



Mobile Climate Control
On Road



Step on board for a better climate

HVAC solutions for the On Road industry

Perfect climate for a perfect trip

For comfort on board

MCC On Road Division develops customized high performance HVAC systems for city, intercity, shuttle, school and touring buses, making the most extreme hot or cold weather unnoticeable. Our products are designed to withstand rigorous conditions and are relied upon to provide a comfortable climate, exceeding our customers' expectations. The MCC HVAC systems can be found in buses on the streets of Cairo to the highways of Alaska, and everywhere in between. Our mission is to create a comfortable travel experience for everyone on board. We are proud to deliver it every time.

Qualifications and experience

For over 30 years, MCC has been providing exceptional climate control solutions for some of the largest bus manufacturers in the world. This experience enables MCC to accurately determine what type of approach is best suited for each client. MCC is committed to working in partnership with our clients, from the initial concept all the way to the streets and highways. Our goal is to ensure that our clients' customers, bus companies and others, provide a comfortable travel experience for the end users, the drivers and passengers.

The MCC Engineering group excels at designing custom HVAC systems for all types of mass transit vehicles for different markets and to fit in limited amounts of space. They have the skills and are qualified to offer innovative products. The MCC Electrical team has the knowledge and the skills to ensure that the requirements set by the seven relevant ECE regulations and five corresponding EC directives in Europe and the requirements set by FMVSS (Federal Motor Vehicle Safety Standards) in North America, are met and exceeded. We can guarantee complete, innovative and customized solutions with outstanding performance.



Exceeding every expectation

MCC has extensive experience working on the global market within the bus industry. Our products have consistently met or exceeded the specifications, expectations and demands from our clients. In Europe our HVAC systems can be found on vehicles manufactured by EvoBus, Irisbus, Irizar, MAN, Scania, Solaris, Van Hool, Volvo and many more. In North America the HVAC systems can be found on vehicles manufactured by among others Blue Bird, ElDorado, Gillig, Motor Coach Industries, New Flyer, Nova and Orion. Something all of these vehicles have in common is an HVAC system designed and manufactured for function, reliability and longevity. We welcome the challenge and we will surpass every expectation.



Global manufacturing presence

MCC is a fully integrated company, designing and manufacturing our cooling, heating and evaporating coils, our control panels and everything in between. Our global organization can provide cost effective HVAC solutions for your vehicle from manufacturing locations in Europe and North America. We continue to strengthen our market presence, enabling us to offer reduced manufacturing lead-times and global support for our clients and their products.

Proven results

The MCC research, development and testing facilities include extensive equipment for testing the performance of our HVAC systems as well as the components within the systems. Our custom-built climate chamber, the core of our test facility, enables MCC to stand behind the products we design and manufacture by proving what we state. In our climate chamber, we can simulate the most severe conditions and put our prototypes through the most demanding tests. All our systems and sub-components undergo rigorous testing prior to delivery to ensure our customers receive exactly what they expected, a durable and superior HVAC system built to the provided specifications. We are not satisfied until you are satisfied!

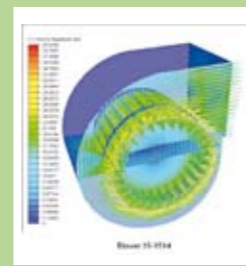
World wide support

At MCC we can provide on-site support to ensure that your HVAC system has been properly installed and certified. Our personalized service ranges from the first contact, all the way to the pilot run on your assembly line and far beyond, no matter the location. Our organization offers flexibility and the capacity to provide a prompt response to your requests. Our continuously expanding service network enables MCC to make certain that your customers remain satisfied, all across the globe. We are an established and reliable organization that is capable of becoming an integral part of your supply chain. The choice is yours, consult MCC about the possibilities for your vehicle, and allow us to assist you with any projects regarding heating, ventilation and air conditioning.



3-D models

Our design team creates computerized 3-D models utilizing the most advanced CAD software, enabling our customers to visualize how the products will integrate into their vehicle. This process allows engineers to see the maximum potential of the HVAC system and offers the flexibility to alter the design and add or remove options as required.



Computational fluid dynamics

With CFD software, as used by NASA and Formula 1 racing teams, our team of engineers can see how the cold or warm air circulates inside the vehicle, before the prototype is even built. The design can then be perfected and the results shared with our clients to ensure complete satisfaction.



