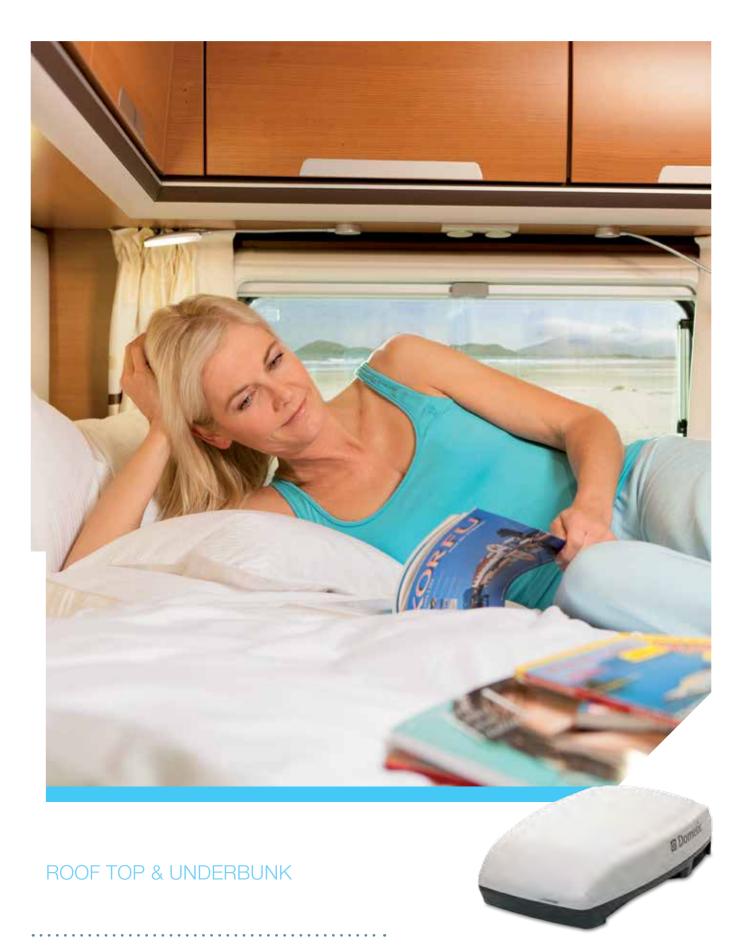
## **AIR CONDITIONERS**



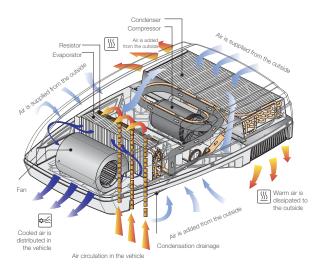


NEW RELEASE DOMETIC FRESHJET

## HOW AIR CONDITIONING WORKS







Air conditioners work on basically the same principle as the cooling units of kitchen refrigerators. A refrigerant extracts heat from the space to be cooled and dissipates it outside. An air conditioner also has the added benefit of reducing the humidity in the air creating a more comfortable environment.

## 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 and 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, as it circulates it dehumidifies the air.

## Benefits of compressor systems:

- → Consistent, powerful cooling performance, largely independent of the ambient temperature and humidity.
- → Most of Dometic's compressor air conditioners also have an integrated heating system with energy-efficient heat pump technology, which are ideal for those cold winter mornings. Other models provide heat via an electric element.

## The temperature conditions in recreational vehicles and the reasons behind them

Motorhomes and caravans don't have the thermal properties of houses as they don't have thick insulated walls. Even if they are reasonably insulated they will heat up quickly in the harsh Australian sun where temperatures inside can quickly reach over 40°C.

- → The size and number of windows can also influence the climatic conditions with a van. A caravan with small windows or double glaze windows will heat up more slowly than a motorhome with generously dimensioned glass surfaces
- → It also matters where you park your vehicle in the blazing sun or in the shade of a tree
- → User behaviour is another factor. Do you take every opportunity to air the vehicle out? Or, are all the windows closed and the heat can spread throughout the interior?

## OPTIONS TO SUIT YOUR NEEDS





## Installation on the roof or in a storage compartment

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

**Rooftop air conditioners** use the principle that hot air rises and 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. They are installed on the exterior of the roof to minimise the space taken up inside the van, normally through a roof opening with an air distribution box on the ceiling.

**Under-bunk air conditioners** distribute the air through outlets, which can be placed in the room as required to get a tailor-made climate control solution. These systems are installed under benches, bunks and in storage spaces within the van or RV.

