CE

Bergstrom

Parking Cooler P23-2T Plus

Rooftop electric air conditioner - User's Manual





- Thank you for choosing the **Parking Cooler P23-2T Plus**.
- Read this manual carefully before using the product.
- Keep this manual for future reference.

Dear Bergstrom Customer,

Thank you for choosing our **Parking Cooler P23-2T Plus** rooftop electric air conditioning unit.

Thank you for trusting **Bergstrom**.

We are committed to ensuring your cabin remains comfortable and cool thanks to our efficient service.

We would be delighted to receive your valuable feedback on how we can improve our products or services.

To ensure optimal performance of the equipment, please read this manual carefully and follow the instructions.

After reading, keep this manual for future reference.

Note: The content of this manual is subject to change without notice.

Bergstrom China is IATF 16949-certified.

Our products are the first OEM Parking Coolers to be approved in China.

CONTENTS

Use and operation

Product characteristics 4

User warnings and tips 5

(1) Product specifications 6

(2) Remote control guide 7

Installation

Appendix: Parking Cooler assembly instructions 8

Appendix: Error codes and troubleshooting 9

The assembly instructions in this manual are solely for the installer's reference.

For more details, please contact your local dealer.

Characteristics

The **Parking Cooler P23-2T Plus** is designed to cool the cabin in commercial vehicles. Its main characteristics are:

- **Excellent performance:**
  Powerful, quick cooling.
  Control via an easy-to-use remote control.

- **Specifically designed for vehicles:**
  Smart vehicle battery management system to guarantee the vehicle starts up.
  Has passed stringent professional tests, both in the lab and on the road.

- **Comfort and convenience:**
  Adjustable ventilation grilles with high airflow capacity.
  Cools every corner of the cabin.

- **High energy efficiency. Longer operating time with lower energy consumption:**
  Longer operating time to ensure better rest for users.

Warning:

1. Only qualified Bergstrom personnel or authorised dealers may install, repair, or reposition the unit.
2. Under no circumstances may the user repair the unit or replace the power cable.
3. If any anomaly occurs (burning smell, smoke, etc.), disconnect the power supply immediately and contact your local dealer.

User tips:

1. To extend the **P23-2T Plus**'s working life, cool the cabin with your vehicle's air conditioning before connecting the unit.
2. Using the cabin curtains to keep the cabin temperature constant is recommended.
3. Avoid direct sunlight. Park the vehicle in the shade and place a sunshade on the windscreen to maintain the cooling effect.
4. Keep the unit's air inlets and outlets clean.
5. To ensure normal operation of the unit, keep the vehicle's engine running for 4 to 6 hours to charge the battery.
6. If you wish to replace your vehicle's battery, it is advisable to opt for one with a minimum capacity of 180 Ah.
7. In high humidity environments, further open the air outlet in order to prevent excessive condensation.
8. When replacing or connecting the **P23-2T Plus** unit to the battery for the first time, it is normal for it to take around 1 minute to start up, due to the characteristics of the batteries.
9. The product should be installed on the top roof of the truck or RV which the height is higher than 2.3 m.

Product description

Dimensions



Performance parameters

Article	Unit	**Parking Cooler P23-2T Plus** Rooftop electric air conditioner
Model		P23-2T Plus
Nominal cooling capacity	W	2300*
Maximum cooling capacity	W	2500
Circulation air volume	m^3/h	350
COP	w/w	3.2
Rated voltage	VDC	24
Setting temperature range	ºC	16~32
Operating temperature range	ºC	16~60
Noise	dB(A)	< 60
Refrigerant		R134a
Refrigerant charge	g	470
Weight	Kg	35
(L x W x H)	mm	985 x 895 x 203

(*) Cooling capacity test conditions:

1. Indoor dry bulb 27ºC, indoor wet bulb 19.5ºC
2. Outdoor dry bulb 35ºC

Remote control



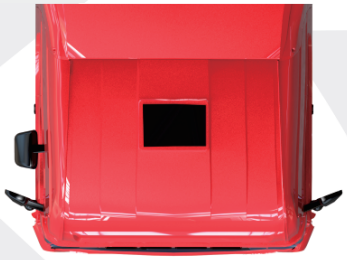
Indoor unit



Button name	Function description	Observation
ON/OFF	Turns the **P23-2T Plus** unit on and off.	The **P23-2T Plus** unit enters low power mode when turned off.
Increase temperature	Press once to increase by 1ºC	Temperature range: 16~32ºC
Decrease temperature	Press once to decrease by 1ºC	Temperature range: 16~32ºC
Fan speeds	3 -> 2 -> 1 -> 3 Airflow rate	Airflow rate adjustment display
Mode	Auto - Economy - High - Auto Three-mode toggle	Changes the unit's operating mode
Air orientation	Automatic swing function	For specific or pre-wired vehicle models

Appendix: Parking Cooler P23-2T Plus assembly instructions

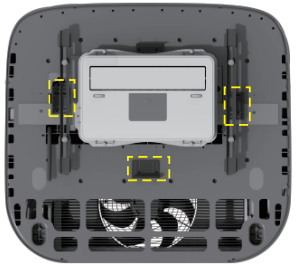
1. Clean the vehicle's hatch.



2. Place the sealing gasket around the hatch.



3. Place the alignment brackets at the base of the unit.



4. Position the **P23-2T Plus** unit in accordance with the location of the alignment brackets.



5. Install the fixing brackets.



6 . Sealing gasket compression s hould be limited to 6-7 mm.



7. Connect the power cable to the battery.



8. Install the interior panels.



Appendix: Error codes and troubleshooting

If an anomaly occurs during operation of the **P23-2T Plus** unit, the display may show any of the error codes listed below.

The table below explains the different error codes:

Error code	Failure details	Meaning of the code	Solution
E2	Low battery warning	Low voltage	1. Low battery power or power cable poorly connected. Charge the battery or reconnect the cable. 2. If these solutions do not solve the problem, replace the unit's controller.
E3	Fan overcurrent warning	Fan failure	Check if the condenser fan is jammed; if it is not, replace the condenser fan.
E8	Return air temperature sensor open circuit warning	Temperature sensor failure	Check if the temperature control sensor is damaged or if the plug connected to the unit's controller is loose; if it is not, replace the unit's controller.
C0	Compressor overcurrent warning	Compressor failure	Check if the compressor's controller and terminals are loose; if they are not, replace the compressor's controller.
C1	Compressor low voltage warning		Check if the power cable connector in the compressor's controller is loose; if it is not, replace the compressor's controller.
C2	Compressor overpressure warning		Check if the generator's voltage is normal; if it is normal or there is no generator, replace the compressor's controller.
C3	Compressor locked warning		Check if the air conditioning system pressure is abnormal or too high; if it is not, replace the compressor's controller.
C4	Compressor overheating warning		Check if the condensation core surface is dirty and clogged, resulting in poor cooling; if it is not, replace the compressor's controller.

Observations: If the screen shows the symbol “**Lt**”, the return air temperature sensor will be below 19ºC and the unit will not be able to cool.

If any of the problems persist, please contact a local dealer and report the details of the failure.



Dirna Bergstrom, S. L.

Address: Calle Francisco Alonso, 11A - 28806 - Alcalá de Henarés (Madrid)
Spain
E-mail: ventas@dirna.bergstrominc.com
Tel: +34 91 877 58 40

BCAC-M-PC-P23-2T Plus (CE)-EN REV01
English edition v1: 01/07/2024 - 1003719344

Bergstrom