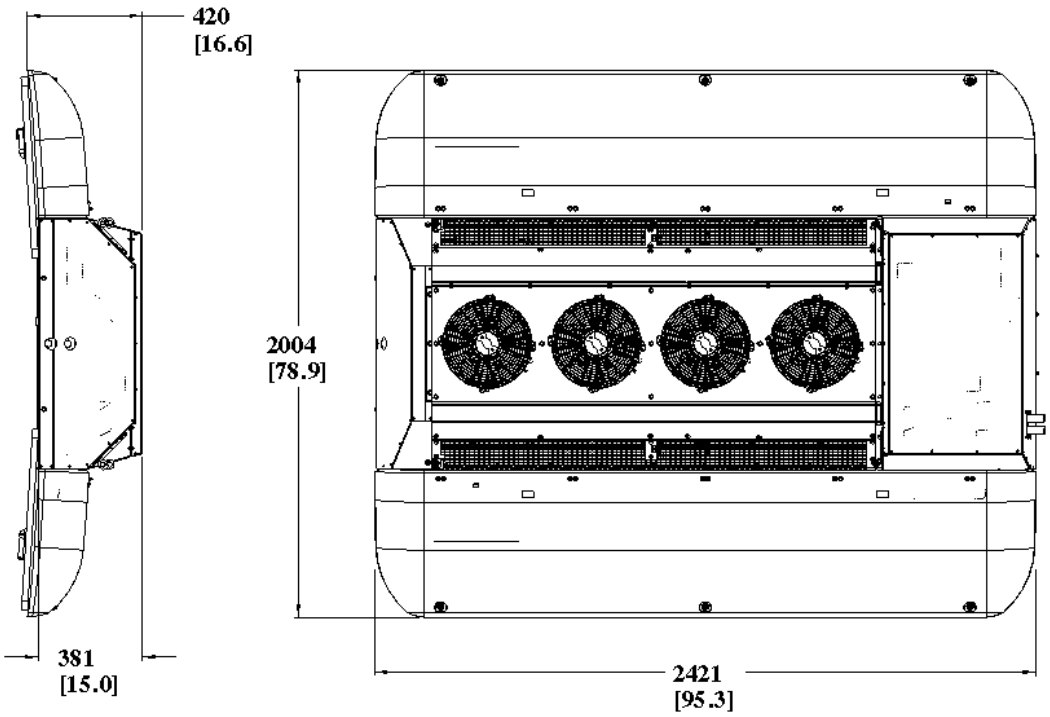
Electric Roof Mount HVAC **Eco 136e**

Electric parallel roof mount air conditioning, heating, and ventilation system

MCC's newest line member Eco 136e completes the portfolio of compact and super efficient roof mount HVAC systems designed to meet all OEM bus requirements. These HVAC systems offer very adaptable and flexible heating, ventilation and air conditioning solutions for best in class passenger comfort in transit, intercity buses and coaches. 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, providing optimal operation minimizing energy consumption. Noise, vibration and harshness (NVH) reduction is achieved by using a quiet 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 advanced designed air cooled inverter drives the compresor with fewer components resulting in greater reliability.

Features	Benefits
• Variable speed electric powered scroll compressor	• Maximizes efficiency for providing output capacity to need • Long life compressor
• Self contained, fully sealed, factory charged and tested	• No customer cost for equipment and time to connect and charge refrigerant
• Long life brushless fan motors	• Provides up to 40,000 hours life cycle along with high efficiency to minimize electrical power
• Reliable CAN enabled microprocessor-based controls	• Communicates with vehicle electronics for optimized control and operation
• Heavy duty heat exchanger coils	• Long life durable to meet environmental conditions
• Easy access to internal parts and components	• Saves time for seasonal maintenance or other service
• Zero ozone depleting, high efficiency HFC R134a	• Friendly to the environment
• Advanced coil and airflow technology	• Provides 15% efficiency benefit versus competitors saving energy and operating cost
• Compact design minimizing installation area	• Space saved can allow installation on hybrid and CNG buses

Electric Roof Mount HVAC **Eco 136e**



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

Mobile Climate Control