Roof or under bench air conditioners have their own advantages but won't suit every application. Check the system comparison 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 rooftop air conditioner

- → Simple and fast installation on the roof
- → No (air distribution) accessories required
- → 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 vehicle's centre of gravity and outside dimensions remain unaffected

Benefits of an under-bunk air conditioner

- → You can keep the roof window
- → Air outlets can be placed as required
- → Air conditioning can be provided for several rooms

## IT ALL DEPENDS ON THE VEHICLE YOU HAVE





## CHOOSING THE RIGHT AIR CONDITIONER

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 dictates 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.

## Vehicle size

The vehicle length is a useful guide when refining the selection of suitable air conditioner models. Before you buy you should also take a closer look at the interior of your motorhome or caravan.

- → How are the rooms laid out?
- → 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 volume of the room to be cooled?

## Type of vehicle

- A. Semi-integrated vehicle
- B. Integrated vehicle
- C. Alcove
- D. Caravan

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 panoramic windows. Alcoves offer the advantage that the windscreen is shadowed by overhang construction so it will heat up less.

# THE NEW FRESHJET SERIES OF ROOFTOP AIR CONDITIONERS

## LIGHTER, SMALLER & MORE EFFICIENT

- → All the functions can be operated by remote control
- Air distributor system with four adjustable air streams
- → Integrated LED ambient lighting

The Dometic FreshJet is lightweight, compact and features a soft start\* function. Soft start reduces current draw during start up, which is ideal when running a generator or in situations when current supply is restricted.

This stylish distribution box has four way vents and ambient lighting. The vents are ideal for directing the air where required within your caravan or RV.

\*FJ3200 model only



Dometic FreshJet 3200

Dometic FreshJet 2200





DOMETIC'S NEW RANGE OF ROOFTOP AIR CONDITIONERS ARE LIGHTER, SMALLER & MORE EFFICIENT THAN EVER

VEHICLE LENGTH	up to 6.5 m	up to 5 m	up to 6 m	up to 7.5 m	up to 7.5 m	up to 7.5 m
MODELS	Truma Saphir	NEW! Dometic FreshJet 2200	Dometic CALR242	Truma Aventa	NEW! Dometic FreshJet 3200	NEW! Dometic BR342
						S. Marie

## **Dometic CALR242**

Reverse cycle rooftop air conditioner



Rooftop air conditioner with heat element

## **NEW!** Dometic FreshJet 3200

Reverse cycle rooftop air conditioner







Reference Number CALR242-ADB-KIT		FJ2200-ADB-KIT	FJ3200-ADB-KIT
Best for vehicle length	up to 6 m	up to 5 m	up to 7.5 m
Nominal (compressor capacity)	3.0 kW	2.2 kW	3.0 kW
Cooling Capacity (ISO5151)	2.3 kW	1.8 kW	2.6 kW
Heating Capacity	2.1 kW	1.2 kW	2.4 kW
Current Draw (Cooling/Heating)	5.8 A / 5.5 A	4.1 A / 5.2 A	6.3 A / 5.5 A
Operating Temperature Range	-7 to 43°C**	0 to 52°C	0 to 52°C
Airflow (high fan)	282 m <sup>3</sup> /h	330 m³/h	400 m <sup>3</sup> /h
Dimensions (W x H x L mm)			
External	736 x 255 x 1027	562 x 225 x 787	650 x 248 x 980
Internal	635 x 508 x 70	535 x 480 x 47	535 x 480 x 47
Roof opening (W x D mm)	360 x 360	400 x 400	400 x 400
Roof thickness (mm)	38 - 150 (approx.)	25 – 60	25 – 60
Weight (kg)	45	32	37
Air vent functions		Continuous air flov	v regulation for all air vents
Number of blower speeds	3	4	4
Remote control	yes	yes	yes
Functions	features four operating modes, reverse cycle and timer function	timer, temperature pre-setting (+16°C to +31°C), automatic mode, cooling, lighting on/off	
Features	<ul> <li>→ Removable and washable filters</li> <li>→ Air distribution box with air shower vent, digital readout and status indication LEDs</li> <li>→ Will operate on most premium brand</li> </ul>	<ul> <li>→ Light weight</li> <li>→ Suitable for poptop caravans</li> <li>→ Low current draw</li> <li>→ Remote control</li> <li>→ Timer function</li> <li>→ Built in free ventilation of 650</li> </ul>	<ul> <li>→ Light weight</li> <li>→ Quiet operation</li> <li>→ Vertical compressor for reduced vibration levels</li> <li>→ Remote control</li> <li>→ Timer function</li> </ul>



inverter type generators of 2000

→ Quiet operation

7°C and over 35°C.

