → Devices tab → "Add Device" → Follow the onscreen instructions and scan the QR code on your Control Hub.
- **Heating mode button** - Schedule your heating mode, or switch it on or off.
- **Water mode button** - Schedule your water mode, or switch it on or off.



- **Cosy Hub status indicator** – The colour of the LED tells you the status of your Cosy Hub and/or Cosy heat pump.



Solid white = Cosy Hub is connected & online, everything is working as it should



Solid yellow = Lost Wifi connection

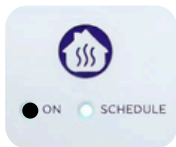


Solid red = Primary Cosy Pod disconnected (more on this later)

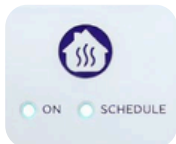


Flashing red = Cosy Heat Pump has a fault

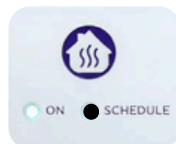
Heating modes



On – Your heat pump is on. It'll start heating if you manually set your target temperature higher than the current temperature in the Octopus app. Turning your heating on from the Cosy Hub will set your target temperature to 20°C by default.

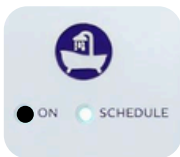


Off – Your heating is off, and the default target temperature for this mode is 7°C (frost protection). This means your heat pump will turn on automatically if the indoor temperature falls below 7°C to protect against frost, which could damage your home.

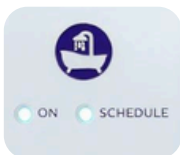


Schedule – Your heat pump is running on a heating schedule.

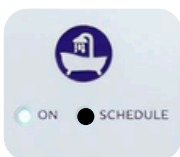
Hot water modes



On - Your heat pump will keep your water at the default target temperature (which can be changed in the Octopus app settings).



Off - Your hot water is off.



Schedule - Your heat pump is running on a hot water schedule.

Your Cosy Pod



A Cosy Pod is a temperature and humidity sensor that lets you control and monitor the temperature in specific parts of your home.

Each Pod will be assigned to a room in your home, so you can easily track temperature and humidity using the Octopus app.

In the app, you'll be able to choose one Pod as the "primary Pod" for each heating zone in your house (your installer will talk to you about these). When you adjust your desired temperature in the Octopus app, your heat pump will warm the house based on the temperature readings from your primary Pod. Whichever Pod you select as your "primary" will be your thermostat sensor.

Pod controls:

- Heating boost button – Press to switch “Boost” on or off.

How the heating boost works from a Cosy Pod:

- If the current temperature is below 19°C and you’re boosting from your Cosy Pod, the target temperature will automatically set to 21°C for 1 hour.
- If the current temperature is above 19°C and you’re boosting from your Cosy Pod, the target temperature will automatically be set to 2°C higher than your current temperature for 1 hour.
- Cosy Pod status indicator – The colour of the LED tells you the status of your Cosy Pod.



Solid red (times out after 15 seconds) = lost connection to Cosy Hub



Solid green (times out after 15 seconds) = boost is enabled



Fading orange (times out after 3 seconds) = boost is cancelled



Flashing red (once every 30 seconds) = low battery

Any other colour or please get in touch

Primary Pod and how to change it

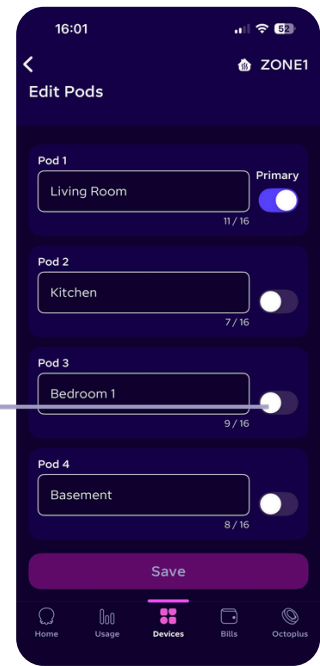
The primary Pod is the main temperature sensor Cosy uses to decide when to heat your home. Each heating zone has one primary Pod assigned to it (your installer sets this up). When you change the target temperature in the app, Cosy looks at the temperature reading from that primary Pod and heats the whole zone until that room is warm enough.

