BUYING GUIDE

BUYING GUIDE AIRCONDITIONERS

IND THE RIGHT AIR CONDITIONER FOR YOUR RECREATIONAL VEHICLE



1887 KHK

CONTENTS

CRITERIA TO CONSIDER WHEN SELECTING YOUR AIR CONDITIONER

04

The right temperature - what makes a perfect climate?

06

How does air conditioning work?

80

Three model versions

10 Choosing the right model

12 Travel destinations **14** Air conditioners on the mains

16 Operation while driving

17 Generators fill the gap

18 – 22 Air conditioners – the range at a glance

26–31 Technical data

WHICH AIR CONDITIONER FOR RECREATIONAL VEHICLES?





THE IDEAL TEMPERATURE

A COMFORTABLE FEELING – IT'S ALL ABOUT TEMPERATURE AND HUMIDITY

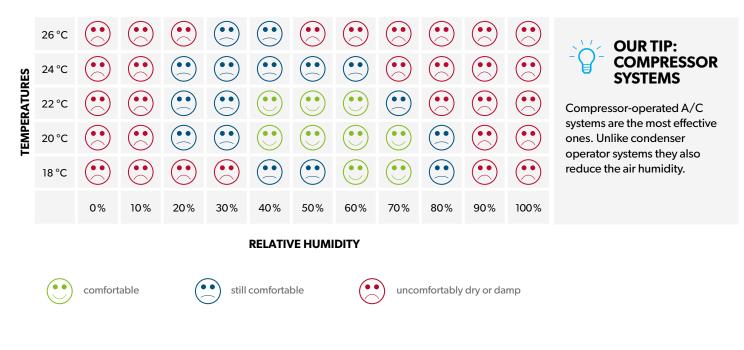
The air temperature felt by the human body may differ from the actual, measured air temperature. Our thermal sensation ranges from warm or hot through comfortable to cold. We all want to enjoy a comfortable climate, and humidity plays a decisive role. When humidity is low, we tolerate hot air temperatures even though we sweat, dry heat makes the sweat evaporate quickly from the skin and creates a cooling effect.

This won't happen, though, in a warm humid climate, when humidity is high transpiration diminishes and with it the cooling effect. As a result, we feel the heat even more. The air feels damp and sticky, which may lead to circulatory troubles and insomnia.

Knowing all this, it becomes obvious what a good air conditioner ought to do. Cooling alone is not enough; it's also necessary to reduce the humidity to get a comfortable climate.

COMFORTABLE CLIMATE AT 26 °C

The air temperature and humidity range perceived as comfortable



CREATE COMFORT

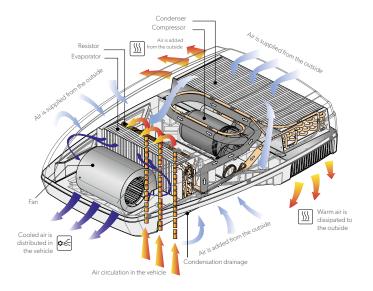
THE TASK OF AN AIR CONDITIONER

We invest in air conditioning to enhance comfort at home or in the vehicle. The temperature range we perceive as comfortable is not really that wide, as the illustration shows. Temperatures up to 26 °C are only obtained when humidity is low. When the air is damp, the thermometer should not exceed 20 °C. We feel more comfortable when the room temperature is between 18 °C and 22 °C and the humidity is between 40 and 70 %.

To create these conditions in a motorhome the air must be cooled down and dehumidified at the same time. This calls for a compressor powered air conditioner. A/C systems based on direct or indirect evaporation cooling are less effective.

HOW AIR CONDITIONING WORKS

Air conditioners work on basically the same principle as the cooling units of kitchen refrigerators. Their cooling efficiency is way higher though. In either system a refrigerant extracts heat from the space to be cooled and dissipates it to the outside. An air conditioner should additionally reduce the humidity.



A. A/C SYSTEMS MOST COMMONLY USED FOR RECREATIONAL VEHICLES

Evaporation systems: Water is vapourised in a roof-mounted unit and collected in a filter. A fan draws ambient air in through the filter, which results in a heat exchange. Benefits: low current consumption, lightweight. Drawback: The energy efficiency depends on the ambient humidity; so the performance of the system varies. It drops when the humidity is > 85% – and that's exactly the level where air conditioning is needed. Moreover, evaporation systems will, by nature increase the humidity in the vehicle, regardless of the ambient conditions.