watts and above (check with your

\*\* Performance is reduced at temperatures under

generator supplier for compatibility)





→ Built in free ventilation of 650

mm² (can contribute to overall

requirement for gas regulations)

inverter type generators of 2000

watts and above (check with your

generator supplier for compatibility)

→ Will operate on most premium brand



- → Remote control
- → Timer function
- → Will operate on most premium brand inverter type generators of 2000 watts and above (check with your generator supplier for compatibility)









### **NEW!** Dometic BR342

Reverse cycle rooftop air conditioner



#### **Truma Aventa comfort**

Reverse cycle rooftop air conditioner



### **Truma Saphir comfort**

Reverse cycle under-bunk air conditioner



BR342-ADB-KIT	AVENTA MARK2-KIT	SAPHIR R/C-KIT	
up to 7.5 m	up to. 7.5 m	up to 6.5 m	
3.6 kW			
3.0 kW	approx. 2.4 kW	approx. 2.4 kW	
2.9 kW	approx. 1.7 kW <sup>+</sup>	approx. 1.7 kW <sup>+</sup>	
6.3 A / 5.3 A	4.2 A / 3.7A	4.2 A / 3.7 A	
-7 to 43°C#	4 to 43°C	4 to 43°C	
526 m³/h	400 m <sup>3</sup> /h	380 m³/h	
721 x 670 x 282	1008 x 660 x 248	N/A	
581 x 530 x 35	670 x 523 x 46	628 x 400 x 290	
360 x 360	400 x 400	N/A	
38 - 165	25 - 50 ***	N/A	
40	33	approx 23.5	
3	3 + sleep mode^	3 + sleep mode	
yes	yes	yes	
	Sleep function for quieter interior cooling, timer function	Timer function	

- → Optional electronic wall control with remote control
- → Condensation drain outlets allow optional attachment of tubing to direct runoff away from doorways/ windows
- → Vertical compressor for reduced vibration levels
- → Will operate on most premium brand inverter type generators of 2000 watts and above (check with your generator supplier for compatibility)
- Performance is reduced at temperatures under 7 °C and over 35 °C

- → Aesthetically pleasing
- → Slimmest air distributor on the market
- → Powerful cooling
- → Energy saving heating
- inverter type generators of 2000 watts and above (check with your generator supplier for compatibility)
- Heating is not possible at an outside temperature of less than 4 °C
- \*\*\*With additional roof thickness adapters unit can be fitted to roof thickness up to 110mm
- ^ 2 speeds in heating mode

- → Integrated heat pump function
- → Highly efficient, delivers exceptionally high performance
- → Extremely light weight at only
- → Will operate on most premium brand → Will operate on most premium brand inverter type generators of 2000 watts and above (check with your generator supplier for compatibility)
  - $^{^{+}}$  Heating is not possible at an outside temperature of less than 4  $^{\circ}\mathrm{C}$

Includes 3 air outlets, nuts, 3 ducting clips & air intake vent. Please note: Ducting must be ordered separately











## Dometic



Dometic Group is a customer-driven, world-leading provider of leisure products for the RV, automotive, truck and marine markets. We supply the industry and aftermarket with a complete range of air conditioners, refrigerators, awnings, cookers, sanitation systems, lighting, mobile power equipment, comfort and safety solutions, windows, doors and other equipment that make life more comfortable away from home.

Dometic Group supplies a wide range of workshop equipment for service and maintenance of built-in air conditioners. Dometic Group also provides specially designed refrigerators for hotel rooms, offices, wine storage and transport and storage of medical products. Our products are sold in almost 100 countries and are produced mainly in wholly-owned production facilities around the world.

## **AUSTRALIA**

#### Dometic Australia, Queensland 1

1 John Duncan Court Varsity Lakes QLD 4227 Phone: +61 (0)7 5507 6000 Fax: +61 (0)7 5507 6001

FREECALL: 1800 21 21 21

#### Dometic Australia, Queensland 2

2/129 South Pine Road Brendale QLD 4500 Phone: +61 (0)7 3205 7599 Fax: +61 (0)7 3881 1409

E-mail: sales@dometic.com.au Web: www.dometic.com.au

#### Dometic Australia, Victoria

Bldg 3B, Clayton Business Park 1508 Centre Road, Clayton VIC 3168 Phone: +61 (0)3 9239 1000 Fax: +61 (0)3 9239 1099

#### Dometic Australia, Western Australia

12 Prosperity Avenue Wangara WA 6065 Phone: +61 (0)8 9303 3555 Fax: +61 (0)8 9303 3577

Your retailer: