

Webasto Cool Top 120-e

Rooftop air-conditioning systems for electric vehicles



Compact 400V air conditioning for electric vehicles

This rooftop air conditioning system is suitable for electric vehicles operating with 400V DC power supply such as minibuses, light commercial vehicles or ambulances. The rooftop unit is fully self-contained including 400V DC compressor, blowers, heat exchangers and electronics.

The unit may be controlled by an optional Webasto control panel or may also be integrated into the vehicle HMI via CAN bus.

The housing of the rooftop air-conditioner may be painted to match the color of the vehicle.

Advantages at a glance:

- Air conditioning unit with cooling capacity of 12 kW
- Compact and lightweight solution
- Easy installation and setup, "plug-and-play" design
- Variable compressor speed control automatically adapts cooling output to cooling demand. This results in low noise levels and higher efficiency once vehicle has been cooled down
- Includes fresh air functionality for better climate comfort on board
- Pre-charged with refrigerant gas – no need to route refrigerant hoses
- More sustainable due to the use of low GWP refrigerant R1234yf
- 12V power supply needed for operation of electronics and blowers
- Electronic temperature control, maintaining precisely the desired target temperature
- CAN bus integration into vehicle HMI possible



Light duty



Bus



Off-Highway



Specialty vehicles

Technical specifications

Model overview	Cool Top 120-e
Nominal cooling capacity (kW)	12
Refrigerant gas	R1234yf
Refrigerant charge (kg)	1.35
Nominal voltage LV / HV (V DC)	12 / 400 (range from 250 to 460)
Max power consumption (W) at 12V / at 400V	1120 / 2625
Max current absorption (A) at 13,5V / at 350V	83 / 7,5
Max. air flow evaporator blower (m ³ /h) (@ 475 Pa back pressure)	2000
Number of evaporator blowers / condenser fans	2 brushless / 2 brushless
Dimensions L x W x H (mm)	1605 x 1290 x 300
Weight (kg)	80
Nominal roof radius (mm)	7000
Additional information	Fresh air function included

Accessories

Automatic control element

- OLED graphic display
- External air monitoring
- Temperature regulation
- Internal and external temperature detector
- On / off switch, air-conditioning system
- Fan speed / automatic and manual
- Fresh air / recirculated air control



Contact details

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