Final testing

Once the design has been completed and approved by your organization, prototypes are made and testing can begin. The product is then evaluated and undergoes a challenging battery of tests to ensure quality and performance. Our state of the art climate chamber is 22m (72') in length and can maintain temperatures of 60°C (140°F) to -54°C (-65°F) with the ability to add up to 95% RH.

Lower your installation costs

MCC PEX is a flexible low weight piping system that is easy to connect and will reduce installation time by up to 50%.



Clean air

Good air quality is maintained through air circulation and effective compartment filters.

Climate impact

Temperature, air circulation, sunshine, heat and cold radiation, humidity and air quality are all climate factors that impact driver and passengers.

Even temperatures

Our roof top units are designed to maintain good climate using only fresh air at an ambient temperature of up to 18° C, load and a maximum number of passengers.



Regulating equipment

An optional number of circuits in the defroster and convector control unit can be regulated with pneumatic valves. For instance, with the MPV6 Valve System there are between one and five circuit modules to choose from.

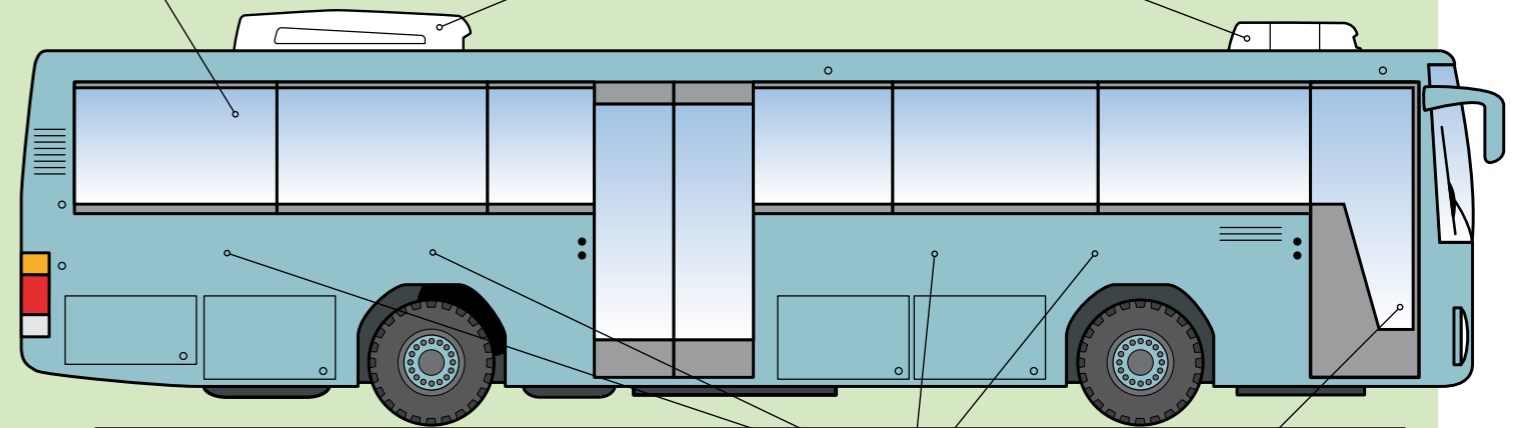


A higher level of comfort

MCC designs and manufactures components which minimize draughts, optimize air quality and reduce humidity.

Stop the cold

Cold from the windows is counteracted through convectors and an air curtain at the top of the window.



Reliable trigger units

The MCC trigger units guarantee an even climate. In case of failure, a fault code will indicate where the fault lies.



In limited space

Our engineering team provides compact, durable high performance HVAC solutions for numerous types of vehicles in various industries all around the world.

Deal with draughts

Draughts can be minimized with PC500 – a combined convector and heating fan for fast heating. When the right temperature is reached the system saves energy by using only radiant heat from the convector.



A clear view

Our effective defrosters with reheat function keep windows free from ice and misting as well as heating or cooling the driver's cabin as needed.