Other Pods still measure temperature and humidity, but the primary Pod is the one “in charge”. Picking the right room – usually one you use a lot – helps Cosy heat your home comfortably and efficiently. It’s important that you don’t use a thermostatic radiator valve (TRV) in the room where your primary Pod is located, as they can “fight” with one another. So if you select a room with a TRV, ensure it’s all the way open or remove the head so it can’t close.



Select the heating zone and on the following page select "Edit"

To change your "primary Pod", simply toggle another Pod and click "Save"



Battery replacement

You can track your Pod battery status in the Octopus app. When the battery is running low, your Cosy Pod will also flash red every 30 seconds.

To replace the batteries, you will need 2x AAA batteries. Once they've been changed, your Pod will automatically reconnect to your Hub.

5. Schedules and Smart Tariffs

To get the lowest running costs from your Cosy heat pump, pairing it with the Cosy Octopus smart tariff makes a real difference. This tariff offers cheaper electricity during specific “dip” periods and higher prices during peak times. Cosy is designed to make the most of this, shifting when it heats your home and hot water, without sacrificing comfort.

By setting your heating and hot water schedules around the cheaper dip periods, Cosy can gently store heat in your home and hot water cylinder when electricity costs less. That stored warmth then carries you through the more expensive peak periods, so Cosy doesn't need to work as hard when prices are higher.

Hot water is especially well-suited to this, as it can be heated during a dip and stored for many hours. With the right schedules in place, Cosy quietly does the clever stuff in the background to keep your home warm, showers hot and energy bills as low as possible.

Let's look at how to do that.



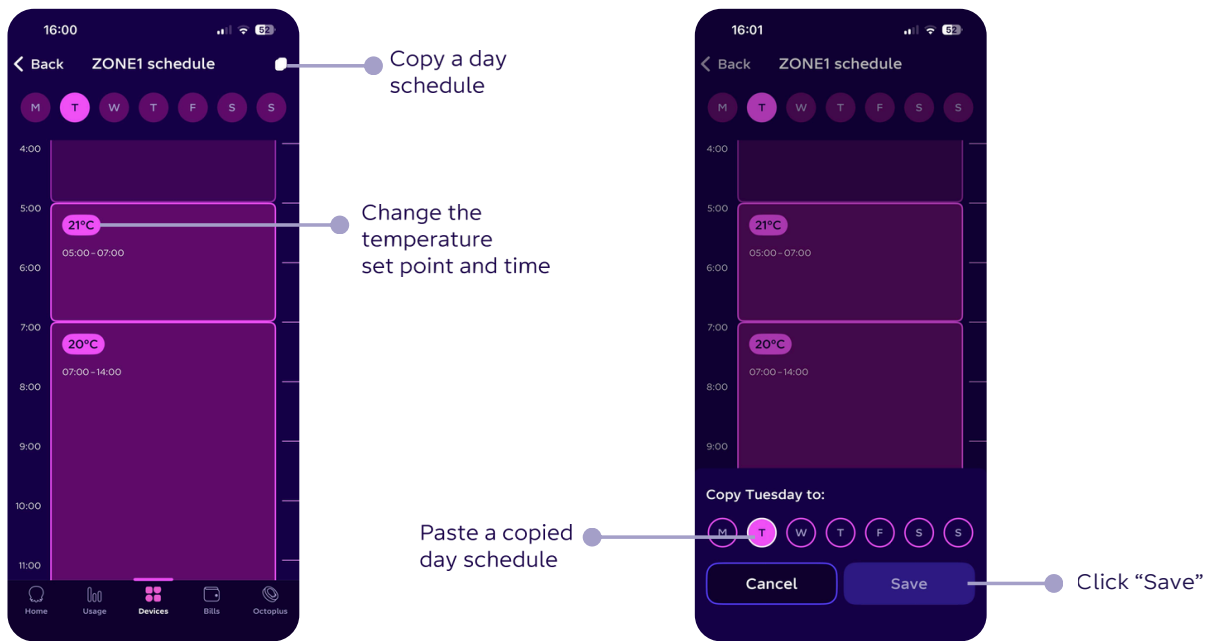
Note: Going on holiday? If you don't need heating or hot water for a couple of days (or longer), you can turn your heating and hot water schedules “off” in your app or on the Hub. Your Cosy controls won't let the temperature drop below 7°C, which protects your pipework from frost and makes it easier for the Cosy to heat your home when you return.