Compressor systems: A gaseous refrigerant contained in a closed circuit is pressurised and turned into liquid. The liquid then flows through a pipe system and turns into gas again in the evaporator. In the process it extracts heat from the surrounding environment; the outside of the evaporator cools down. The refrigerant then flows back to the compressor, where the cycle begins again. In this way the air conditioning system dissipates air and cools the vehicle interior. Additionally, it circulates and dehumidifies the room air. The benefits are its consistent, powerful cooling performance, largely independent of the ambient temperature and humidity. Many compressor air conditioners integrate a heating system. The performance and efficiency of such heating systems depend on what type you have. If you have a simple heating resistor the performance will certainly be adequate for a chilly evening.

Air conditioners with energy-efficient heat pump technology provide a heating capacity of 3000 watts or more – enough to get the vehicle warm in the early or late seasons.





B. THE TEMPERATURE CONDITIONS IN RECREATIONAL VEHICLES AND THE REASONS BEHIND THEM

Motorhomes and caravans are no houses and they don't have thick walls, even if they are reasonably insulated they will heat up in the sun. The temperature inside can quickly rise to 30 °C or more and not only in the hot and sunny south, but also in moderate climate zones. Besides insulation, the temperature conditions inside the vehicle depend on other factors, too: the size and number of windows, for

instance. A caravan with small windows will heat up less quickly than a motorhome with generously sized glass surfaces and it does of course matter where you park your vehicle – in the blazing sun or in the shade of a tree. Do you take every opportunity to air the vehicle out? Or are all the windows closed and the heat can spread throughout the interior?

THREE MODEL VERSIONS

AIR CONDITIONERS FOR RECREATIONAL VEHICLES



air conditioners

INSTALLATION ON THE ROOF OR IN A STORAGE COMPARTMENT

with window

Recreational vehicles offer only two places where the installation of an air conditioner makes sense from a technical and practical point of view: on the roof or in the storage compartment.

Roof air conditioners use the physical principle that cold air sinks. The cold air streams can be directed into the vehicle's living area in an energy-saving manner and without performance loss. Formerly, air conditioners replaced the roof window, but now our engineers have found a way to integrate a window into the roof air conditioner. The result is known as Dometic FreshLight – it is the first of its kind worldwide.

Air conditioners fitted in the storage compartment distribute the air through air outlets, which can be placed in the room as required to get a tailor-made climate control solution.

OUR TIP: DO YOU WANT DAYLIGHT FROM THE ROOF WINDOW?

Although roof-mounted A/C systems are installed above the vehicle roof window, you need not go without daylight inside your mobile home. If daylight is important to you, you will appreciate the innovative roof-mounted Dometic FreshLight A/C system with integrated window.



WHICH TYPE OF AIR CONDITIONER IS SUITABLE FOR ME?

Roof or under-bench air conditioner – either version has its own advantages but won't suit every application. Check the system comparison benefits below to make a well informed decision. After all, you are going to use your air conditioner for many years to come ...

BENEFITS OF A ROOF AIR CONDITIONER

- Simple and fast installation on the roof
- No (air distribution) accessories required
- Easy change-over to another vehicle
- No performance loss (system effectively uses the physical principle that cold air sinks)
- No need to sacrifice the storage compartment
- Option to install two units for two separate climate zones
- The roof window is retained (models with integrated window)

BENEFITS OF AN UNDER-BENCH AIR CONDITIONER

- The vehicle's centre of gravity and outside dimensions remain unaffected
- You can keep the roof window
- Air outlets can be placed as required
- Air conditioning can be provided for several rooms

TIP – DOMETIC ADAPTER FRAMES FOR ROOF AIR CONDITIONERS

Most roof air conditioners from Dometic are designed for roof openings of 400×400 mm. What do you do if you have a wider cut-out, e.g. 430×430 mm? Simply use an adapter frame to adjust the air conditioner to the wider roof opening and enjoy perfect installation results.

We also offer an adapter frame for corrugated roofs with a roof cut-out of 400×400 mm – the recessed areas are closed off.



Adapter frame for roof air conditioners or roof windows in corrugated roofs

CHOOSING THE RIGHT ONE

CHOOSING THE RIGHT AIR CONDITIONER DEPENDS ON WHICH VEHICLE YOU HAVE

THERMAL INSULATION, WINDOW SURFACES ... AND OTHER THINGS TO CONSIDER

We are sorry to say there is no standard formula to calculate which air conditioner fits which recreational vehicle. Buildings of the same size and vehicles of the same length can have entirely different thermal properties. Their insulation as well as the number and size of the windows decide on how much heat enters the interior. A well insulated caravan with small windows will require less cooling performance than a vehicle with poor insulation and large window areas.



