

# Operating Instructions

Air Conditioning  
Cool Top RTE 16



**English**

**Deutsch**      Bedienungsanweisung

**Français**     Notice d'utilisation

**Italiano**      Istruzioni per l'uso

**Español**      Instrucciones de uso

# Content

<b>1</b>	<b>About this document</b>	<b>4</b>
1.1	Purpose of the document	4
1.2	Using this document	4
1.3	Use of symbols and highlighting	4
1.4	Warranty and liability	4
<b>2</b>	<b>Safety</b>	<b>4</b>
2.1	Intended use	4
2.2	Safety information	4
2.3	Regulations and legal requirements	4
<b>3</b>	<b>Installation</b>	<b>4</b>
3.1	Qualifications of installation personnel	4
3.2	Notes on installation	4
<b>4</b>	<b>Operation</b>	<b>5</b>
4.1	General	5
4.2	Operation	5
4.3	Changing settings	6
<b>5</b>	<b>Error codes</b>	<b>7</b>
<b>6</b>	<b>Disposal</b>	<b>7</b>
<b>7</b>	<b>Maintenance</b>	<b>7</b>

# Index

<b>1</b>	<b>À propos de ce document</b>	<b>12</b>
1.1	But visé par ce document	12
1.2	Utilisation de ce document	12
1.3	Utilisation de symboles et de mises en évidence	12
1.4	Garantie et responsabilité	12
<b>2</b>	<b>Sécurité</b>	<b>12</b>
2.1	Utilisation conformément aux dispositions	12
2.2	Consignes de sécurité	12
2.3	Exigences réglementaires et légales	12
<b>3</b>	<b>Montage</b>	<b>12</b>
3.1	Qualifications du personnel d'installation	12
3.2	Remarques concernant l'installation	12
<b>4</b>	<b>Utilisation</b>	<b>13</b>
4.1	Informations générales	13
4.2	Utilisation	13
4.3	Modification des paramètres	14
<b>5</b>	<b>Codes d'erreur</b>	<b>15</b>
<b>6</b>	<b>Élimination</b>	<b>15</b>
<b>7</b>	<b>Entretien</b>	<b>15</b>

# Inhaltverzeichnis

<b>1</b>	<b>Zu diesem Dokument</b>	<b>8</b>
1.1	Zweck des Dokuments	8
1.2	Umgang mit diesem Dokument	8
1.3	Verwendung von Symbolen und Hervorhebungen	8
1.4	Gewährleistung und Haftung	8
<b>2</b>	<b>Sicherheit</b>	<b>8</b>
2.1	Bestimmungsgemäße Verwendung	8
2.2	Sicherheitshinweise	8
2.3	Vorschriften und gesetzliche Bestimmungen	8
<b>3</b>	<b>Einbau</b>	<b>8</b>
3.1	Qualifikation des Einbaupersonals	8
3.2	Hinweise zum Einbau	8
<b>4</b>	<b>Bedienung</b>	<b>9</b>
4.1	Allgemein	9
4.2	Bedienung	9
4.3	Einstellungen ändern	10
<b>5</b>	<b>Fehlercodes</b>	<b>11</b>
<b>6</b>	<b>Entsorgung</b>	<b>11</b>
<b>7</b>	<b>Wartung</b>	<b>11</b>

# Indice

<b>1</b>	<b>Informazioni su questo documento</b>	<b>16</b>
1.1	Scopo del documento	16
1.2	Uso di questo documento	16
1.3	Uso di simboli e evidenziazioni	16
1.4	Garanzia e responsabilità	16
<b>2</b>	<b>Sicurezza</b>	<b>16</b>
2.1	Uso previsto	16
2.2	Informazioni di sicurezza	16
2.3	Norme e disposizioni di legge	16
<b>3</b>	<b>Installazione</b>	<b>16</b>
3.1	Qualifiche del personale addetto al montaggio	16
3.2	Note sull'installazione	16
<b>4</b>	<b>Funzionamento</b>	<b>17</b>
4.1	Generale	17
4.2	Funzionamento	17
4.3	Modifica delle impostazioni	18
<b>5</b>	<b>Codice di errore</b>	<b>19</b>
<b>6</b>	<b>Smaltimento</b>	<b>19</b>
<b>7</b>	<b>Manutenzione</b>	<b>19</b>

