

ALL-ELECTRIC ROOFTOP AIR CONDITIONING UNIT FOR ELECTRO- AND HYBRID BUSES

# CC 205-E



The CC205-E is supplementing our range of all-electric rooftop air conditioning units and is specifically oriented to the demands of the global markets. A special emphasis was placed on lightweight construction, performance and simple installation. In addition, customers also have the option of PTC heating.

BEST BUS CLIMATE



## HIGHLIGHTS



### Life-cycle

- Low consumption of energy due to low unit weight;
- Short dimensions allow space for battery system on the roof;
- Long duration due to brushless EC blowers;
- Nearly maintenance-free.



### Environmentally Friendly

- Safety against leakage due to the hermetically sealed refrigerant circuit;
- Noise emissions optimized.



### Comfort

- Cooling capacity with intelligent variable control up to 25 kW;
- Optional PTC electric heating.



### Range of Driving

- Maximization of the range due to the low unit weight;
- Optimized power consumption;
- Variable regulation of the PTC heater.



### Others

- Integrated compressor, no installation of refrigerant lines necessary;
- Better interface with all bus body builders OEM;
- Designed for R 134a.



Optionally with PTC heating, available in 10 kW versions.

## PTC HEATER

The new high-voltage PTC heaters complement our heating systems. They are intended for use whenever there is simply an additional need for heating. In operation the PTC heaters can be infinitely adjusted by means of an electronic control unit developed by Valeo.

## TECHNICAL DATA

Characteristics	Version 1 Cooling	Version 2 Cooling + PTC Heater	Version 3 Cooling	Version 4 Cooling + PTC Heater
Integrated Converter	24V DC / 380V DC	24V DC / 380V DC	380V DC	380V DC
Maximum Cooling Capacity	85.000 BTU/h (25kW)	85.000 BTU/h (25kW)	85.000 BTU/h (25kW)	85.000 BTU/h (25kW)
Maximum Heating Capacity	-	0-10 kW	-	0-10 kW
Current Consumption 26V DC	Nominal - 50A <sup>(4)</sup>	Nominal - 50A <sup>(4)</sup>	Nominal - 53A <sup>(1)</sup>	Nominal - 53A <sup>(1)</sup>
Current Consumption 600V DC	5A <sup>(3)</sup> / 13A <sup>(2)(4)</sup>	5A <sup>(3)</sup> / 13A <sup>(2)(4)</sup> 15A <sup>(4)</sup>	7A <sup>(1)(2)</sup> -	7A <sup>(1)(2)</sup> 13A <sup>(4)</sup>
Fresh Air <sup>(5)</sup>	25%	25%	25%	25%
Flow of Evaporator	4.400 m <sup>3</sup> /h	4.400 m <sup>3</sup> /h	4.400 m <sup>3</sup> /h	4.400 m <sup>3</sup> /h
Flow of Condenser	5.400 m <sup>3</sup> /h	5.400 m <sup>3</sup> /h	5.400 m <sup>3</sup> /h	5.400 m <sup>3</sup> /h
Temperature Cut-Off	> 55° C	> 55° C	> 55° C	> 55° C
Unit Weight	180 kg	185 kg	168 kg	173 kg
Refrigerant Gas <sup>(6)</sup>	R134a - 2,8 kg + 0,5 kg <sup>(7)</sup>	R134a - 2,8 kg + 0,5 kg <sup>(7)</sup>	R134a - 2,8 kg + 0,5 kg <sup>(7)</sup>	R134a - 2,8 kg + 0,5 kg <sup>(7)</sup>
Dimension L x W x H (mm)	2646 x 1500 x 269	2646 x 1500 x 269	2646 x 1500 x 269	2646 x 1500 x 269
Roof Radius (mm)	5.500 - 8.000	5.500 - 8.000	5.500 - 8.000	5.500 - 8.000

(1) Nominal: (condenser 80% / evaporator 70%).

(2) Cooling maximum (compressor speed 90 Hz).

(3) Regulated (temperature passenger compartment at set-point 27 °C and ambient 35 °C).

(4) Maximum speed (condenser 100% / evaporator 100%).

(5) Referring to the total flow of the free evaporator.

(6) Gas charge values changes to each application.

(7) Gas charge when cooling system has front box.