



## ***MOBILCOOL 12V***



### ***Mounting instructions and warranty***

**Note : Mobilcool may not be able to cool an entire room. This is a portable device designed to cool small areas only.**

**Warning : Mobilcool must be secured in such a way so that it cannot be easily toppled from the upright position when in use, or when stored with water in the tank. Even greater caution is required if Mobilcool is to be operated in a moving vehicle or boat.**

**Read points A to E carefully before using Mobilcool**

- A. Pour only 2 litres of water in the newly purchased Mobilcool and start it in low or medium speed (why ? Read point 10).
- B. Do not run in high speed more than a few seconds during the running in time (why? Read points 4, 5 and 10).
- C. 4 hours running in are recommended (why? Read points 4 and 5).
- D. You must not re-circulate air cooled by the evaporative cooler back into the cooler. You must use outside air otherwise Mobilcool will not operate as a cooler but only as a fan (why? Read points 5 and 6).
- E. If the pump does not prime, switch on and off several times.

**Mobilcool has a one year warranty:**

Espar guarantees for a period of one year as from the date of purchase, any Mobilcool which does not operate in a satisfactory way due to defective material or manufacturing. Espar's warranty is limited to the repair or replacement, without charge, of the defective part or parts on the condition that the unit has not been used inappropriately, treated without care or has had unauthorised repairs carried out. Espar will guarantee the complete product if it is returned in appropriate packaging to the sales point with a copy of the invoice.

**Please read following instructions to ensure proper operation of Mobilcool.**

**1. How can I have cool air with a cooler?**

Air will come out of the air outlets much cooler than when it enters thanks to the evaporation phenomenon.

**2. Why should I choose an evaporative cooler?**

Mobilcool is portable and can be used without the need to have the engine running.

**3. What is the best way to cool an area using Mobilcool?**

Doors, windows must be open and the cooler must run in high speed to force the warm air out of the area. When the inside and outside temperatures are similar, you must shut doors and windows. Read points 5 and 6 to know what should be left open.

**4. Is there a priming time for a cooler?**

Yes, run the cooler for an hour in low and medium speed and then empty the remaining water. Fill with fresh water and repeat two or three times. Rinse the pads.

**5. How many openings do I need for appropriate cooling?**

The cooler must be located close to an open window or door in order to let the hot air out. Leave another window open to let the air out, otherwise a humid atmosphere will be created. **You must not re-circulate air cooled by evaporation.**

**WARNING :** Use a 2.5 mm<sup>2</sup> cable that goes to your cigarette lighter and a 20 Amp fuse in order to avoid overheating of the electric circuit.

**6. Can I use the cooler in a van, a truck or a tractor?**

You must not re-circulate air cooled by an evaporative cooler, you must get rid of humidified air by creating an airstream (open the passenger window a little and the driver window completely when at rest or in traffic jams but only have windows open a little when motoring at high speed).

**7. What should be done if water comes out of the air outlets?**

Do not overfill with water. Only fill between half to ¾ for the first few operations. With a new pad, there can sometimes be a small quantity of water from the outlets for 3 or 4 hours in high speed mode. Operate the cooler in low or medium speed and it will settle. Do not let water exit from the outlets continuously as this will void the warranty. (see point 5).

**8. My cooler does not provide cool air at the rear of my van/camper, etc.**

Use the dashboard fan as usual, keeping the windows closed. Place the cooler at the front of the dash air outlets so that it blows towards the rear of the vehicle.

**9. How long can my cooler operate with water and can ice be used?**

5.7 litres gives about 7 hours during the night and 3 hours during the day. Use clean domestic water. An addition of vinegar helps if water is hard. Ice must not be used in the Mobilcool because it could damage the blower fan. It is recommended to add a small quantity of mild disinfecting additive such as Milton's fluid or Aquatabs when filling the Mobilcool after every 200 hours of operation, this will avoid unpleasant smells.

**10. How will I know if the cigarette lighter socket has the right cable?**

Use the cooler in low or medium speed before checking the size of the cable. Use a 2.5 mm<sup>2</sup> cable and a 20 Amp fuse for high speed. If the cable is not the required size, the cigarette lighter can become so hot in high speed that you could melt some of the connecting parts. You do not often need high speed as there should be sufficient cool air on low and medium in most instances.

**11. How long can I use the battery without charging it?**

You should use a deep cycle battery ( 105 Amp / hour or more) which can be effective for between 10 to 17 hours (in low and medium speed).