The vehicle length is a useful guide when selecting an air conditioning unit. Before you buy you should also take a closer look at the interior of your motorhome or caravan. How are the rooms laid out, and where are you going to place the unit? Do you want to air condition the whole vehicle or part of it? How large is the area of the room that needs cooling?

-Ò

OUR TIP – DON'T SAVE ON POWER!

Make sure the power rating of the air conditioner you pick is a bit higher than necessary for your vehicle. After all, you can always turn the A/C down to consume less energy.



- a. Semi-integrated vehicle
- b. Integrated vehicle
- c. Alcove
- d. Caravan
- e. Van

Recreational vehicles with larger window areas place higher demands on the performance of the air conditioning system. The number and size of the windows, in turn, depend on the type of vehicle you have. A semi-integrated motorhome with medium sized windows is already a bit of a challenge for the air conditioner. It will have to work even harder if you have one of those integrated vehicles with large and beautiful panorama windows. Alcoves offer the advantage that the windscreen is shadowed by overhang construction so it will heat up less. Caravans with their relatively small windows are not much of a problem either.



OVERVIEW* OF AIR CONDITIONERS BY VEHICLE TYPE AND LENGTHS



	Roof air conditioners FreshJet			Roof air conditioner with window FreshLight	Under-bench air conditioner FreshWell	
AIR CONDITIONER	FJ 1700	FJ 2200	FJ 3000	FJ 2000	FL 2200	FW 3000
CARAVAN						
up to 6 m up to 7 m up to 8 m from 8 m	• - -		- - •			- • •
RECREATIONAL VEHICLES						
up to 6 m up to 7 m up to 8 m from 8 m	• - -	- • -	- - •		• - - -	- • •
PANEL VAN						
up to 6 m up to 6.50 m	• -	-	-	•	-	-

*The overview features typical recommendations ideal for vehicles. The classes of air conditioners may vary according to the vehicle type and insulation.

TRAVEL DESTINATIONS

WHICH REQUIREMENTS DOES THE AIR CONDITIONER HAVE TO MEET?

THE NORTH OF SWEDEN OR THE SUMMER HEAT OF SICILY ...

If you are travelling to the cooler Scandinavian region then this will not challenge the air conditioners to the extremes, a unit with a smaller power rating will do for them. You should not save on power, though, if you regularly travel to the south of Europe and even less so if you have children or pets on board as staying in a recreational vehicle can quickly become uncomfortable on a hot summer day. When the nights are no cooler either, rest and recuperation is only possible with an adequate air conditioner.





It's a question of common sense and energy usage. Basically, you should not demand the same performance from your RV air conditioner as you get from a vehicle A/C system, which is powered via the engine. Those wishing to have 18 °C indoors at midday when the sun is right on top and the temperature way over 30 °C, are likely to be disappointed. But they can look forward to a good night's sleep in pleasant temperature conditions. The purpose of RV air conditioners is not to struggle with the outside temperature but to prevent heat-up caused by additional, "man-made" factors. The temperature level inside a vehicle exposed to the sun usually exceeds the outside temperature by far. Air conditioners can help significantly reduce the interior temperature and the humidity for a better indoor climate.

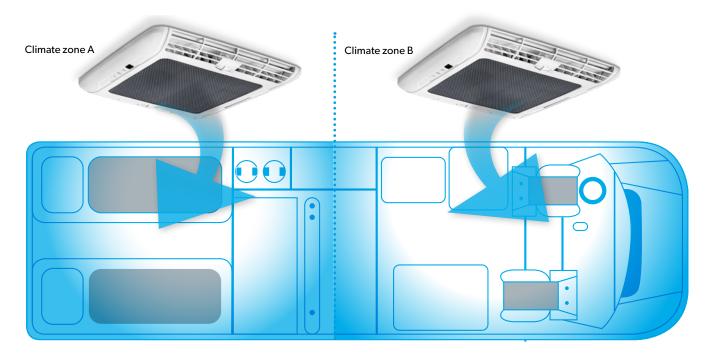
As a rule of thumb, try to get a temperature between 18 and 22 °C and a humidity between 40 and 70 %. These values are considered to be best for a comfortable climate. If you want to be on the safe side, use a thermometer or hygrometer and switch the air conditioner on when necessary. It is best to keep the interior temperature no more than 8 °C below the outside temperature.

DOMETIC FRESHJET – IDEAL FOR TWO-ZONE AIR CONDITIONING

Do you want to control the climate in the bedroom and living space separately? This is easily done by installing two FreshJet units.

When choosing the matching power rating you should consider the size of the room, the temperature preferences and your favourite travel destinations. The larger FreshJet 2200 model is fitted with the soft-start function, the smaller FreshJet 1700 model has very low starting current, so you will always be able to run at least one of the two units, even on campsites with low electrical circuit protection.





