



stroco

MOBILE HEATING SOLUTIONS

Stroco Launches New Heater to Meet Specific Needs of Electric Buses



The days of traditional bus heaters are numbered, says Stroco A/S International Sales Manager Søren Rasmussen, who points to a shift in requirements driven by the growing adoption of electric buses.

The heating needs of electric buses differ substantially from their diesel-powered predecessors, particularly in terms of how much heating is required, says Søren Rasmussen, International Sales Manager at Stroco A/S.

Electric buses need less heating, primarily due to their energy efficiency in comparison to older diesel buses,

which rely on waste heat from the combustion engine. This is not only less efficient but also inconsistent, particularly when the vehicle is idling or travelling at low speeds.

Electric buses are often equipped with advanced thermal management systems and employ heating technologies like heat pumps, which work efficiently above 7°C (45°F). However, in regions with harsh winters, like Northern Europe, relying solely on heat pumps significantly reduces an electric bus's range due to increased power consumption.

For these challenging environments, specialised



Stroco 35.02 M



Stroco 35.02 M – LE Hybrid heater

heating solutions that don't rely on the bus's main battery, such as those offered by Stroco, are crucial. These combustion-based heating systems maintain passenger comfort without compromising the bus's electric range, ensuring consistent performance even in cold weather conditions.

Stroco Electric Bus Heating Solutions

Stroco A/S has been in the transport heating market for over 50 years, and offers a wide range of heating solutions, which are known for their high efficiency and minimal maintenance.

A leader in the electric bus heating market has been **the company's 35.02 M – LE (low emission) Hybrid heater**, which was the industry's first combined fuel-burning heater/electrically charged boiler.

This model is able to run on diesel and alternative fuels such as hydrotreated vegetable oil (HVO) and rapeseed methyl ester (RME), which when used enables the vehicle to run 100% fossil free.

Stroco is the only company that manufactures heaters that can see HVO's blue flame, thanks to the photocell it uses.

"When you use HVO or biodiesel the flame goes blue and this can be an issue because if that blue flame isn't recognised, then the combustion heater will not work. This is an issue for many heater manufacturers, but not us. We developed a special photocell for our heaters

that enables us to reliably register the flame every time," Rasmussen explains.

To date, happy customers have purchased more than 1,000 units, but behind the scenes Stroco A/S engineers have been hard at work developing a new, advanced model.

The Stroco 23kW LE Hybrid Heater

Stroco A/S is always looking to advance its offerings, and for the last year experts at the company have been working hard to try and find ways to improve on its successful 35kW model. This has led to the development of the Stroco 23kW LE Hybrid heater, which has all the capabilities of its predecessor, but uses less energy.

"This was developed because we saw that normal 30kW heaters were producing more heat than was necessary in some cases, which meant lots of stops and starts. This created unnecessary amounts of soot and used up more fuel, so we looked to develop a better solution for these situations," Rasmussen says.

Spot the Difference

From the outside, Stroco's new 23kW model looks the same as the old 35.2kW, as it has the same dimensions. Where you'll find the difference is inside the heater.

Stroco engineers developed a new low-emission (LE) combustion unit and put a smaller nuzzle into this



heater. The nozzle is fitted with a non-return valve which ensures that the remaining fuel in the nozzle and nozzle holder isn't accidentally released into the combustion chamber. This means that the heater doesn't stop and start as often as the older model, and the heater doesn't give off as much smoke when it does.

Rasmussen highlights the benefits of the new 23kW LE Hybrid heater.

“All in all, this new model offers a smoother ride, less noise and a better fuel economy thanks to a 10% reduction in fuel used.”

“If a 30kW oil boiler uses three litres per hour and a 23kW uses 2.7, that's a saving of 0.3 litres of fuel per hour,” he continues. “If one litre of fuel costs DKK 10 for example, then the saving is DKK 1 per hour. If the heater runs for five hours, that's a saving of DKK 5 per day, per bus. So, if an operator runs services 30 days a month, that's a saving of DKK 150 per month per bus.”

“In the Nordics, the size of an operator's electric bus fleet can vary significantly, but on average small to medium cities will likely have fleets of 20–50 vehicles, while fleets in larger cities and urban areas can range from 100–300 buses. Multiply these savings by fleet size and you can see the dramatic fuel – and therefore cost – savings this new model offers.”

Come and See Stroco at Persontrafik 2024

Since its soft launch earlier this year, Stroco has already sold more than 200 23kW heater units, and the company plans to officially launch this model at **Persontrafik 2024** in Gothenburg this November.

Stroco will be joining its Swedish dealer TK Bussklimat AB at the event, but for those that cannot attend in person, you can learn more about Stroco's heaters by visiting www.stroco.dk or contacting Søren Rasmussen directly via swr@stroco.dk or +45 40 57 10 66.

Fuel Saving Heaters

Danish produced heaters, designed to deliver better economy for your buses



Heaters:

- Runs on diesel, biodiesel, HVO, RME and ethanol
- Can be equipped for electric night operation
- Can be equipped with LE-function

Electricity:

- Fossil-free heating in electric buses
- Up to 4 heating elements
- From 7.5kW to 60kW
- From 400VDC to 727VDC

Hybrid:

- Heating for electric buses environment-friendly combi heater
- Specially developed for hybrid and electric buses
- 100% fossil free when using HVO