Tip: Turn the heating and hot water schedules back “on” in the app the day before you return, so your home will be cosy and have plenty of hot water.

Setting your heating schedule

The best way to run your Cosy cost-effectively is on a schedule. The controls in your Octopus app make it easy to copy one daily schedule across for every day of the week, or to set each day individually to match your needs.



If you're on a smart tariff, it's best to set your heating and hot water schedules to take full advantage of variable pricing. For our Cosy Octopus tariff, that means boosting your heating slightly during the dip periods so you can avoid heating your home as much during the periods that cost more.

Heating schedule temperatures

- **Dip rate periods** - set your temperature 1-2°C higher than usual (e.g. 22°C if you normally keep it at 20°C) to store cheaper heat. This is also the best time to heat water.
- **Standard rate periods** - keep your usual home temperature (around 20-21°C, which is what your system was designed for).
- **Peak rate periods** - lower your temperature by 1-2°C to save money while using stored heat.

Avoid turning the heating off when popping out, as reheating uses more energy. Heat pumps work best at a steady temperature.

A typical heating schedule on our Cosy Octopus smart tariff

Time period	Temperature
Midnight to 4 AM (Standard rate)	19–20°C
4 AM to 7 AM (Morning dip)	21–22°C
7 AM to 1 PM (Standard rate)	20°C
1 PM to 4 PM (Afternoon dip)	22°C
4 PM to 7 PM (Peak Rate)	19°C
7 PM to Midnight (Standard and night dip)	20°C



Note: Remember, depending on which room your primary Pod is placed in, that room's design temperature at the very coldest time of the year may not allow your Cosy to reach above its design setpoint.

Setting your hot water schedule

Your Cosy heat pump makes hot water based on a schedule and stores it in your water cylinder. Depending on usage, it can last 8–12 hours. So you can heat the cylinder at night or in the early morning and potentially have hot water all day long.

We suggest setting your hot water storage temperature to 50°C, as this is best for efficient storage. (60°C isn't necessary and will take longer to heat the cylinder).

Hot water takes priority

Your Cosy can heat your radiators or heat the water in your cylinder – but it can't do both at once.

If you ask your Cosy to do both at the same time, it will always prioritise hot water, and then continue heating your home once the cylinder has hit the target temperature.

No need for a legionella purge

Which is good news, as a legionella purge typically means raising your hot water cylinder to 60°C for 1 hour every week, increasing your running costs.

Although legionella bacteria can build up in water temperatures of 20–45°C, most customers choose to heat water to around 45–55°C, and your cylinder is unlikely to stagnate for more than 24 hours because you'll be regularly using it. This means the chance of dangerous legionella build-up is extremely unlikely.

This is why your installer won't set up a hot water schedule for a legionella purge during your installation.



Tip: If you choose to set up a legionella purge, simply set a hot water schedule to raise your hot water to 60°C for one hour a week. We recommend doing this during a dip period on the Cosy Octopus smart tariff to minimise costs.