AIR CONDITIONERS ON THE MAINS

OPERATION AT THE CAMPSITE

ABOUT START-UP CURRENTS AND CIRCUIT PROTECTION

Compressor air conditioners have the highest starting current among the consumers commonly found in recreational vehicles. However, this is only required for fractions of a second and drops rapidly in continuous operation. As the fuses on most campsites are slow blow fused, the short-term peaks are usually tolerated without problems. The FreshJet 2200, FreshLight 2200 and FreshWell 3000 have particularly high power and they also have a feature that makes them start up perfectly even on campsites with unstable power supplies: the soft start function. This provides the engine with additional support during the start-up phase. The start-up phase is significantly shortened and is over before the (slow) fuse can react. Another advantage: voltage drops due to improvised supply lines (cable drums) that are too long are generally tolerated.



DOMETIC FRESHWELL 3000

COMPRESSOR BENCHMARKING

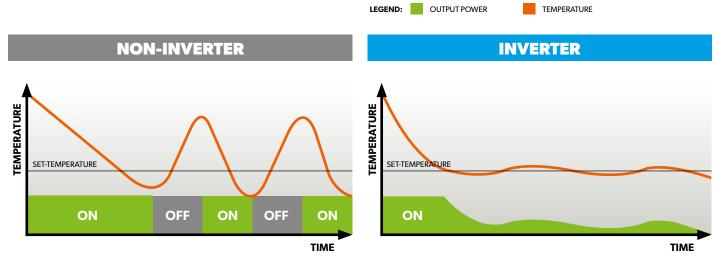
WHAT ARE THE BENEFITS OF AN INVERTER COMPRESSOR?

Compared to the compressors used in conventional A/C systems, the inverter compressor of the FreshJet 3000 is particularly quiet, efficient and energy-saving. The main reason for this is that the electronically controlled compressor type does not have the typical ON/OFF cycles. The compressor speed automatically adapts to the cooling requirements. When the preset temperature has been reached, the inverter compressor won't cut off. Instead, it continues running superbly quietly at a low speed to keep the temperature on a fairly constant level. A conventional A/C compressor, by contrast, switches on and off over and over again. This causes noise and consumes extra energy.

CONCLUSION: An inverter compressor runs more quietly than a classic compressor, and it consumes less energy.

THE BENEFITS AT A GLANCE:

- Pleasantly guiet running scarcely any vibration
- Low temperature fluctuations low energy consumption
- Long running times during self-sufficient camping using the second battery
- No current peaks in the start-up phase hassle-free operation even on campsites with low electrical circuit protection



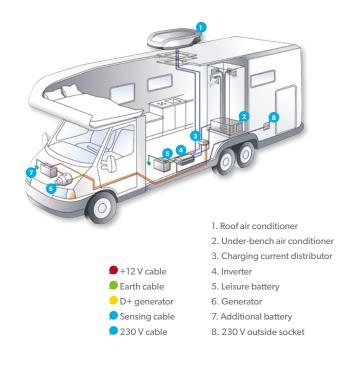


KEEP COOL ON THE ROAD

All Dometic air conditioners can be supplied with matching DC kits for operation on the 12-volt vehicle battery. Equipped with the DC kit, you don't need to wait until you arrive at your destination – you can enjoy a perfect climate in your vehicle during the journey. This is especially pleasant when you are travelling with family, friends and pets.

FAR MORE THAN "JUST" A CONVERTER

Dometic's A/C accessory range gives you a choice of two DC kits with different performance ratings, features and functions. The main components are a sine wave inverter (or one providing a sinewave-like voltage) and a charging current distributor. The latter ensures optimal energy efficiency while driving. It regulates the power distribution between the starter battery, leisure battery and the generator. At the same time, it prevents excessive strain on the batteries or onboard electronics.



TWO DC-KITS TO CHOOSE FROM

Our two DC Kits integrate a high-quality inverter that generates a pure sine wave voltage to supply the air conditioner or other electrical devices during the journey. **DC Kit DSP-T 12** is for vehicles with 12-volt batteries, **DC Kit DSP-T 24** for vehicles with 24-volt batteries.

Both comfort kits can be used with almost all FreshJet air conditioner models. Features and functions include a charging current distributor with low-voltage protection, a priority circuit for 230-volt mains operation, and the new remote control, **Dometic DSP-RCT**.