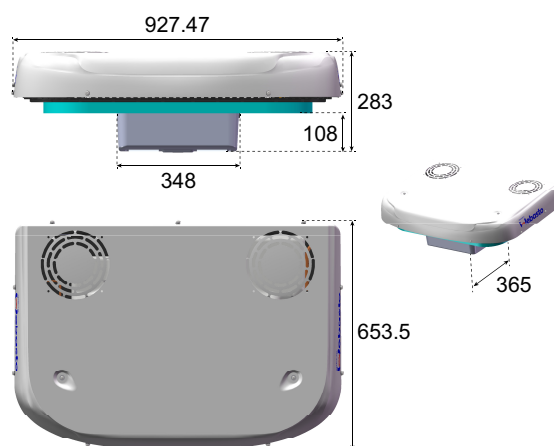
# Índice

<b>1</b>	<b>Acerca de este documento</b>	<b>20</b>
1.1	Objetivo del documento	20
1.2	Cómo usar este documento	20
1.3	Uso de símbolos y resaltes	20
1.4	Garantía y responsabilidad	20
<b>2</b>	<b>Seguridad</b>	<b>20</b>
2.1	Uso previsto	20
2.2	Información de seguridad	20
2.3	Normas y requisitos legales	20
<b>3</b>	<b>Instalación</b>	<b>20</b>
3.1	Cualificación del personal de instalación	20
3.2	Notas sobre la instalación	20
<b>4</b>	<b>Funcionamiento</b>	<b>21</b>
4.1	Generalidades	21
4.2	Funcionamiento	21
4.3	Modificar los ajustes	22
<b>5</b>	<b>Códigos de error</b>	<b>23</b>
<b>6</b>	<b>Eliminación</b>	<b>23</b>
<b>7</b>	<b>Mantenimiento</b>	<b>23</b>

## Technical data / Technische Daten / Caractéristiques techniques / Dati tecnici / Información técnica

Description	Beschreibung	Description	Descrizione	Descripción	Values/ Wert Valeur / Valore Valor
Operating voltage	Betriebsspannung	Tension de service	Tensione di esercizio	Tensión de servicio	<b>24 VCC</b>
Current	Strom	Intensité	Corrente	Corriente	<b>23 A</b>
Cooling capacity	Kühlleistung	Capacité de refroidissement	Capacità di raffreddamento	Capacidad de refrigeración	<b>1600 W (5460 BTU/h)</b>
Maximum operating temperature	Max. Betriebstemperatur	Température de service max.	Temperatura di esercizio massima	Máxima temperatura de funcionamiento	<b>45 °C /113 °F</b>
Air flow after evaporator	Luftstrom nach Verdampfer	Débit d'air après l'évaporateur	Flusso d'aria dopo evaporatore	Caudal de aire tras el evaporador	<b>230 m³/h</b>
Weight	Gewicht	Poids	Peso	Peso	<b>23,4 kg</b>
Refrigerant type/charge	Kältemitteltyp/-füllung	Type de réfrigérant/charge	Tipo/Carica di refrigerante	Tipo/carga de refrigerante	<b>R134a / 0,450 kg</b>

## Dimensions / Abmessungen / Dimensions / Dimensioni / Dimensiones



# 1 About this document





## 1.1 Purpose of the document

These operating instructions are an integral part of the product and provide the user with information on the safe operation of the unit.

## 1.2 Using this document

- ▶ Read these operating instructions before operating the unit.
- ▶ Keep these operating instructions ready to hand.
- ▶ Hand these operating instructions on to the following owner or user of the unit.

## 1.3 Use of symbols and highlighting

	Explanation
▶	Action to be taken.
✓	Requirements for the following necessary action.
	Note on a special technical feature.
	Separate information is available.
	Possibility on property damage.
	Possibility on a severe or mortal injury.

## 1.4 Warranty and liability

Webasto shall not assume liability for defects or damage that are the result of the installation and operating instructions being disregarded.

This liability exclusion particularly applies for:

- Installation by untrained personnel
- Improper use
- Repairs not carried out by a Webasto service workshop
- Use of non-original spare parts
- Conversion of the unit without permission from Webasto
- Mechanical damage to the equipment
- Failure to comply with inspection and maintenance instructions

# 2 Safety

## 2.1 Intended use

Under all aspects the Cool Top RTE 16 is an air conditioner and so the ideal companion for any stop; its features make the day or night rest shift more satisfying and regenerative, thus rendering travel activities safer.

The Cool Top RTE 16 air conditioner is designed for truck cabins, for stationary use only. It cannot replace the original vehicle air conditioning system. The manufacturer declines its liability if the Cool Top RTE 16 is used in other applications as described herein.



### **WARNING** **Danger of explosions**

Danger of injuries and equipment damage.