Typical hot water schedule on an Octopus Cosy smart tariff

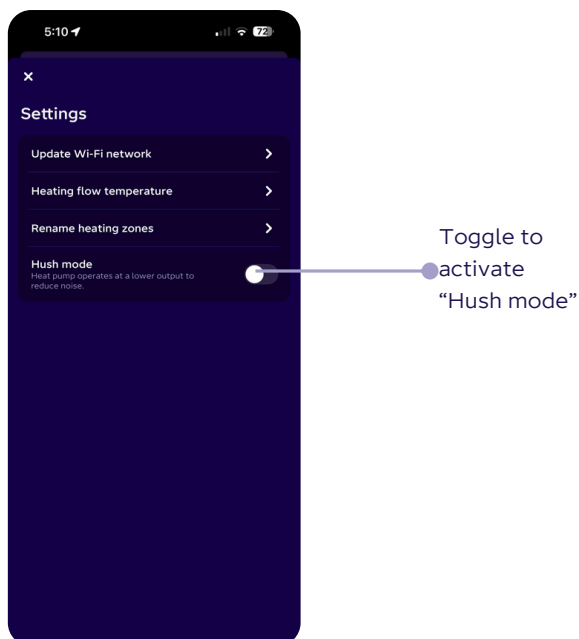
- **Morning Dip (4 AM - 5 AM):** Ideal for morning showers – top up your tank and leave enough time to heat your home too.
- **Afternoon Dip (1 PM - 4 PM):** Great for evening showers or kids' baths. A 30-minute reheat will keep the water warm for bedtime.

If you need extra hot water, our MCS design ensures your cylinder is correctly sized for your property, but if you expect you'll need a lot of hot water, follow the tips below so you don't run out:

- Make sure the hot water is up to your set temperature before everyone starts taking baths/showers.
- Keep the hot water schedule on a bit longer so your heat pump continues generating hot water as your peak usage period begins.

Hush mode

Hush Mode is a feature that customers can enable via the Octopus app to reduce the noise emitted from the Cosy unit.



When activated, Hush Mode limits the compressor speed and fan speed to 60%, resulting in quieter operation. This mode will allow your Cosy to achieve your target temperature most of the year; however, in the colder months, you will need to turn this off to allow your compressor and fan to operate at full speed.

6. User Maintenance

Luckily, the Cosy is pretty low-maintenance if you keep the airflow path clear and call in the installer for upkeep and repairs. To keep things running as efficiently as possible, follow these useful tips:

Bleed your radiators

This removes trapped air that can stop heat from circulating properly. If a radiator feels cold at the top, but warm at the bottom, air is usually the culprit. Removing it helps your Cosy heat pump run more efficiently and keeps rooms evenly warm.



Tip: To bleed a radiator, turn your heating off and let it cool. Use a radiator key to slowly open the bleed valve until you hear air escape, then close it once water starts to drip out. After bleeding, check your system pressure and top it up if needed.

If your home has more than one floor, you should bleed the downstairs radiators first and start with the radiator that's farthest away from the cylinder. Once you've finished with the downstairs radiators and moved upstairs, again, start with the radiator farthest from the cylinder.

Read our step-by-step guide: [How to bleed your radiator](#)

Topping-up system pressure

Your heating system needs the right water pressure to spread heat evenly around your home. If the pressure drops too low, Cosy may struggle to move heat efficiently, which can affect comfort and performance. Topping up the pressure keeps everything running smoothly and helps protect the system.

Pressure is most likely to drop if you haven't used your heating for a while, usually after the warmer months or after bleeding your radiators.



Tip: To top up pressure, use the mains filling loop (usually a small silver hose with one or two valves). Slowly open the valve(s) and watch the pressure gauge rise. When it reaches the recommended level (between 1–1.5 bar cold), close the valve(s) fully.

Read our step-by-step guide: [Top up your heat pump pressure \(the easy way\)](#)

Leave your radiator valves (TRVs) open

When using fossil fuel boilers, some customers turn their thermostatic radiator valves (TRVs) down, or completely off, to save energy.

While TRVs work well with boilers, heat pumps work differently and are most efficient when all radiators are fully open to maintain the flow rate. So, for the best results, keep radiator valves open and let the warmth spread evenly throughout your home!