GENERATORS FILL THE GAP

COMFORTABLE CLIMATE WHEN MAINS POWER IS UNAVAILABLE

POWER TO GO WHEREVER YOU NEED IT

Travelling off the beaten track with all the comfort you are accustomed to – Dometic generators make it possible. They ensure reliable power supply wherever mains power is unavailable. This makes them a must-have accessory for outdoor enthusiasts striving for maximum freedom and independence.

Technical data generators see P. 26 – 31







DOMETIC FRESHJET

THE MODERN AIR CONDITIONING CONCEPT

These two FreshJets are the smallest air conditioners on the market. The power versions shown here have the same ultra-compact design, which still leaves space for solar panels or a satellite dish on the roof or even for a second FreshJet if you need separate air conditioning areas. Very low starting currents with FreshJet 1700 and soft-start with the 2200 model ensure that the units run smoothly even on campsites with low electrical protection.

- Compact design and lightweight
- · Pleasantly cool, dehumidified air
- With heat function
- Very low starting currents, FreshJet 2200 with soft-start
- Two power versions for vehicles from < 5 m to < 7 m long
- Ideal as a duo for creating separate air conditioning zones in larger vehicles



DOMETIC FRESHJET 1700

Roof air conditioner with air distribution box for vehicles up to 6 m

- Ultra-compact and lightweight design
- Cool, warm or dehumidify air at the touch of a button
- Ideal for vehicles up to 6 m in length
- Cooling capacity: 1700 W / 5800 BTU/h
- Heating capacity: 800 W

Ref. No. 9105306658

DOMETIC FRESHJET 2200

Roof air conditioner with air distribution box for vehicles up to 7 m

- Ultra-compact and lightweight design
- Cool, warm or dehumidify air at the touch of a button
- Ideal for vehicles up to 7 m in length
- Cooling capacity: 2200 W / 7500 BTU/h
- Heating capacity: 1200 W

Ref. No. 9105306515 / 9600025788

FRESHJET POWER FOR LARGE VEHICLES

The Dometic FreshJet 3000 is the latest air conditioner innovation from Dometic. Specially developed for larger motorhomes and caravans from 7 m in length, it combines the benefits of a light, compact design with impressive cooling and heating performance. Equipment highlight: the new inverter compressor. This ensures a very quiet, pleasant run and is also extremely efficient. Therefore this air conditioner can be operated on almost all campsites.

- Patented dual-cylinder inverter compressor reduces vibration and is highly efficient
- · Low fan noise with three standard speeds
- Vertically adjustable outlet vents allow individual air flow control
- · Lightweight for a low centre of gravity
- · Low-profile rooftop unit



DOMETIC FRESHJET 3000

Roof air conditioner with air distribution box for vehicles over 7 m

- Powerful roof air conditioner for large vehicles
- Cool, warm or dehumidify air at the touch of a button
- Ideal for vehicles over 7 m in length
- Cooling capacity: 2516 W / 8600 BTU/h
- Heating capacity: 3107 W / 10600 BTU/h

Ref. No. 9600026626

Technical data see page 26 - 31

FLEXIBLE CLIMATE CONTROL FOR CAMPERVANS

When creating the Dometic FreshJet 2000 campervan roof air conditioner, our engineers combined the ultra-compact rooftop unit of our popular FreshJet series with an air distribution box which gives a pleasantly gentle air curtain effect. The air flows in four directions – to the front, rear, left and right. All four air streams can be adjusted individually to target the distribution exactly where you need it. As well as cool air, the FreshJet 2000 can warm and dehumidify air too. The temperature and blower speed can be conveniently adjusted by remote control. The LED lighting is dimmable, while a soft-start function ensures reliable start-up on campsites with an unstable power supply. The dark grey, aerodynamically shaped rooftop unit perfectly complements the design of modern campervan models.

- Ultra-compact and lightweight design is ideal for campervans
- Cool, warm or dehumidify air at the touch of a button
- Specially designed air distribution box adjustable air flow from four air ducts
- Soft-start for reliable start-up at campsites with low electrical protection
- Rooftop unit in dark grey complements the design of modern campervan models



DOMETIC FRESHJET 2000

Roof air conditioner with air distribution box for vehicles up to 6.5 m

- Ultra-compact and lightweight design for vans
- Cool, warm or dehumidify air at the touch of a button
- Ideal for vehicles up to 6.5 m in length
- Cooling capacity: 2000 W / 6800 BTU/h
- Heating capacity: 1200 W / 4100 BTU/h

Ref. No. 9600025737

DOMETIC FRESHLIGHT

THE UNIQUE COMBINATION OF AN AIR CONDITIONER AND WINDOW

For this innovative air conditioner, there's no need to sacrifice the roof window – quite the contrary. With Dometic FreshLight, the window is already built into the air conditioning unit and the result is perfect temperatures on board a caravan or motorhome with natural light still coming from above.

