



Electric Roof Mount A/C **Eco 136e**

Parallel roof mount Air-Conditioning and ventilation system

MCC's newest family member Eco 136e completes the portfolio of compact and super efficient roof mount A/C systems designed to meet all OEM bus requirements. The family offers very adaptable and flexible heating, ventilation and air conditioning solutions for best in class passenger comfort in transit, intercity buses and coaches. The Eco 136e is a self-contained unit, including the glycol battery cooler option which simplifies installation and reduces life cycle cost.

The aluminum electric piston compressor integrated into the unit offers reduced weight variable speed control and cylinder unloading. The wide modulation range allows

efficient power management without having to cycle the compressor, leading to optimal energy use.

Noise, vibration and harshness (NVH) reduction was achieved by selecting a low NVH compressor, with special mount design and minimized compressor cycling.

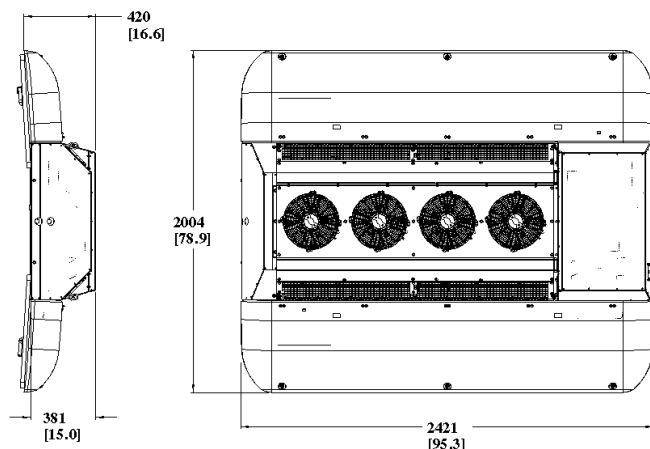
A robust inverter, very efficient and reliable, drives the compressor. Air cooling of the inverter improves the overall reliability by reducing complexity.

This unique simply designed air cooled inverter drives the compressor with fewer components resulting in greater reliability.



Features

- Self contained, fully sealed, factory charged and tested
- Variable speed semi-hermetic compressor with unloadable cylinder bank
- Long life brushless fan motors
- Reliable CAN enabled microprocessor-based controls
- Heavy duty aluminum fin/copper tube coils
- Easy access for serviceability
- Two year parts and labor warranty
- Zero ozone depleting, high efficiency HFC R134a
- Single refrigeration loop



Advantages

- Best in class efficiency saves fuel
- Proven variable speed compression technology optimizes capacity control as well as power consumption and maximizes efficiency over the life of the system
- Sealed system means no leaking hoses, seals, or fittings
- Outstanding performance at idle saves fuel
- Constant temperature at idle lowers time to pre-cool bus interior
- Elimination of compressor clutch and belts reduces maintenance costs
- Unmatched life cycle cost

Technical Data

Refrigerant	R134a	
Cooling capacity @ max ^[1]	109000 Btu/hr (32kW)	
Cooling capacity @ ARI ^[2]	82000 Btu/hr (24 kW)	
Glycol Heating @ 7 gpm (100F Δ T)	130000 Btu/hr (38 kW)	/ Electric Heating 54500 Btu/hr (16 kW)
Evaporator air capacity	3900 CFM (6600 m ³ /hr)	
Length	96" (2430 mm)	
Width	79-86" (2010 - 2180 mm)	
Height	15" (380 mm) max (at the compressor enclosure)	
Weight	660 lbs (300 kg)	
Low voltage power consumption	100 A @ 26 VDC	
High voltage power consumption ^[3]	20 A @ 650 VDC or 480 VAC 3-PH	40 A @ 330 VDC or 240 VAC 3-PH
OPTION: Refrigerant to glycol chiller	12000 Btu/hr (3.5 kW)	

[1] Max conditions 95°F (35°C)/104°F (40°C)/50% RH
 [2] ARI conditions: 95°F (35°C) / 80°F (27°C) / 50% RH
 [3] Nominal w/o electric heat