Give it space

Your heat pump needs room to breathe. As a rule of thumb, make sure there are 1.5 metres of clear space in front of or above the heat pump. Don't store anything behind it, as this can cause damage to important parts of the Cosy.

Minimum clearances:

- 500mm of clear space on either side.
- 750mm minimum of clear space in front of the fan.
- 250mm of clear space at the rear of the heat pump, to keep the air flowing.

Keep the fan grille clear

Fingers, big or small, shouldn't fit through the fan covering, but other things, like sticks or toys, can cause damage to the fan.

Use a soft brush to clear away any garden debris like leaves, bushes and branches to prevent any potential blockages. Take care when brushing behind the heat pump, especially around the pipework and cables. While you're there, check the flow and return pipes for any leaks or damage. Arrange a service if you need to.

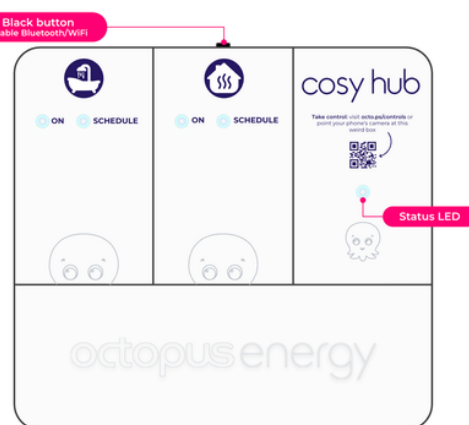
General maintenance: Hubs and Pods

- Always use the Cosy Hub and Pods according to the user guide.
- Avoid placing Pods in areas of extreme temperature or condensation, e.g., windows, external doors, kitchen hobs/ovens or radiators.
- Keep Pods away from water and other liquids at all times.
- When replacing batteries in the Pod, always change both at once.
- Make sure nothing is leaning against the Pods or the Hub that might accidentally activate the buttons, e.g., if the Hub is in an airing cupboard, keep towels and bedding clear of the Hub.

Pairing Cosy Pods

The Cosy Hub needs to be put into 'AP Mode' to enable access to the installer website. Follow the steps below:

1. When the Cosy Hub is first powered up, the status LED should change from flashing purple to solid red.
2. Enable 'AP Mode' by pressing the black button at the top for 10 seconds until the status LED goes solid blue.
3. Go to your Wi-Fi settings on your tablet (or laptop or mobile), select OCTO-COSYHUB.
4. Locate the password on the side of the Cosy Hub or on the inside of the wiring cover.



Warning: When accessing 'AP mode', do not change any other settings, as this may negatively affect your system's performance.

Before attaching the Pod to the wall plate, pair it to the controller as follows:

1. Ensure Cosy Hub 'AP Mode' enabled (status LED is solid blue); instructions above.
2. Remove the Cosy Pod battery tab, hold the Pod button until the Pod status LED flashes purple.
3. Scan the QR code on the back of the Cosy Pod with your tablet. The first Cosy Pod you scan will become the primary Pod for the zone.
4. Scanning will automatically open the 'Cosy Pods Page 'Link room sensor' page on the installer site.
5. If there is more than one heating zone, the Pod must be assigned to a zone.



Note: Do you have multiple heating zones? If you do, you will need your installer's support to add additional Pods.

Note: If your Pod gets stuck pairing, try resetting it; instructions below.

Resetting Cosy Pods

1. Remove battery.
2. Hold the boost button.
3. Put the battery back in while holding the boost button.
4. Keep holding until the LED stops flashing red, and then let go.



Take care when gardening and cleaning your home

- **Cosy unit** – The outer casing of the Cosy is impact-resistant and can survive most bumps and knocks, but the back of the heat pump – the bluish metal bit called the evaporator – can be damaged easily. It's important to take care when gardening or cleaning. If any cracks appear in the casing or if the evaporator gets damaged, get in touch as soon as possible.
- **Hub & Pods** – Do not use solvents or abrasive cleansers to clean the Hub or Pods. Use a soft and dry cloth only.