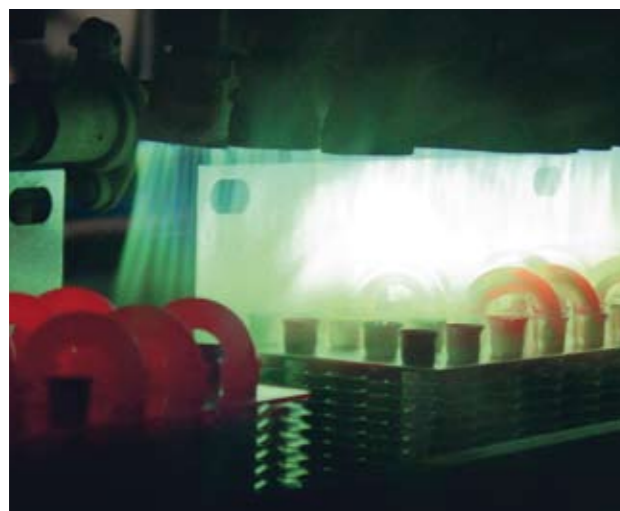
We are Mobile Climate Control

Since 1975, MCC has led the field in the design and manufacturing of exceptional heating, ventilation and air conditioning solutions. MCC specializes in custom designed HVAC systems for all types of vehicles in numerous industries all over the world. With our experience and engineering expertise, we develop



exceptional and innovative climate control products. MCC HVAC systems can be found all over the world. From the forests of Scandinavia to the diamond mines in South Africa, on the battlefields in

the Middle East and through the streets of New York. Our customers know where their vehicle will be used and MCC knows how to create a comfortable working environment wherever that may be. We listen to our clients, we understand their expectations and needs and we offer the best recommendations to suit our



State of the art facilities around the world ensure quality and efficiency in our manufacturing processes.



customers' applications. Our customers' clients expect excellence and outstanding performance, and we have the ability to deliver, every time!

Mobile Climate Control is certified by ISO 9001:2000 and ISO 14001:2004.

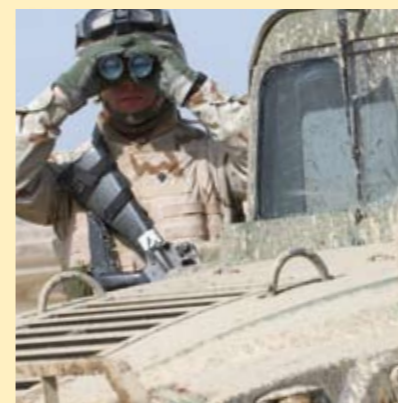
A stable horizon

Mobile Climate Control is owned by Ratos – a stable, listed, private equity company with an industrial profile and a total annual revenue of about 4 billion US-dollars. The Ratos business concept is professional, active and long-term ownership. This gives us a stable and bright horizon for future planning.




Capable of providing any vehicle with a superior climate inside

Mobile Climate Control provides specialized expertise in four different market segments: On Road, Military, Off Road and Specialty Applications.




Mobile Climate Control Military

 The MCC Military Division specializes in custom engineered HVAC systems for hostile environments. With our products, soldiers can focus on their assigned duties, instead of on the conditions surrounding them. We have extensive experience working with the military industry and can always find the best approach for each client, and design a system to withstand rigorous demands and to fit in the available space.




Mobile Climate Control Off Road

 The MCC Off Road Division delivers the best possible interior climate for vehicles and machinery in the agriculture, construction, forestry, mining and material handling industries, just to name a few. We create an excellent interior climate for every type of vehicle no matter the weather conditions or terrain. Our custom HVAC solutions create a comfortable working environment for operators all over the world.



Mobile Climate Control Specialty Applications

 The MCC Specialty Applications Division provides the global market with customized climate products. This segment includes fire and rescue as well as electric and battery powered AC systems for use in cooling electronics. It also includes fully independent AC systems for sleeper cabins in highway trucks and for small freight containers.

Every passenger deserves the best possible vehicle climate with MCC products

- Innovative ideas
- Numerous options
- Proven results
- A stable supply chain partner
- An established global organization
- Personalized service and support
- Understanding your industry and your customers
- Exceeding all expectations



Mobile Climate Control

www.mcc-hvac.com

Certified ISO 9001 and ISO 14001. Specifications subject to change without notice. MCC is a registered trademark.