- Roof air conditioners with roof window, for vehicles up to 7 m
- Temperature and blower speed can be conveniently set by remote control
- Control panel with integrated, dimmable LED lights
- Individual air flow regulation with automatic blower control
- Energy-efficient cooling mode and heat pump system for heating mode
- Roof window with active ventilation system and single-pleated darkening screen



DOMETIC FRESHLIGHT 2200

Roof air conditioner with roof window for vehicle lengths of up to 7 m

- Cooling capacity: 2200 W/7500 Btu/h
- Heating capacity: 2050 Watt / 2700 Watt
- Temperature and blower speed can be conveniently set by remote control
- Control panel with integrated, dimmable LED lights

Ref. No. 9102900165

Technical data see page 26 - 31

DOMETIC FRESHWELL

UNDER-BENCH AIR CONDITIONER

Is the under-bench storage space still free? Then there are a number of reasons for housing the air conditioner there: no roof load, and the centre of gravity and outside dimensions of the vehicle remain unaffected – meaning the vehicle will still fit under the carport at home. With the FreshWell 3000 Dometic offers the most compact under- bench air conditioner available in the category up to 2700 watts. Featuring state-of-the-art heat pump technology, this air

conditioner will gladly serve as powerful heating on cool days. FreshWell 3000 is superbly quiet in operation and its air diffuser system generates a pleasant air stream, which is distributed evenly over three air outlets with the help of accessories. The outlets can be positioned in the vehicle as required – concentrated at one point, and also in different rooms. With the matching DC kit, your underbench air conditioner can even be used while driving.



DOMETIC FRESHWELL 3000

Under-bench air conditioning unit for vehicle lengths of up to 8m

Conveniently housed in the under-bench storage area in motorhomes or caravans, this provides an efficient space-saving air conditioning solution for vehicles up to 8 m in length.

- Under-bench air conditioner for vehicle up to 8 m
- Cooling capacity: 2700 W / 9200 BTU/h
- Heating capacity (heat pump + heating element): up to 3000 W*

Ref. No. 9105306670

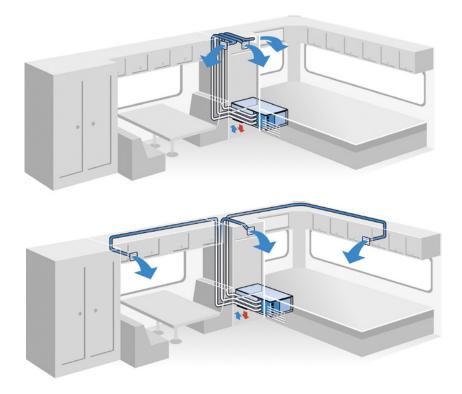
 * When the ambient temperature drops, the heating capacity of the heat pump reduces. We recommend you operate this at ambient temperatures of +2 °C and above.

Technical data see page 26 - 31

FLEXIBLE AIR DISTRIBUTION

CONCENTRATED OR IN DIFFERENT ROOMS

Once FreshWell 3000 has been installed, the air distribution system can be customised to meet individual preferences using the supplementary accessories. It provides the option of concentrating all three air outlets in one place and directing them onto one single point. Alternatively, the vents can be fitted on different places inside so that the air streams area. All of the functions can be effortlessly activated by remote control: ON/OFF, the temperature selection, blower speed and operating mode. The digital display on the remote control shows the setting selected.



ACCESSORIES FOR THE INDIVIDUAL AIR DISTRIBUTION:

DOMETIC FRESHWELL FW-ADC 90°- curved section, 60 mm Ref. No. 9100300015

DOMETIC FRESHWELL FW-ADG

Circular air inlet grille, two-part, ø 190 mm Ref. No. 9100300018

DOMETIC FRESHWELL FW-ADG

Rectangular air intake grille, 240 x 240 mm Ref. No. 9100300017

DOMETIC FRESHWELL FW-ADG

Round air outlet grille kit, ø 60 mm Ref. No. 9100300077

DOMETIC FRESHWELL FW-ADH

Flexible hose, ø 60 mm x 10 m Ref. No. 9100300019

THE SEARCH FOR THE PERFECT PHOTO

SEAN SCOTT



Travelling and working all over Australia is something I don't take for granted. Some of the places and environments I find myself in are truly breath taking. Australia however also has one of the harshest climates in the world and having my caravan fitted with a Dometic air-conditioner has made working in some of these environments so much more enjoyable. As much as I try and love to work and live outside there are definitely times when I need the shelter and comfort of my air-conditioned caravan. It allows me to escape the heat of the day and I get to edit my photographs in comfort. At night it is super quiet and there have been many times where it allowed me to get a peaceful nights rest in the comfort of an air-conditioned caravan. It has now allowed me to live and work in locations that I would normally only visit in the winter because I know I will always have a place to escape the heat. I have also on occasions used the reverse cycle feature and enjoyed some heating on my trips. It has not been needed often but some early mornings it's been a great way to warm up after my shower before heading out to photograph the sunrise. I often use the timer functions to ensure the vehicle is nice and cool for when I return from my day's work without using excess power and the remote control beside my bed also allows me to turn it off at night if the temperature drops. I love my Dometic aircon and I don't think I could travel Australia without it.



