



Air conditioning and heat pumps

Global Warming Potential of just 3!



Choose home comfort the planet will thank you for

Air conditioners or heat pumps are becoming more popular with homeowners every year. It's no surprise! Cool in summer, warm in winter... what's not to like?

Like any home appliance, though, every choice we make comes with a cost to the environment.

Pioneer air conditioning has been created to reduce that impact, making it a very cool choice for anyone with the planet at heart.



A cooler refrigerant

All Pioneer air conditioners and heat pumps use either M50 or M60 hydrocarbon refrigerant. (Refrigerant is what moves heat energy from one part of your system to another.) Hydrocarbons are naturally occurring organic compounds, made up entirely of hydrogen and carbon. Hydrocarbon refrigerants are environmentally friendly, non-toxic and don't deplete the ozone layer – which makes them a great step up from traditional alternatives such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs).









An environmentally friendly refrigerant

To get technical for a moment, hydrocarbon refrigerants like those used in Pioneer air conditioners have an extremely low Global Warming Potential (GWP) of 3, which is great for the planet.

Why Pioneer is a smart choice

Pioneer has been an innovator in home comfort across Australia for over 30 years and now, in partnership with HRV, brings that innovation and experience to New Zealand. Here's why a heating and air conditioning brand that's trusted across the Tasman is a great choice for your home here in Aotearoa.

-  Heat pump and air conditioning specialists – it's all we do.
-  Environmentally friendly choice through efficient design and hydrocarbon refrigerants.
-  Massive 7-year warranty on everything we make. Unbeatable peace of mind!
-  Trusted HRV installation and service teams
-  Affordable options available to replace your existing system with Pioneer technology.
-  Choice of single-room (Blade Series) or whole home system (Pro Series)



An environmentally friendly refrigerant

| | PIONEER M50 | PIONEER M60 | R-32 | R410A | R-22 |
|--|--|---|---|--|--|
| Composition | 4 components Hydrocarbons | 4 components Hydrocarbons | Single component - Hydrofluorocarbon | 2 components Hydrofluorocarbon | Single component Hydrochlorofluro- -carbon |
| Chemical formula | 75% propane C ₃ H ₈ 16% propylene C ₃ H ₆ 8% ethane C ₂ H ₆ <1% Butane C ₄ H ₁₀ | 60% propylene C ₃ H ₆ 35% propane C ₃ H ₈ 5% isobutane C ₄ H ₁₀ 5% IsoButane | CH ₂ F ₂ | CH ₂ F ₂ /CHF ₂ CF ₃ | CHCLF ₂ |
| Boiling Point (°C) | -50 to -10 | -50 to -10 | -51.7 | -51.5 | -40.8 |
| Ozone depletion potential (ODP) | 0 | 0 | 0 | 0 | 0.055 |
| Global Warming Potential (GWP) | 3 | 3 | 675 | 2090 | 1810 |
| Pressure | 0.8 | 0.95 | 1.6x | 1.6x | 1x |
| Refrigerant Oil | Synthetic/Mineral Oil | Synthetic/Mineral Oil | Synthetic Oil (FW50S) | Synthetic Oil (FV50S) | Mineral Oil |
| Toxicity | None | None | None | None | None |
| Flammability | A3 Flammable | A3 Flammable | A2L Mildly flammable | A1 Non-flammable | A1 Non-flammable |



Pioneer Blade Series

Heat or cool one room affordably and efficiently



Sometimes, only one or two rooms in the home need some extra heating or cooling (often a living room, bedroom or home office).

The Pioneer Blade Series features high-wall heat pumps designed to quickly and efficiently heat or cool one room. Inside, the unit delivers warm or cool air where you need it, as set on the handy remote control unit or smartphone app. Outside, an efficient air conditioning unit takes ambient heat from the air or removes it from your room.



Engineered for Kiwi conditions:

New Zealand winters are hard on heat pumps due to the outside ambient conditions being cold and damp (high humidity) so Pioneer has developed special heat exchangers for New Zealand with higher refrigerant fluid velocity, higher refrigerant turbulence, higher surface area and large temperature differential – all contributing to more efficient heat transfer and shorter defrost times.



Easy on the planet: M50 refrigerant also means your Pioneer Blade Series heat pump has extremely low global warming potential (GWP) and an ozone depletion potential (ODP) of zero. That makes choosing Pioneer a great way to help take care of our planet!



M50 refrigerant: Pioneer's revolutionary M50 hydrocarbon refrigerant operates safely, with a low environmental impact.



Wi-fi control: coming home to a room that's welcoming and warm (or cool in summer) is easy – your Blade Series heat pump is wi-fi enabled so you can set the desired temperature from your Pioneer smartphone app.