- ▶ Do not operate the system in potentially explosive environments.



▶ Do not operate the system in saline environments.

## 2.2 Safety information



### **WARNING** **Rotating components** **Danger of injuries**

- ▶ Do not put your hands in the ventilation vents.
- ▶ Make sure that foreign objects cannot enter the device.

## 2.3 Regulations and legal requirements

The Cool Top RTE 16 air conditioning system has been type-tested and approved in accordance with ECE standards (type approval E24 10R-052087)

- ▶ Read and comply with warnings and notes in these operating instructions.

# 3 Installation



See for complete information the Installation Instructions.

## 3.1 Qualifications of installation personnel

The installation personnel must have the following qualifications:

- Successful completion of Webasto training.
- Corresponding qualification for working on technical / electrical systems.
- Certified to work on air conditioning systems.

## 3.2 Notes on installation



### **NOTE**

- If the electrical cables have to go through bulkheads with sharp corners, use protective sheaths or piping.
- Firmly secure the electrical cables paying close attention to their path along metal bulkheads able to conduct electricity; furthermore, avoid contact with sharp edges.
- Connect the Cool Top RTE 16 to the vehicle's power supply protecting the system by using a fuse.

# 4 Operation

## 4.1 General

The Cool Top RTE 16 consists of 2 main parts:

- The evaporator, installed inside the cabin.
- The condenser, installed outside.

The Cool Top RTE 16 works when the engine is switched off. The Cool Top RTE 16 is extremely quiet. It can be easily installed on any type of vehicle without alterations.

The system utilizes the refrigerant R134a.

Operation can be controlled:

- Directly by the control panel
- Remotely by means of the remote controller.

## 4.2 Operation

The remote controller operates the main functions. Changes to the standard settings may be done only by means of the local control panel.

### Control panel

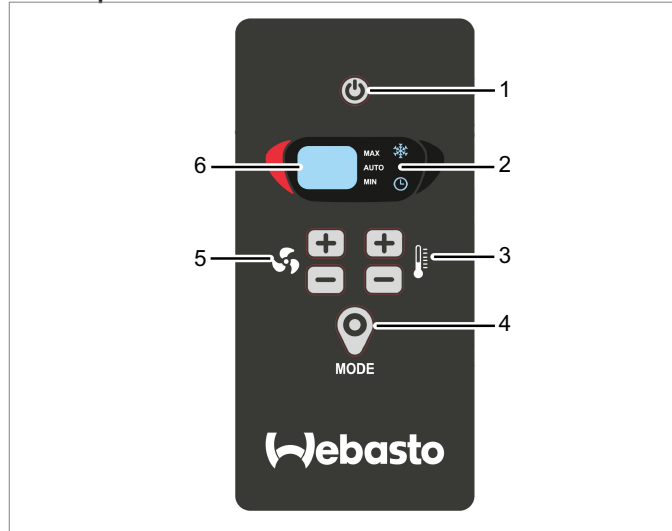







Fig. 01: Control panel

Legend Fig. 01:

1. ON-OFF button
2. Mode indications
3. Temperature symbol and setting buttons
4. Mode button
5. Fan symbol and setting buttons
6. Display

	Description
 ON-OFF	Press the "ON-OFF" button to switch the Cool Top RTE 16 ON or OFF. When on, the display always shows the last set temperature.
 MODE	Pushing the "MODE" button you cycle through the modes MIN, AUTO and MAX. The corresponding icon lights up.
MIN	This corresponds the lowest power setting of the Cool Top RTE 16 (lowest performance and lowest compressor speed – the timer is set for a continued function of 6 hours, after which the Cool Top RTE 16 goes off automatically). You can modify the timer with the P0 parameter - see chapter 4.3.

	Description
AUTO	The management is automatic (performance and compressor speed are managed automatically based on the temperature required by the user and on the current temperature - the timer is set for a continued function of 4 hours, after which the Cool Top RTE 16 goes off automatically). You can modify the timer with the P1 parameter - see chapter 4.3
MAX	This corresponds to the highest power setting of the Cool Top RTE 16 (highest performance and highest compressor and ventilator speed), after 20 minutes the Cool Top RTE 16 goes to the "AUTO" mode. You can modify the timer with the P2 parameter - see chapter 4.3
	If you press the MODE button when the Cool Top RTE 16 is off, you will activate the DELAYED ACTIVATION mode and the relative icon lights up. The Cool Top RTE 16 switches itself on automatically after a certain number of hours have elapsed, shown on the display. You can set the number of hours between 1 and 99 by using the TEMPERATURE (+ / -) buttons.
 VENTILATION	Each push on the (+ / -) buttons corresponds to the increase or decrease of the ventilation speed: you can choose between 6 different levels of ventilation. The display shows the selected level. If you press a ventilation (+ / -) button when the Cool Top RTE 16 is off, you activate the ventilation only mode.
 TEMPERATURE	Each push on the (+ / -) buttons corresponds to the increase or decrease of 1 °C of temperature: from a minimum value of 17 °C to a maximum of 32 °C. The display shows the selected temperature.