Never open the heat pump covers

To make sure you stay safe and don't cause damage to your heat pump, never open its covers or the fan cap. Your Cosy should only ever be opened by a trained professional. Contact your installer if you need help.

Contact your supplier if you notice excessive ice build-up

Your Cosy will go into defrost mode to remove ice build-up, but if you notice that ice continues to build up on or inside your heat pump, call your installer, as there could be a problem. Your installer will be able to take a look.

Clean away any moss or algae

Over time, you may get moss or similar plant life growing on your Cosy. This is the UK after all – if you stood still long enough, you'd grow moss too! But a bit of green stuff is nothing to worry about and can easily be removed with a damp cloth. When wiping, stick to the casing and avoid the fan, evaporator, and pipework as these can be extremely hot or cold and could cause an injury.

A soft brush can be used to clean the evaporator at the back of the heat pump. Don't try to clean the evaporator with a cloth or with your hands, as the fins are sharp and can injure you. Never use a hose, pressure washer, or metal brush to clean your evaporator either. When in doubt, give your installer a call for a service or just some advice.

Don't worry about rainwater

Your Cosy can cope with rainfall and will work as normal. The rain will pass through the fan, down the airflow path, and into the drip tray, where it will drain away through the same drain used for all the water created during defrosting. Don't worry about all the fancy gubbins inside your Cosy. They're totally separated from the elements by the fan duct. Water, snow, ice, and other materials can't enter the inner workings.

7. Troubleshooting

The good news is that it's pretty unlikely that anything will go wrong with your heat pump, but if you're worried that something isn't right, contact your installer for advice.

General guidance

I've spotted a leak or water isn't draining away

It's normal for heat pumps to create water while operating, but this should drain away easily. If you've found a puddle of water, check that there's no obvious debris or blockage that can be carefully cleared away. If you can't see anything, or you've spotted a leak, contact your installer – don't try to fix it yourself.

My heat pump is louder than usual or making strange noises

You'll get used to the way your heat pump sounds when it's working normally. But sounds that are unfamiliar can tell you that your heat pump needs some attention.

Loud gurgling, grinding or squealing sounds are unlikely, but if they happen, contact your installer, and they will investigate.

In colder weather or during your hot water cycle, your heat pump will be working harder, so it may seem louder than in the warmer months. This is normal and nothing to worry about.

My heat pump isn't working (and has switched off)

This could be due to a loss of electricity supply:

- Check that both the indoor and outdoor units are switched on.
- Check if your app is connecting to the system.
- Check your circuit breaker for a tripped circuit.

If all three are fine, contact your installer, and they will investigate.

My heat pump isn't heating my home enough

Sometimes the feeling of underheating can be just that — a feeling. But it's always worth checking a few things to make sure everything is in order:

- The room your Pod is in and the temperature that room has been designed to reach (you can usually find this in your design documents). Most rooms are designed to 18°C or 21°C.
- If your Pods are located near anything that could be affecting the temperature readings, e.g. by an open window or door.
- What your current setpoints are and whether you've left enough time for temperatures to increase. It will take longer to get to a temperature of 21°C if there's previously been a setpoint of 16°C, compared to if it was previously 18°C. This will also be impacted by the external temperature (see section 5).
- Check your TRVs are open and your system pressure is correct (see section 6), especially if you have your primary Pod in a room with a TRV.
- You may still have Hush Mode activated and are limiting your Cosy's compressor speed and fan speed to 60%. Although this makes the Cosy quieter, it will struggle to hit your target temperature in colder months (see section 5).
- If you've taken these steps and it still doesn't feel right, contact your installer, and they will investigate.

My heat pump is costing too much to run

If you feel your heat pump running costs are too high, there are several things that you can do to improve this:

- Check our guidance on our smart tariffs (see section 5)
- Check your setpoints for heating and hot water to make sure they're not too high (see section 5).
- Check the location of your Pods. If your primary Pod is located in an area that brings down its temperature (i.e. near a window or door), it could be struggling to reach target setpoints and cause your heat pump to run more often than it needs to.