By the numbers: Pioneer Blade Series specifications

Specifications are correct at time of printing but are subject to change as we continuously improve the Pioneer range.

| MODEL - INDOOR | | HPR-09A2I | HPR-12A2I | HPR-18A2 | HPR-24A2I |
|---------------------------------------|---|-----------------------------|------------------------|------------------------|---------------------------|
| MODEL - OUTDOOR | | HPR-09A2O | HPR-12A2O | HPR-18A2O | HPR-24A2O |
| Cooling | Rated capacity (W) | 2,500 | 3,500 | 5,000 | 6,700 |
| | Rated input power (W) | 630 | 930 | 1540 | 1950 |
| | AEER / EER ¹ (W/W) | 3.941 / 3.984 | 3.664 / 3.690 | 3.355 / 3.371 | 3.424 / 3.427 |
| | Energy Star rating (cool/mid/hot) | 4.5/4.5/4.5 | 5/4.5/5 | 4/4/4 | 5/4.5/4.5 |
| Heating | Rated capacity (kW) | 2,600 | 3,600 | 5,100 | 7,000 |
| | Rated input power (W) | 550 | 880 | 1350 | 1800 |
| | ACOP/COP ₂ (W/W) | 4.747 / 4.807 | 4.038 / 4.070 | 3.880 / 3.899 | 3.874/3.866 |
| | Energy star rating (cool/mid/hot) | 3/3.5/4 | 2/3/4 | 2/2.5/3.5 | 1.5/2.5/4 |
| | Power supply (V-ph-Hz) | 240-1-50 | 240-1-50 | 240-1-50 | 240-1-50 |
| | Noise indoor (dBA) | 39 | 39 | 44 | 47 |
| | Noise outdoor (dBA) | 52 | 53 | 55 | 57 |
| | Compressor type | Rotary | Rotary | Rotary | Rotary |
| | Refrigerant (type/qty) | M50/260g | M50/290g | M50/420g | M50/510g |
| | Additional charge (g/m) | 10g/m | 10g/m | 10g/m | 10g/m |
| | Refrigerant copper pipe sizes (liq/gas) mm and inches | 6.35/9.52 1/4 , 3/8 | 6.35/9.52 1/4 , 3/8 | 6.35/12.7 1/4 , 1/2 | 6.35 / 15.87 1/4 , 5/8 |
| | Pipe extension length min/max (m) | 3-20 | 3-20 | 3-25 | 3-25 |
| | Maximum Pipe height (m) | 10 | 10 | 10 | 10 |
| | Indoor | Dimensions (l x h x w) (mm) | 850x291x203 | 850x291x203 | 972x302x224 |
| Packaging dimensions (l x h x w) (mm) | | 930x368x297 | 930x368x297 | 1047x377x314 | 1158x413x352 |
| Net/gross weight (kg) | | 10/12.5 | 10/12.5 | 13.5/16.5 | 16/19 |
| Outdoor | Dimensions (l x h x w) (mm) | 830x540x325 | 830x540x325 | 890x598x372 | 890x598x372 |
| | Packaging dimensions (l x h x w) (mm) | 879x605x366 | 879x605x366 | 941x663x412 | 941x663x412 |
| | Net/gross weight (kg) | 27/30 | 27.5/30.5 | 35.5/40 | 37/41.5 |
| Operating Range (Outdoor) | Cooling (°C) | 18 to 43 | 18 to 43 | 18 to 43 | 18 to 43 |
| | Heating (°C) | -7 to 43 | -7 to 43 | -7 to 43 | -7 to 43 |

1. AEER/EER – Annualised Energy Efficiency Ratio / Energy Efficiency Ratio. AEER/EER @ Standard Cooling Capacity Test (T1).

2. ACOP/COP – Annualised Coefficient of Performance / Coefficient of Performance. ACOP/COP @ Standard Heating Capacity Test (H1).

Pioneer Pro Series

Ducted heat pump systems



A Pioneer Pro Series ducted heat pump system is your ultimate heating and cooling choice.

A quiet, powerful central air conditioning unit is concealed in your roof space, connected to a single outside unit against the wall of your house. All that's visible in each room is the ceiling diffuser delivering warm or cool air as needed, along with a return air grill and a wall-mounted controller to manage your system.

Connecting the two units, moving heat energy out during the summer and inside during the winter, is our revolutionary M60 hydrocarbon refrigerant. Safe, easy on the planet and an energy saving of at least 35% when compared to R410A refrigerant¹.



Engineered for Kiwi conditions: Like the Blade Series, the Pioneer Pro Series has been developed with heat exchangers specially suited to New Zealand's climate, delivering more efficient heat transfer and shorter defrost times.



