

# **ADB Virtual Fair**

Nursultan Kazakhstan – 03 September 2020

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## World leading supplier of electric vehicle heating and charging solutions

• Calix have more than 50 years of experience in designing and manufacturing onboard electric heating and charging solutions for the automotive industry







## Calix AB

#### Located in Eskilstuna Sweden

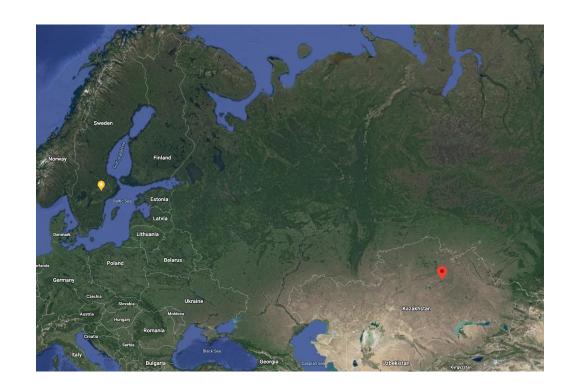
- HQ
- Development
- Production
- Marketing & Sales

#### **Business areas:**

- OEM Cars
- OEM Commercial vehicles
- Aftermarket

#### Main markets:

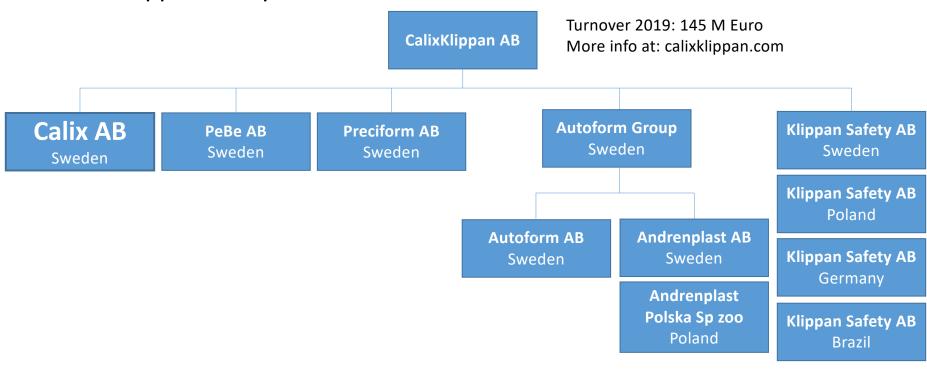
- Northern Europe
- Canada







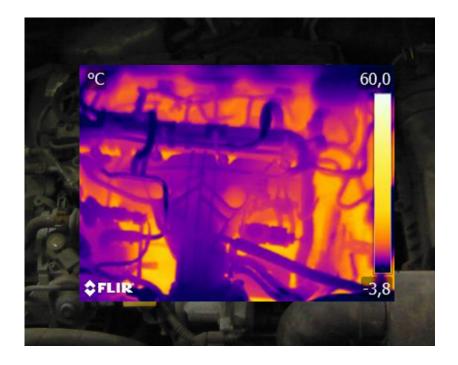
## CalixKlippan Group





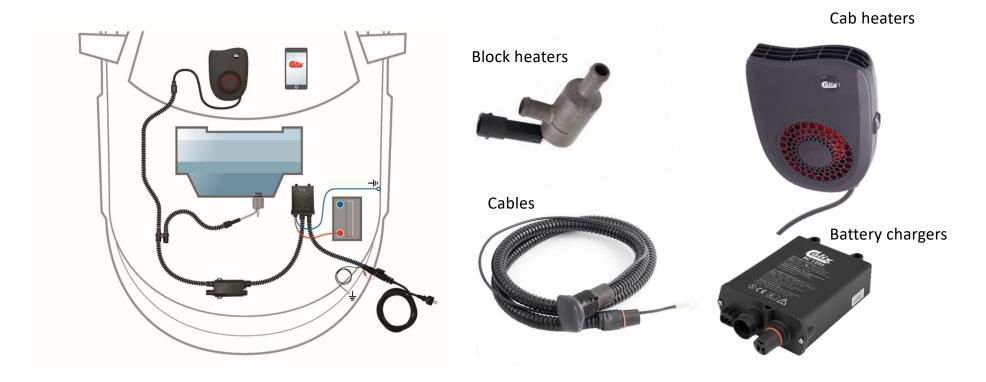
## Why do you need a electric heating system for your vehicle?