My water temperature is dropping too quickly

In some cases, you may see your water temperature reading drop quickly on your app. This is because the temperature sensor is located near the bottom of your cylinder, next to the incoming cold feed. This is nothing to worry about, as hot water is always taken from the top of the cylinder. Having the sensor near the bottom of the cylinder is part of the design, as it means the tank will reheat itself as soon as it needs to.

As long as your water is warm, you can disregard any low temperature readings shown in the app. If your water isn't warm, please contact your installer.

My heat pump is overheating my home

If the heat pump is running constantly, your setpoints could be too high. Check the primary Pod temperature and that they're working in line with your design temperatures. (See 'Your Cosy Pod' in section 4).

Be sure to check your Pods and your app to make sure the 'Boost' function isn't on. It's also a good idea to take a look at your Hub in case there are any fault indications showing. If everything seems to be working as it's supposed to, but you're still experiencing overheating, contact your installer for help.

Cosy Hubs and Pods

Check the Status LED colour on your Cosy Hub and/or Cosy Pod, to help identify what's causing an issue.

Device	LED Colour	Meaning	How to fix
Cosy Hub	Solid yellow	Lost WiFi connection	Make sure your WiFi router is switched on and working. Your Cosy Hub should automatically try to reconnect.
Cosy Hub	Solid red	No primary Pod found	Head to the Octopus app to identify which primary Pod has disconnected. Check battery level and change if needed (2x AAA). Move Pod within 5m of Hub.
Cosy Hub	Flashing red	Heat pump fault	Call 0808 196 6842 or email aftercare@octopus.energy
Cosy Pod	Solid red (15s)	Lost Hub connection	Move Pod within 5m of Hub – it should auto-reconnect.
Cosy Pod	Flashing red (30s)	Low battery	Replace with 2x AAA 1.5V Alkaline batteries (never rechargeable).

8. Technical Specifications

Specifications		Cosy 6	Cosy 9	Cosy 12
Nominal capacity	kW	6	10	12
Heat capacity (A-5/W50)	kW	5.6	8.7	11.2
Minimum heat capacity (A10/W35)	kW	1.9	3.0	3.0
SCoP at 35°C flow temperature	-	4.31	4.36	4.60
SCoP at 65°C flow temperature	-	2.84	2.99	3.40
Dimensions (W x H x D)	mm	855 x 1125 x 595	855 x 1375 x 595	855 x 1375 x 595
Volume	m ³	0.44	0.56	0.56
Weight	kg	100	125	125
Sound power level - (A7/W55)	dB(a)	58	56	61
Sound power level - (A7/W65)	dB(a)	58	57	61
Maximum flow temperature	°C	70	70	70
Maximum operating pressure	Bar	32	32	32
Maximum flow rate	L/min	17.3	28.9	34.5
Minimum flow rate	L/min	7	7	7
Minimum system volume	L	90	135	135
Refrigerant type	-	R290	R290	R290
Refrigerant charge weight	kg	0.65	0.95	1.30
Electrical supply	-	230V/1ph/50hz	230V/1ph/50hz	230V/1ph/50hz
Starting technology	-	Inverter	Inverter	Inverter

Specifications		Cosy 6	Cosy 9	Cosy 12
Compressor type	-	Scroll	Scroll	Scroll
Rated max current	amps	16	20	32
MCB type	-	B Curve	B Curve	B Curve
RCD type	-	B	B	B
Maximum cable length (MODBUS)	m	50	50	50
IP rating	-	IPX5	IPX5	IPX5
Fan maximum power	watts	140	170	275
Fan maximum speed	rpm	940	940	1400
Primary pipe run (max advised)	m	20	25	25

Conforms to EN14511 standard

Octopus Energy Heating Limited declares that the radio equipment types IC1 and RS1 comply with UK SI 2017 No.1206 and EU Directive 2014/53/EU. Full declaration text available at: octopus.energy/blog/Cosy-Octopus-heat-pump/. Max. radiated power: <20dBm. Frequency: 2400 – 2483.5 MHz.