instagram.com/seanscottphotography



2.13 / Dometic Roof air conditioners

	2.13 / Dometic Roof air conditioners		
TECHNICAL DATA		KAUFTIPP REISE	
AIR CONDITIONERS	FRESHJET 1700	6/2014 FRESHJET 2200	
Ref. No.	9105306658	9105306515 / 9600025788	
Suitable vehicle length (m)	max. 6	max. 7	
Cooling capacity (watts/Btu/h)	1700 / 5800	2200 / 7500	
Heating capacity (watts)	800	1200	
Consumption Cooling/heating mode (watts) heat pump (watts)	620/800 	950/1200 —	
Input voltage	230 V AC / 50 Hz		
Current consumption Cooling (A) Heating (A)	2.7/3.5	4.1/5.2	
Required circuit protection Cooling (A) Heating (A)	4 4	5 6	
Refrigerant Refrigerant quantity CO ₂ equivalent Global warming potential (GWP)	R407c 0.545 kg 0.96683 t 1774	R407c 0.520 kg 0.92248 t 1774	
Dimensions (W x H x D mm) External Internal	562 x 225 x 787 470 x 45 x 555		
Roof opening (W x D, mm)	400 x 400	400 x 400	
Roof thickness (mm)	25-60	25-60	
Weight (kg)	29	32	
Number of air vents	2 (front / rear)		
Air vent functions	Continuous air flow regulation for all vents		
Number of blower speeds	4		
Remote control	•		
Test marks	E-approved to EMC / automotive directive		
/ Optional extras			
Suitable generators	TEC 29, TEC 30EV, TEC 40D, T 2500H		
DC-Kits	DSP-T 12 / DSP-T 24	DSP-T 12 / DSP-T 24	
Adapter frame	Adapter frame for the FreshJet models in roof openings which exceed the standard opening size of 400 x 400 mm / 9103500476		
Adapter frame	Adapter frame for air conditioners or roof lights on a trapezoidal sheet metal roof / 9104114007		

FRESHJET 3000	FRESHJET 2000
9600009483	9600025737
over 7	max. 6.5
2516 / 8600	2000 / 6800
3107*1	1200
594/898 —	940 / 1200 —
230 V AC / 50 Hz	230 V AC / 50 Hz
4.6/7.4 	4.6/7.4
8 7.4	5 6
R410a 0.78 kg 0.1629 t 2088	R407c 0.520 kg 0.92248 t 1774
665 x 240 x 997 518 x 48 x 579	787 x 225 x 562 518 x 48 x 579
400 x 400	400 x 400
25-60	25-60
37	32
4 (front / rear / left / right)	4 (front / rear / left / right)
Continuous air flow regulation for all vents	Continuous air flow regulation for all vents
4	4
•	•
E-approved to EMC / automotive directive	E-approved to EMC / automotive directive
TEC 29, TEC 30EV, TEC 40D	TEC 29, TEC 30EV, TEC 40D
-	DSP-T 12 / DSP-T 24

2.10 / Dometic Roof air conditioners

TECHNICAL DATA AIR CONDITIONERS	FRESHLIGHT 2200	
Ref. No.	9102900165	
Suitable vehicle length (m)	max. 7	
Cooling capacity (watts/Btu/h)	2200 / 7500	
Heating capacity (watts)	2700 *1	
Consumption Cooling (watts) heat pump (watts)	950/	
Input voltage	230 V	
Current consumption Cooling (A) Heating (A)	4.1/— 5.2	
Required circuit protection Cooling (A) Heating (A)	5 6	
Refrigerant Refrigerant quantity CO ₂ equivalent Global warming potential (GWP)	R407c 0.560 kg 0.9934 t 1774	
Dimensions (W x H x D mm) External Internal	758 x 210 x 1105 550 x 53 x 880	
Roof opening (W x D, mm)	400 x 700	
Roof thickness (mm)	25-60	
Weight (kg)	42	
Number of air vents	2 (front / rear)	
Air vent functions	Continuous air flow regulation for all vents	
Number of blower speeds	4	
Remote control	•	
Test marks	E-approved to EMC / automotive directive	
/ Optional extras		
Suitable generators	TEC 29, TEC 30EV, TEC 40D, T 2500H	
DC-Kits	DSP-T 12 / DSP-T 24	
Protective cover	er 9103500237	



