CoolCamper G1 (2021) Product Brochure

1. DESCRIPTION OF OPERATION

Your CoolCamper unit provides a cooling system for a caravan or camping vehicle for comfort and relaxation in a dry, hot, off grid environment. The unit meets the specific needs of the mobile camping community to provide for a lightweight construction, 12 V power supply and low power consumption. Long term operation is possible from the batteries located in the camping vehicle supported by a suitably sized solar charging system.

Dry, hot air from the outdoor environment is cooled by the CoolCamper unit by passing it through a water saturated pad and cooled by natural evaporative principles. The temperature of the dry air is dropped significantly through the high efficiency fan assisted phase transition of liquid water to water vapor (evaporation), which cools the air while using much less energy than compressor assisted refrigeration type air conditioners.

The high-volume of cool air is directed into the living area and pushes the hot air out through ventilation openings allowing you to keep some of your doors and windows open which is Ideal for a camping environment. The cool air passes through the living area once only without recirculation, resulting in a clean humidified air environment inside the ventilated area.

The extend of cooling that result from the natural evaporative process is dependent on the humidity of the air supply to the unit. The lower the atmospheric humidity the greater the cooling effect. The unit will therefore provide effective cooling when used in dry inland conditions but will be less effective at coastal regions or during rainy days where the natural humidity of the air in the environment is high.

The operation of the unit is fully automated by a powerful handheld remote control. The operations include the normal on / off selections with fan speed selection and a sleep mode that will switch the unit off at a set time. Setting up for camping and traveling require minimal intervention.

The system uses a small quantity of drinking quality water in the evaporative cooling process. The installer should connect the water make-up to the low-pressure water supply system of the camping vehicle to maintain a minimum level of water in a water tank. The operation of the water system is integrated within the controls of the unit and requires no operational intervention while in use.

The maintenance requirements are minimal for normal use with some interventions required for safe storage at the end of the camping trip and periodic inspections. The evaporative pad is a consumable item that may require replacement at times depending on the conditions of use.

2. PRODUCT OPTIONS

Your CoolCamper is a new innovative solution to the challenge of the entire camping community for many years on how to stay cool while camping during the hot season. The product range is continually being expanded to enable fitment to a growing range of caravans and camping trailers.

The specific design and installation of a unit in a camping vehicle must ensure the required volume of air is introduced at a suitable position into the camping vehicle to achieve the desired ventilated cooling effect where needed. For this, two standard product series, the Bosbok series and the Waterbok series are developed to be suitable for use for a large range of caravans and camping trailers. The functionality of these units is identical with the only changes being dimensional variations to suit specific installation requirements.

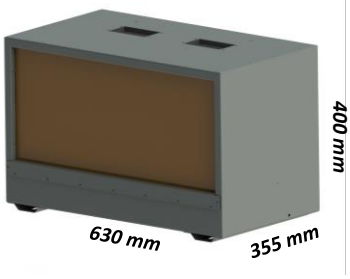
In addition to the standard series, specific custom designs are available and being developed for applications where the standard product series are not suitable or ideal.

The standard product range can be provided in two or more sizes to suit the vehicle internal cooling volume. This will impact overall width of the unit. The recommended width for the required cooling capacity is indicated in the technical details below.

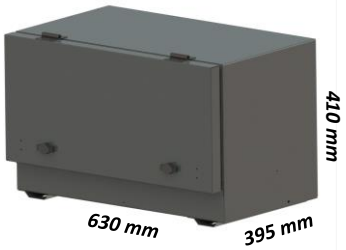
Feedback on your requirements will be appreciated as part of the ongoing improvement in the development of the range of models and related products. Please send your requirements to info@coolcamper.co.za. Information on the CoolCamper product range and application will soon be available on www.coolcamper.co.za.

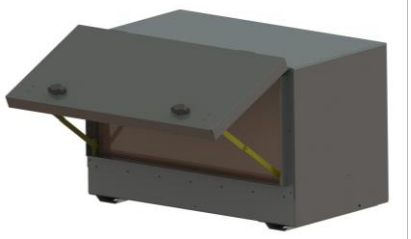
2.1 Bosbok Series

The Bosbok model is available with top or rear air discharge. The unit is ideal for installation inside a compartment of the caravan or outside, on top of the nose cone of a caravan or camping trailer. The unit can be provided with or without a door.



Bosbok without a door

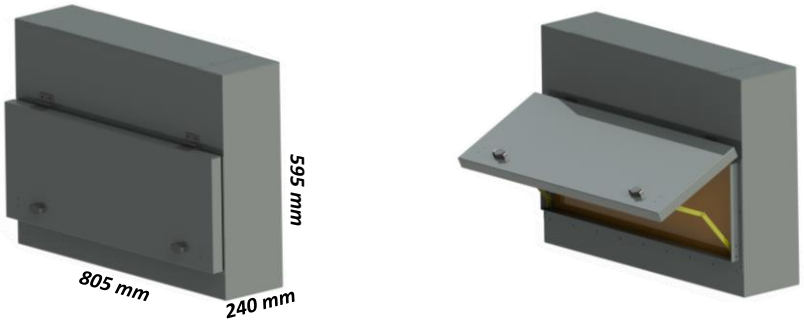




Bosbok with a door.