## Remote controller

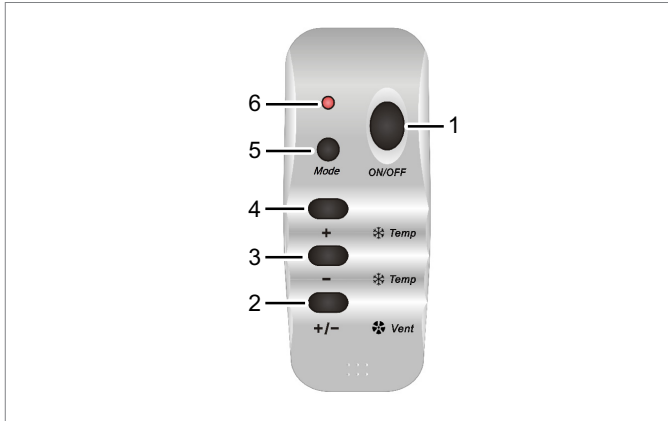





Fig. 02: Remote controller

Legend Fig. 02:

1. ON-OFF button
2. Fan speed setting button
3. Temperature decrease button
4. Temperature increase button
5. Mode button
6. Transmit indication

	Description
ON-OFF	Press the "ON-OFF" button to switch the Cool Top RTE 16 ON or OFF. When on, the display on the local control panel shows the last set temperature.
 Vent	With each push on the (+ / -) button you cycle through the 6 different ventilation levels. The display on the local control panel shows the selected level. If you press the ventilation (+ / -) button when the Cool Top RTE 16 is off, you activate the ventilation only mode.
 Temp	Each push on one of the + / - buttons increases or decreases the set temperature with 1 °C. The minimum value is 17 °C, the maximum 32 °C. The display on the local control panel shows the selected temperature.
MODE	Pushing the "MODE" button you cycle through the modes MIN, AUTO and MAX. The corresponding icon on the local control panel shows the selected mode.
	Each time you press a button on the remote controller the light comes on to show transmission activity.

## 4.3 Changing settings



### ATTENTION

Changing the standard settings must be carried out only by qualified personnel. Any change performed without the proper skills may cause damage to the Cool Top RTE 16 and/or to the vehicle.



Changing settings can be done only with the system off.

- ▶ Press simultaneously the VENTILATION (+ / -) and the TEMPERATURE (+) buttons to access the setting menu.
- ▶ Scroll between the menus with the VENTILATION (+ / -) buttons.
- ▶ Choose the desired values with the TEMPERATURE (+ / -) buttons.
  - The values will be saved after a few moments without touching anything else.
- ▶ Exit from the menu by not touching any button.

### Settings menu:

Item		Description
P0	Timer (MIN mode)	In MIN mode, the systems default setting is 6 hours of continuous operation. The default value can be changed in this menu. The choice range is between 1 and 99 hours.
P1	Timer (AUTO mode)	In AUTO mode, the system's default setting is 4 hours of continuous operation. The default value can be changed in this menu. The choice range is between 1 and 99 hours.
P2	Timer (MAX mode)	In MAX mode, the system operates at its max power for the preset time in minutes. The choice range is between 1 and 99 minutes. The system switches to the AUTO mode.
A3	Celsius and Fahrenheit degrees	The systems default setting is Centigrade degrees. This menu allows you to change the parameter to Fahrenheit degrees.
A4	Offset	This refers to the temperature difference detected by the probe and the temperature shown on the display. This menu allows you to change this value from -9 °C to +9 °C with 1 °C increments.
A5	Battery saver value	The default setting is 21.5 VDC (Cut-out) and 24 VDC (Cut-in). This menu allows to change these values based on the following table.

### A5 settings:

A5	24 VDC		A5	24 VDC	
	Cut-out	Cut-in		Cut-out	Cut-in
0	20	24,5	10	20	24 (default)
1	20,3		11	20,3	
2	20,6		12	20,6	
3	20,9		13	20,9	
4	21,2		14	21,2	
5	21,5		15	<b>21,5 (default)</b>	
6	21,8		16	21,8	
7	22,1		17	22,1	
8	22,4		18	22,4	
9	22,7		19	22,7	



## 5 Error codes

In case of a problem, the device shuts down and the display will show an error message from the following list.