**12. What happens if the cooler is knocked over?**

Water should simply spill from the inlet grill.

**13. Will the evaporative cooler work in areas where the humidity is high?**

On a hot dry day (40.5 °C) with humidity at 15% the cooler’s output temperature would be 23.3 °C but with humidity at 35% the cooler’s output temperature would be 28.9 °C. The lower the humidity, the more effective the Mobilcool becomes.

**14. When should I replace the evaporation pads?**

At least once a year. The pads can be washed with soap and water. They are also available at hardware and other stores that carry evaporative cooler parts. The pads come in large sheets, are inexpensive and can be easily cut to fit.

**15. Can I plug a 12 Volt cooler into a converter or AC power?**

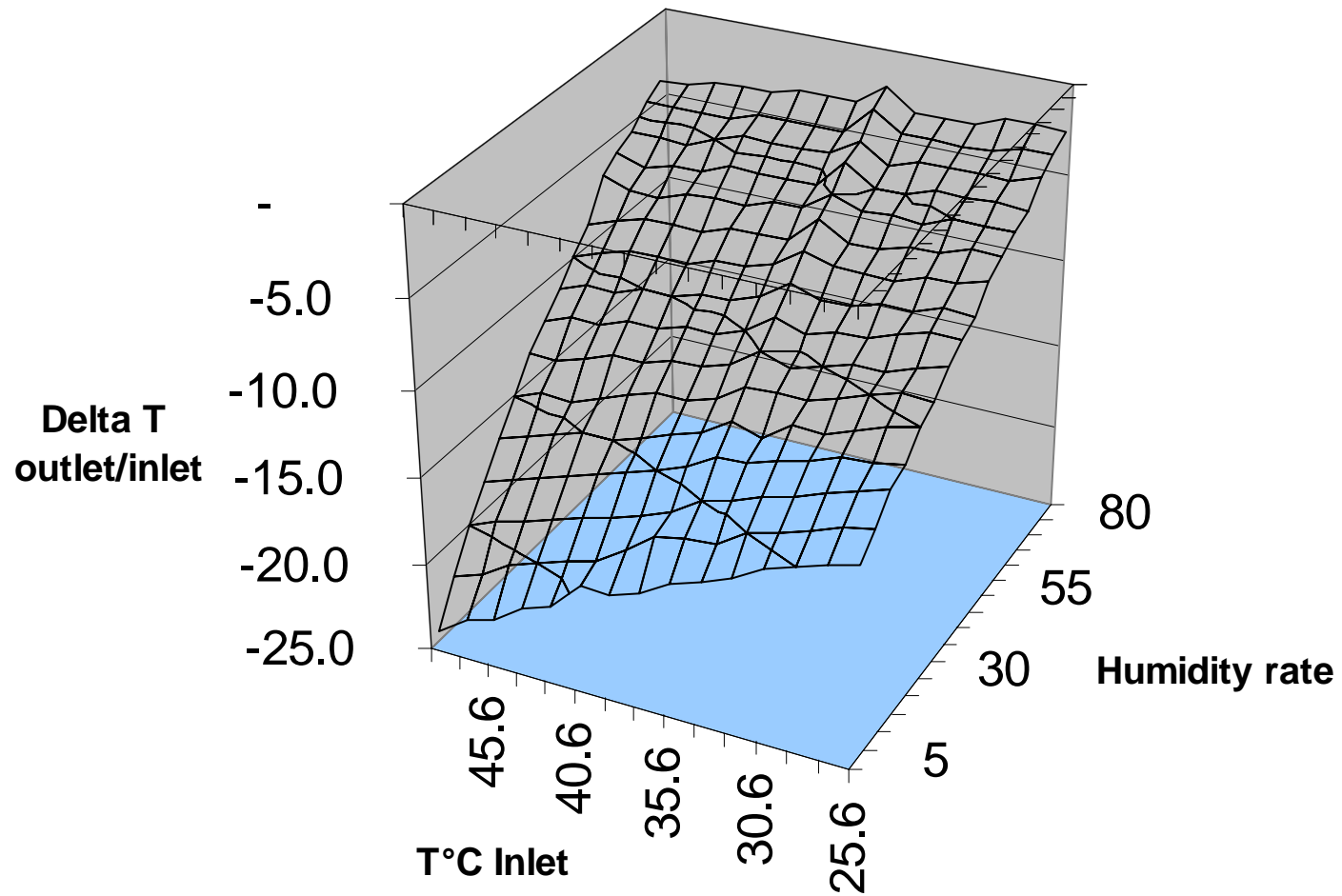
Mobilcool is a 12 Volt device that can be operated through a converter. You may also operate Mobilcool directly off a 10 Amp battery charger or converter if you want to use it in a shop, tent or spare bedroom at home. NEVER connect Mobilcool to an AC power supply.