2.2. Waterbok Series

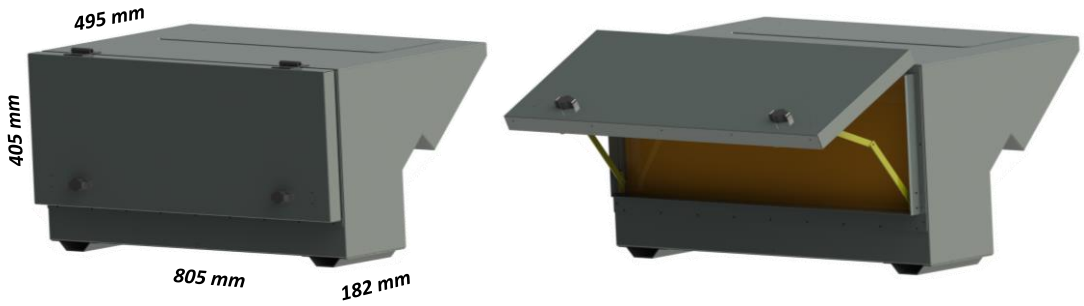
The Waterbok model is available with rear air discharge. The depth of the unit is limited (240mm) and therefore ideal for installation at the back of a caravan, adjacent to the spare wheel or in the position normally used for a spare wheel. The unit is normally provided with a door but can be provided without a door for installations inside a compartment of a caravan. The unit is also available in a 400mm or 600mm width.



Waterbok with a door

2.3 Custom designs

The Elephant model is based on the Waterbok model but made to fit the conquer commander and may fit other similar caravan arrangements with a sloped rear panel.



Elephant

3. TECHNICAL DESCRIPTION

Note that water consumption is dependent on the fan speed and environmental conditions. The consumption can generally be expected to vary between 1.5 to 8 l/hr with the higher consumption during long continue operation at the maximum fan speed and extreme dry conditions. (Note that continued operation at maximum fan speed is unlikely).

The noise levels of the unit during normal operation are generally below 55db. The high air flow results in typical air flow noise such as experienced with car ventilation systems. This air noise will increase with fan speed. Speed 4 is not advisable for long term operation given the high audible air flow.

The technical parameters of a single fan unit are as follows:

SPECIFICATION		
POWER SUPPLY	12V DC	12V DC (30 A)
WORKING CURRENT 4 SPEED	Speed 1	7.5 A
	Speed 2	10A
	Speed 3	14 A
	Speed 4	25 A
WATER SUPPLY PRESSURE (max)		30 Psi / 2 BAR
FAN DESIGN CAPACITY		1000m^3/h (max)

INSTALLATION	
POWER SUPPLY	Power supply >40A (to be provided) NOTE: The unit does not have an internal fuse
WATER SUPPLY	Water supply must be clean drinking water quality.
	RECOMMENDED COOLING CAPACITY FOR PRODUCT SIZE SELECTION (WIDTH OF STANDARD PRODUCT RANGE)
600/630 mm	5 m³ -17m³ operating at fan speed 1&2 (Operate at Speed 3 in extreme conditions)
800mm	18m³ -25m³ operating at fan speed 2 and 3 (Operate at speed 4 in extreme conditions)

PRODUCT SPECIFIC INFIRMATION

BOSBOK 600

Dimensions	W x H x D= 630mm x 400mm x 350mm
Weight	<12kg kg (without a door) no water

WATERBOK 800

Dimensions	W x H x D = 800mm x 600mm x 250mm
Weight	<15kg kg without water

WATERBOK 600

Dimensions	W x H x D = 600mm x 600mm x 250mm
Weight	<14kg kg without water

ELEPHANT

Dimensions	W x H = 800mm x 400mm
Weight	<15kg kg without water

4. **Recommended Installer**
   Equipped for Africa
   e-mail: andries@ar-dynamics.co.za
   Tel: 0765203054

5. Gallery

CoolCamper Waterbok

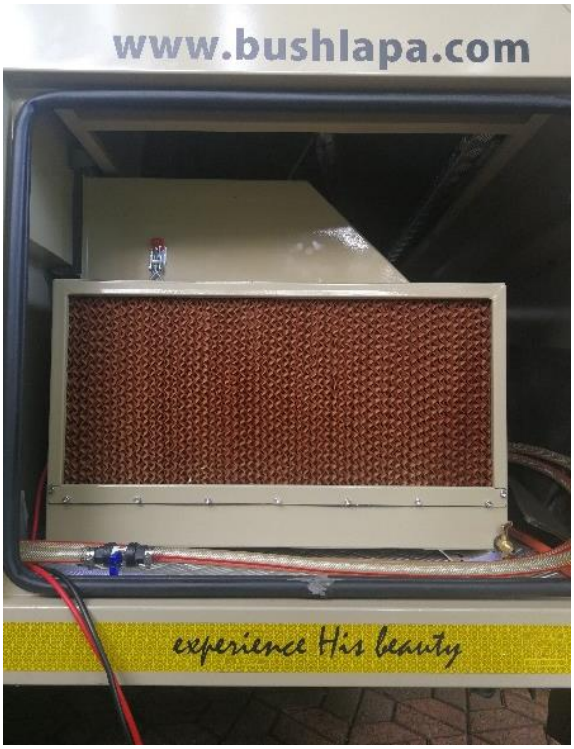
Bush Lapa Ratel

CoolCamper Olifant

Conqueror Commander

CoolCamper Bosbok

Boskriek caravan.



CoolCamper Bosbok

Bushlapa Gogga (Pre 2021 model)