

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

REVO[®]-E GLOBAL



The REVO[®]-E Global 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. The customers also have the option of PTC heating and battery cooling.

BEST BUS CLIMATE

FOC 205_REV.00/June 2023



HIGHLIGHTS



Life-cycle

- Low consumption of energy due to low unit weight and the optimized thermal control system;
- 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;
- Contributes to the reduction in CO² emission, as it does not need mechanical energy.



Range of Driving

- Maximization of the range due to the reduced unit weight;
- Variable regulation of the via PTC heater;
- Optimized power consumption through thermal management by integral proportional control.



Comfort

- Cooling capacity up to 33 kW;
- Heating with PTC heater or heat pump possible as an option.



Others

- Integrated compressor, no installation of refrigerant lines necessary;
- Designed for R407C;
- Better interface with all bus body builders OEM.



Optionally with PTC heating, available in 20 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 development by Valeo.

TECHNICAL DATA

Characteristics		REVO®-E GLOBAL Cooling	REVO®-E GLOBAL Cooling + Heating PTC ⁽⁶⁾	REVO®-E GLOBAL Cooling + BTM ⁽⁵⁾
Maximum cooling capacity		113.000 BTU/h (33 kW)	113.000 BTU/h (33 kW)	113.000 BTU/h (33 kW)
Maximum heating capacity		-	68.500 BTU/h (20 kW)	-
BTM capacity ⁽⁵⁾	During the ride	-	-	Máximo 7 kW
	During the night charge	-	-	10 kW
Current consumption (A) @ 600 Vdc		18 ⁽¹⁾ 11 ⁽²⁾ 4 ⁽³⁾	18 ⁽¹⁾ 11 ⁽²⁾ 4 ⁽³⁾	18 ⁽¹⁾ 11 ⁽²⁾ 4 ⁽³⁾
Fresh air ⁽⁴⁾		20%	20%	20%
Evaporator air flow		6.900 m ³ /h	6.900 m ³ /h	6.900 m ³ /h
Unit weight		230 kg	250 kg	250 kg
Gas refrigerant		R407C	R407C	R407C
Dimension L x W x H (mm)		3.100 x 1.900 x 295	3.100 x 1.900 x 295	3.100 x 1.900 x 295
Bus roof application (mm)		7.000 - 12.000	7.000 - 12.000	7.000 - 12.000
Maximum altitude (m)		3.000	3.000	3.000

- 1- Maximum capacity (electric compressor at maximum rotation);
- 2- Temperature in the passenger compartment at 27°C and outside temperature at 35°C;
- 3- Upon reaching the setpoint;
- 4- Considering the total free flow of evaporator air;
- 5- Thermal management of batteries;
- 6- Heating via heat-pump is an option available on demand.