- Environmental care
- Comfort
- Reliability, cold weather start
- Care of your vehicle
- Safety



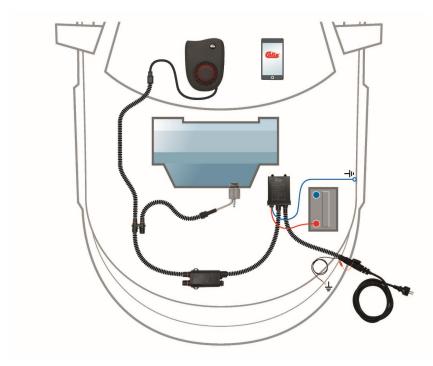


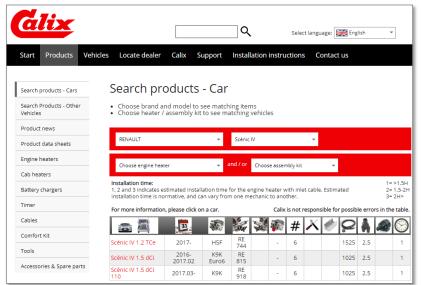
# Calix offer a high quality, modular, plug and play system





## Optimised installation guidelines for most cars on the market





Approx: 250 vehicles tested every year



# Commercial vehicles and industrial engines











#### Calix, Product Quality

- All heater and charging products are approved for assembly in engine compartment by a mechanic according to:
  - Swedish standard: SS 428 08 69 (replacing EN 50066)
  - Finnish standard: SFS 7502 (replacing EN 50066) No requirement for qualified electrician for safe installation of 250Vac/16A system in a vehicle
- All products are tested and certified by Intertek Semco according to all European safety standards of electric installations in vehicles









#### Calix, Managing Quality

- Developed and produced by Calix AB in Eskilstuna Sweden according to the high quality requirements set by the Automotive industry
  - To fulfil the product quality requirements set by the Automotive industry Calix is certified, by DNV, according the Automotive industry own quality management system IATF 16949:2016
  - Calix are also certified according Environmental management system ISO 14000
- Calix AB have got several rewards for supplying excellent quality from several leading companies in the automotive industry.
  - GM Quality award 2017, 2018 and 2019
  - Volvo Cars Quality Excellence Award 2017
  - KGK Supplier Award 2017







# Distribution network







#### **Calix distributor since 2013**

#### Facts about our distributor

- 20+ years experience in pre-heating
- Tech & warranty support in Russian
- OE & Aftermarket competence

20

**YEARS** 

- Distribution stock in Moscow
- 15 employers
- Installation trainings



- Distribution in all EAEU countries
- Over 50 authorized installation centers
  - 3 in Kazakhstan



# Additional information

## Block heaters optimized for most cars on the market

- >400 variants
  of block heaters for
  230V or 115V supply
- >200 active variants of assembly kits
- Yearly production: approx. 300 000 units





# High quality modular cable system

 Made for installation in the rough environment in the engine compartment and temperatures <-40°C</li>

 Approved and certified for use in 230V and 115V systems.

 Yearly production: approx. 1 000 000 meters





#### WaveLine cab heaters

- Easy installation
- Self adjusting based on surrounding temperature
- Max capacity
  - 800W-2000W (230V)
  - 1000W (115V)





#### Robust and intelligent chargers

- Made for on-board installation
- Intelligent charging
  - High efficient switch technology
  - Charging current adjusted based on surrounding temperature
  - Automatic switch to maintenance charging mode when battery is fully charged
- For 12V, 2A 30A and 24V, 5A 20A maximum charging current





# Wide range of accessories