**Specifications :** Mobilcool has 3 speeds and a weight of 4.5 kg.

The current draw on a 12 Volt model is 4.9 Amp in low speed, 7.9 Amp in medium speed and 13.1 Amp in high speed.

		Humidity %															
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Inlet T°C	25.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		13.9	12.9	11.7	11.2	10.0	9.5	8.4	7.8	7.3	6.2	5.6	5.0	4.5	3.4	2.8	2.3
	27.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		14.4	13.3	12.2	11.6	10.5	9.4	8.9	7.8	7.2	6.6	5.5	5.0	4.4	3.9	2.8	2.2
	28.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		15.0	13.9	12.8	11.7	11.1	10.0	9.5	8.3	7.8	6.7	6.1	5.0	4.5	3.9	3.3	2.2
	30.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		15.6	14.5	13.4	12.3	11.7	10.6	9.5	8.9	7.8	7.3	6.2	5.6	4.5	3.9	3.4	2.8
	32.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		16.6	15.0	13.9	12.8	11.6	11.1	10.0	8.9	8.3	7.2	6.6	5.5	5.0	3.9	3.3	2.8
	33.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		17.2	16.1	14.5	13.3	12.8	11.1	10.6	9.5	8.3	7.2	6.7	5.6	5.0	4.5	3.3	2.8
	35.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		17.8	16.2	15.0	13.4	12.3	11.2	10.0	8.9	7.8	6.7	5.6	5.0	3.9	3.4	2.3	1.7
	37.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		18.9	16.6	16.1	14.4	13.3	12.2	11.1	10.0	8.9	7.8	7.2	6.1	5.5	4.4	3.9	2.8
38.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	19.5	17.8	16.7	15.0	13.9	12.8	11.7	10.6	9.5	8.3	7.2	6.1	5.6	4.5	3.9	2.8	
40.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	19.4	18.9	17.3	15.6	14.5	12.8	11.7	10.6	9.5	8.4	7.3	6.7	5.6	4.5	3.9	2.8	
42.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21.1	19.4	17.8	16.1	15.0	13.3	12.2	11.1	10.0	8.9	7.8	6.6	5.5	4.4	3.9	3.3	
43.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	21.7	20.0	18.3	16.7	15.0	13.9	12.2	11.1	10.0	8.9	7.8	6.7	6.1	5.0	4.5	3.3	
45.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	22.8	20.6	18.9	17.3	15.6	14.5	12.8	11.7	10.6	8.9	7.8	7.3	6.2	5.6	4.5	3.4	
47.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	23.3	21.6	19.4	17.8	16.1	14.4	13.3	11.6	10.5	9.4	8.3	7.2	6.6	5.5	4.4	3.8	
48.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	24.5	22.2	20.0	18.3	16.7	15.0	13.3	12.2	11.1	10.0	8.9	6.7	6.1	5.5	4.5	3.9	

## Outlet temperature vs inlet temperature and humidity



**Main advantages :**

- *Produces cool air*
- *No installation required*
- *Simply works with water*
- *The warmer and drier the weather, the more efficient Mobilcool is*
- *Can be easily moved from one vehicle to another*
- *4 cool air outlets can be oriented and closed*
- *3 speed-ventilation*



<b>Specifications</b>	<b>Values</b>
<b><u>Dimensions :</u></b> . height . width . depth	400 mm 170 mm 318 mm
<b><u>Empty weight</u></b>	4.4 kg
<b><u>Water capacity</u></b>	5.7 litres
<b><u>Electric consumption (12 volts) :</u></b> . low speed . medium speed . high speed	4.2 Amps 7.6 Amps 13.9 Amps

**Contact Information:**

[Espar Ltd.](#),  
[Eastern Hangar](#),  
[Shaw Way](#),  
[Mount Batten](#),  
[Plymouth](#),  
[Devon](#),  
[PL9 9XH](#).  
[Tel 01752 491900](tel:01752491900)  
[Fax 01752 491910](tel:01752491910)