Message	Description	Troubleshooting
E0	Disconnected compressor (A power supply cable of the compressor has disconnected.)	Contact an authorized Webasto dealer.
E1	Battery power (The battery-saver has activated. Power decreased below the set threshold.)	Start the vehicle in order to recharge the battery.
E2	Power overload from the cooling fan (The cooling fan overloads the board beyond the allowed limit. Possible cause: short circuit or something is blocking the fan from rotating.)	Contact an authorized Webasto dealer.
E3	Blocked compressor (The rotor is blocked or the pressure in the cooling circuit is too high.)	The E3 – E4 – E5 codes do not indicate a malfunction, but is a normal management procedure for the compressor by the electronic board. Only if the code continues to be displayed contact an authorized Webasto dealer.
E4	Over-current on the compressor	
E5	High temperature in the control board (If the cooling circuit is overloaded or if the surrounding temperature is too high, the control board signals this issue.)	
E6	Empty circuit (The system may have lost gas.)	Contact an authorized Webasto dealer.
E7	Temperature probe (If the probe has short circuited or has become disconnected, the device stops working.)	
E9	Power overload from the condenser fan (The cooling fan overloads the board beyond the allowed limit. Possible cause: short circuit or something is blocking the fan from rotating.)	

## 6 Disposal

Dispose of packaging material as required by standing regulations, separating them for recycling.



The system cannot be disposed off as regular waste. Dispose the system according the local applicable rules and regulations. Obtain information about disposal at the city council, the responsible waste station and/or your local Webasto sales partner.

## 7 Maintenance



**WARNING**  
**Sharp edges**  
**Danger of injuries**

► When you work near heat exchangers, be careful not to get cut.



### ATTENTION

Any repair or intervention for charging or the collection of refrigerant must be done at authorised Webasto workshops and by qualified personnel.



While washing the vehicle, make sure you do not direct violent jets of water towards the inside of the condenser unit from the lower part and through the slits of the electric fan; in case cover it.

Period	Action	Comments
At least once a month. Even during winter months!	Start the unit.	Avoid keeping the conditioner inactive for a long period of time. Functioning of it guarantees the lubrication of components which would dry up if left inactive for a too long period.
Periodically	Check the condenser.	If necessary, clean it with compressed air, being careful to not damaging the aluminium rests.
Periodically	Check the functioning of the condenser's electric fan.	
Periodically	Check cleanliness.	Insects, floss and other material may deposit on the winglets, reducing the efficiency of the heat exchanger.
At the start of each season.	Inspect every part of the system, including electric components, to make sure there are not any abnormal conditions.	

In multilingual versions the English language is binding.

The telephone number of the respective country can be obtained from the Webasto service point flyer or the homepage of your respective Webasto country representative.

Bei mehrsprachiger Ausführung ist Englisch verbindlich.

Die Telefonnummer des jeweiligen Landes entnehmen Sie bitte dem Webasto Servicestellen-Faltblatt oder der Webseite Ihrer jeweiligen Webasto Landesvertretung.

Dans le cas d'une version rédigée en plusieurs langues, l'anglais est alors la langue qui fait foi.

Pour trouver le numéro de téléphone du pays concerné, veuillez consulter le dépliant des points-service Webasto ou la page web de la représentation Webasto de votre pays.

In caso di versione multilingue, fare riferimento alla lingua inglese.

Il numero di telefono relativo al paese specifico è indicato sull'opuscolo del centro servizi Webasto ed è disponibile sul sito web della propria filiale Webasto.

Este manual esta traducido en varios idiomas, le informamos que sólo la versión en inglés será vinculante.

Consulte el número de teléfono del país correspondiente en el folleto de los servicios autorizados Webasto, o en la página web de su representante Webasto.

Webasto Thermo & Comfort SE  
Postfach 1410  
82199 Gilching  
Germany

Company address:  
Friedrichshafener Str. 9  
82205 Gilching  
Germany

Manufacturer  
Indel B SpA  
Localita Ca' Baldone,  
610196 Sant'Agata Feltria (RN)  
Italy

Technical Extranet: <https://dealers.webasto.com>

Manufacturer model name  
Sleeping Well Oblò Aircon 1600, # SW024T231B

[www.webasto.com](http://www.webasto.com)

