

# Cabcool



**Unipart Rail has partnered with Creative Design to bring the revolutionary CabCool driver cooling system to a wider market.**

Creative's Cabcool is a unique air cooling system which differs from Air Conditioning by using **no CFCs or coolants** and using as little as 20% of the power used by traditional cooling systems, making it both **energy efficient** with significantly **reduced environmental impact**.

## **Benefits at a Glance**

- Low energy consumption – 800W
- Cools air by up to 19 degrees from cab ambient
- Heating function warms air on cold days
- Makes the driver environment more comfortable
- Can be designed into tight space envelopes
- Use of laser scanning to analyse fitment area
- No CFCs or Coolants - nothing to refill
- Environmentally friendly - no harmful waste
- Can be fitted overnight
- Has been designed into in-service "67" tube stock and "C" stock LUL, Class 319, 1001 Shunter and Plasser tamping vehicles, trials on 165, 66,455, 456, 317, 156, 323, City Trams

## **Contact for more information**

Keith Vale, Technical Sales Manager

Telephone: +44 (0) 7950 011703

E-mail: [keith.vale@unipartrail.com](mailto:keith.vale@unipartrail.com)

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## Hot Cabs

Drivers' cabs can get very hot - sometimes in excess of 32 degrees, and this makes for very uncomfortable working conditions. Air conditioning units are bulky, heavy and energy hungry and impractical for installation on vehicles.

## Clever Technology

At the heart of our solution is a technology called Peltier devices, together with some clever technology Creative has developed. The small electrical devices in the units are traditionally used to cool computer servers, but with creative thinking, they have been developed for use on trains

The units draw in air from the driver's cab and pass it over the cold surface of the Peltier device, and is then channelled out to cool the driver. The heat from the units is vented outside the train. In the first trials, air was cooled by 12 degrees, and cooling of up to 19 degrees from cab ambient is now commonly achieved with the latest models.

## Driver Control

The driver has complete control over their environment through a simple yet effective driver control interface which allows setting to various degrees of cooling and air flow speeds. The added benefit of the system is that it can also be used for heating - meaning that those frosty mornings can quickly be dispelled.

## Successful installations

These units are so compact that they can be easily retro-fitted into many types of rolling stock. They are already fitted on the Victoria and Circle lines for London Underground, whilst overground fitments include full fleet fitment on Class 319 passenger fleet, and trials are successfully concluding on Class 66 Locomotives and a UK city tram. Vehicles in Germany are also currently undergoing trials.

To date, there are around 500 units installed with collectively over seventy two million kilometres of service. Our design service can assess your fleet and develop an installation process complete with all fittings and installation training required for your vehicles.



## Very low Maintenance

With the exception of the fans, the actual cooling units have no moving parts at all, being totally solid state, unlike air conditioning units. This means that a unit can have a very long in-service life. The five-year maintenance cost is estimated at £285 - consisting mainly of the replacement of dust and particle filters which improve the air quality as the unit is running.