FRESHWELL 3000

FRESHWELL 3000			
9105306670			
max. 8			
2700 / 9200			
3000*2			
990/— 1100			
230 V			
4.3/ 4.8			
5 5			
R410a 0.600 kg 1.2528 t 2088			
400 x 286 x 628 —			
-			
_			
21			
3 air outlets			
3 air outlets (optional) to be placed centrally or where required			
3			
•			
E-approved to EMC / automotive directive			
TEC 29, TEC 30EV, TEC 40D			
DSP-T 24			
_			

*1 Maximum heat = heat pump output.

*2 Maximum heat = heat pump output + heating resistor capacity

TECHNICAL DATA				
GENERATORS	Т 2500Н	TEC 29	TEC 30EV	TEC 40D
Ref. No.	9102900005	9102900299	9102900033	9102900295
Operating mode/fuel	Normal ROZ 91 petrol	Normal ROZ 91 petrol	Diesel	Diesel
Consumption	max. 1.2 l/h	max. 1.2 l/h	max. 0.7 l/h	max. 1.4 l/h
Continuous output (W)	2000	2600	2500	3500
Peak output (W)	2200	2900	2900	3900
Output voltage	230 volts AC ±10 % (continuous)/pure sine wave \sim		230 volts AC ±1 % (continuous)/pure sine wave \sim	
Short circuit protection	•	•	•	•
Max. starting current (A)	24	33	33	45
Sound level at 7 metres	60	54-59	60	64
Soundproofed	•	•	•	•
Operation via external control panel	•	•	•	•
Test marks	E3	E13	E13	E24
Engine output (kW (PS)	4.0 (5.5)	4.0 (5.5)	3.3 (4.5)	4.7 (6.4)
Width with suspension (mm)	640	580	572	765
Size (W x H x D mm)	530 x 290 x 385	480 x 290 x 385	465 x 465 x 466	765 x 457 x 467
Housing finish	Stainless steel			
Weight (kg)	50.0	44.0	70.0	96.5
/ Compatible with Dometic air conditioners				
FreshLight 2200	•	•	•	•
Freshjet 1700	•	•	•	•
Freshjet 2000	•	•	•	•
Freshjet 2200	•	•	•	•
Freshjet 3000	-	•	•	•
FreshWell 3000	-	•	•	•

TECHNICAL DATA





DC KITS FOR 12 OR 24 VOLT OPERATION	DC KIT DSP-T 12	DC KIT DSP-T 24		
Ref. No.	9600007286	9600007287		
Power consumption (12 volts DC) (A)*1	30 - 113	50 – 75		
Recommended generator capacity (A)*2	<i>→</i> 150	<i>→</i> 75		
Recommended total battery capacity (Ah)* ³) 250	<i>→</i> 250		
Continuous output (W)	1800	1800		
Size (W x H x D mm) Inverter	284 x 118 x 405	284 x 118 x 405		
Scope of delivery Sine inverter Mains priority circuit Remote control, control cable (m) 2 battery cables, 1.5 m long (mm ²) 230-volt connection cable (piece) Charging current distributor with power relay	• 7.5 35 2 •	• 7.5 35 2 •		
/ Compatible with Dometic air conditioners				
FreshLight 2200	•	•		
Freshjet 1700	•	•		
FreshJet 2000	•	•		
FreshJet 2200	•	•		
FreshJet 3000	-	-		
FreshWell 3000	•	•		

*1 Power consumption depends on the type of air conditioner and ambient temperatures.
 *2 Generator capacity depends on the type of air conditioner and ambient temperatures.
 *3 Total battery capacity depends on the type of air conditioner and ambient temperatures.

THE FULL COMFORT RANGE

View Products: **dometic.com**

UNITED KINGDOM DOMETIC UK LTD.

Dometic House, The Brewery, Blandford St. Mary Dorset DT11 9LS Tel 0344 626 0133 Fax 0344 626 0143 Mail sales@dometic.co.uk Net dometic.com

GERMANY DOMETIC GERMANY GMBH

Hollefeldstraße 63 D-48282 Emsdetten

 Tel
 +49 (0) 2572 879-0

 Fax
 +49 (0) 2572 879-300

 Mail
 info@dometic-waeco.de

 Net
 dometic.com

