## **CalixKlippan**

### ENGINE HEATING AND POWER SUPPLY

The R&D-center in Eskilstuna, Sweden, is equipped with a laboratory and climate chamber that has been third-part certified by Intertek. The climate chamber that operates in the temperature range of -40°C/+60°C is large enough to fit passenger cars, light weight trucks and cabins for heavier trucks.

### Calix cable system

Calix plug & play cable system is the interface for a combination of our products such as battery chargers, engine heaters, cab heaters, converters and inverters. We have a suitable set-up for almost all vehicles on the market.

Calix plug & play cable system is approved for permanent installations in cars, buses, trucks, off-road, agriculture and construction machinery.

The system is also widely used as interface for high voltage systems (230V/115V) in for example emergency and military vehicles. There is also a possibility to add the Calix app by which the customer via the mobile can set a timer to start and/or stop the Calix system.





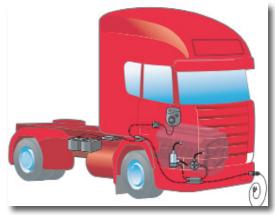
Connecting cable connected to the installed Calix system



App-solution



Calix Dual cables are approved for both EU and North America



System overview- truck

# CalixKlippan

#### Calix battery chargers

Calix battery chargers are designed for quick installation and easy connection.

Modern vehicles contain a great deal of electronic equipment constantly consuming small quantities of electricity, even when the engine is switched off. This continuous discharge of batteries requires a charger installation.

If a power source is disrupted because the battery is completely discharged, important vehicle settings may disappear, often leading to expensive, unplanned workshop visits. The charging also extends battery life and ensures that you always have power for the engine start.

A permanently installed battery charger from Calix is extremely useful - quick and easy for the user – just plug in to a wall socket and let the charger do the rest, fully automatically.

Calix battery chargers function under tough conditions and all the chargers are designed for lead acid, AGM and Gel batteries.

The broad range of Calix battery chargers and the Calix cable systems meet all legal requirements.

DC/DC conversions are often needed for the different voltage levels when electrifying vehicles. Calix offers a broad range of encapsulated and robust DC/DC converters.







#### Calix heaters

If you preheat an engine prior to starting it, its life will be prolonged. By elimination of cold starts you reduce considerably emissions of carbon dioxide and NOX (nitrogenous gases). Thus you can contribute to a better environment by installing engine heaters.

Calix develops and manufactures electric heaters of various designs to meet all needs for different vehicles. Preheating the engine block by warming up the cooling water results in improved starting capacity and reduced emissions.

For electrical and hybrid vehicles, Calix offers different products for heating the battery and compartment.

The recommendation table on Calix website guides you to the desirable engine heater set-up. The website is regularly updated with the latest products and installation instructions.

The Calix cab heaters create a warm and comfortable feeling inside your vehicle directly from the start.