Total control: The touch control is a wall mounted controller that is centrally located for you to set your desired temperature and automatically set it to turn on and off at a time that's convenient for you.



M60 refrigerant: Pioneer's revolutionary M60 hydrocarbon refrigerant operates safely, with a low environmental impact.



Safe for you and the environment: Pioneer ducted air conditioning systems have a global patented hydrocarbon refrigerant gas safety detection system. A refrigerant gas detector is located inside the indoor unit (located in the roof cavity). If a leak is detected the system will immediately go into a safety pump down, pumping all the refrigerant into the outdoor unit and then shutting the whole system down.



Easy on the planet: that M60 refrigerant also means your Pioneer Pro Series heat pump system has extremely low global warming potential (GWP) and an ozone depletion potential (ODP) of zero.

By the numbers: Pioneer Pro Series specifications

Specifications are correct at time of printing but are subject to change as we continuously improve the Pioneer range.

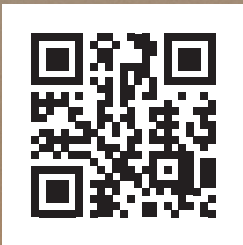
| MODEL - INDOOR | | VPE-36A1 | VPE-48A1 |
|----------------|---|----------------|----------------|
| | Power supply (V-ph-Hz) | 240-1-50 | 240-1-50 |
| | Air flow (m ³ /h) (hi/med/low) | 1600/1200/1000 | 2250/1700/1450 |
| | Supply air spigot size (mm) | 1118 x 191 | 1118 x 191 |
| | Return air spigot size (mm) | 1100 x 235 | 1100 x 235 |
| | Drain size (mm) | 25 | 25 |
| Indoor | Dimensions (lxdxh) (mm) | 1390x715x280 | 1390x715x280 |
| | Packaging (lxdxh) (mm) | 1593x848x350 | 1593x848x350 |
| | Net/gross weight (kg) | 41/47 | 42/48 |

| MODEL - OUTDOOR | | VPC-36A1 | VPC-48A1 |
|---------------------------|---|------------------------|------------------------|
| | Power supply (V-ph-Hz) | 240-1-50 | 240-1-50 |
| Cooling | Rated capacity (kW) | 10 | 14 |
| | Rated Current (A) | 20.1 | 30.1 |
| | Capacity range (kW) | 3.5 - 11.5 | 4.9 - 15.0 |
| | Rated input (W) | 2800 | 3600 |
| | EER W/W | 3.55 | 3.86 |
| Heating | Rated capacity (kW) | 10 | 14 |
| | Capacity range (kW) | 3.8-12.5 | 5.2-15.5 |
| | Rated input (W) | 2630 | 3550 |
| | COP (W/W) | 3.71 | 3.88 |
| | Compressor type | Rotary | Scroll |
| | Refrigerant type/qty (kg) | M60/1.9 | M60/2.15 |
| Pipe Extension | Refrigerant pipe size (liq/gas) mm and inches | 9.52/15.88 3/8, 5/8 | 9.52/15.88 3/8, 5/8 |
| | Pipe Extension (maximum pipe height (m)) | 15 | 30 |
| | Maximum Pipe length (m) | 30 | 30 |
| Additional Charge | Additional Charge | 36g/m | 36g/m |
| Sound Pressure | Sound pressure (dBA) | 55 | 60 |
| Outdoor | Dimensions (lxdxh) (mm) | 990x426x790 | 1020x396x1350 |
| | Packaging (lxdxh) (mm) | 1054x479x832 | 1101x448x1500 |
| | Net/gross weight (kg) | 64/69 | 99/109 |
| Operating Range (Outdoor) | Cooling (°C) | 18 to 43 | 18 to 43 |
| | Heating (°C) | -7 to 43 | -7 to 43 |

Professional installation, reliable service: the HRV difference

To operate at its best and keep working well for many years to come, your Pioneer Blade or Pro Series heat pump needs to be professionally installed and serviced annually. That's why we've partnered with HRV.

- 🍃 The HRV sales team has a deep understanding of the Pioneer product range. You will be taken through a pre-sales consultation so you get the system that's right for you.
- 🍃 HRV installers are trained in the handling of hydrocarbon refrigerants, so you can rest assured your system will be installed safely and professionally.
- 🍃 HRV provides a comprehensive after-sales service, so your system retains performance and efficiency.



Find out more

To see which Pioneer model is right for your home, get in touch with your local HRV expert today. They'll talk you through your options and recommend a solution to suit you and your family.

Scan the QR code to find out more.



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