



PLATFORM FOR ELECTRIC BUSES

OVERNIGHT AND HIGH POWER CHARGING FOR 12, 18 & 24 METER ELECTRIC BUSES

- **Efficiency Redefined:** Cutting-edge electrical equipment, tailored for electric buses of all lengths with Kiepe Traction Control for high traction efficiency and low energy consumption.
- **Tailored Solutions:** Our equipment adapts to 12,18 and 24 m electric bus lengths, and can be used for powering other commercial vehicles thanks to our modular building blocks.
- **Charge with no limits:** You can choose between our High-Power Charging system with up to 800 kW which charges an electric bus within 5 minutes or our overnight charging solution with a battery capacity up to 648 kWh.
- **Reliability at Heart:** Trust in our equipment's reliability, designed to withstand the rigors of daily operation and ensure consistent performance, backed by more than 3,000 electric buses equipped by Kiepe Electric.
- **Smart Energy Management:** Kiepe Electric's intelligent Smart Fleet Management maximizes energy efficiency, minimizing charging times and reducing operational costs, with artificial intelligence to learn changing demands from the operation caused by road blocks, traffic jams and detours.
- **Simplified Maintenance:** Benefit from easy-to-maintain components that minimize downtime, keeping your buses on the road and passengers on the move, with remote diagnostics.
- **Technical Expertise:** Partner with leaders in electric bus technology, backed by a team of experts committed to your success in the electric mobility landscape, offering comprehensive training and support.

KIEPE ELECTRIC

Project details

Discover our advanced platform for electric buses, that is scalable for 12, 18 and 24 m buses either as a High-Power Charging Solution with charging times around 5 minutes or as an overnight charger with the maximum capacity of 648 kWh. The platform comprises of the control system, the power distribution, the charging system, the auxiliaries, the energy storage system and our service package.

The control system generates the traction power for acceleration and deceleration including all interface communication to the main vehicle control. The power













distribution solution ensures peak performance, reliability, and energy efficiency across subsystems. Our adaptable charging system accommodates overnight depot and on-route charging, minimizing downtime and allowing a 24/7 operation. The auxiliary power supply module optimizes energy for lighting, HVAC, and passenger amenities. The energy storage system employs advanced battery technology, extending range and durability. Services enhance the core, offering online diagnostics and condition-based maintenance for streamlined fleet management.



Technical Data

Maximum Traction Power	320 kW
Energy Storage Capacity	648 kWh (overnight) & 165 kWh (High power charging)
Operational Voltage	800 V
Auxiliary Power	24 VDC & 400 V
Control System	Kiepe Traction Control
Services Included	Real-time Diagnostics, Predictive Operation Control via SFM, Remote Over-The-Air Updates
Operating Temperature Range	-40°F to 185°F (-40°C to 85°C)

Components of the High Power Charging E-Bus Platform

 <p>CHARGING SYSTEM</p>  <ul style="list-style-type: none"> ■ Compatibility of various charging systems ■ High current transfer ■ Fast contacting 	 <p>POWER DISTRIBUTION</p>  <ul style="list-style-type: none"> ■ Central high and low voltage distribution ■ Protection of the electronic equipment ■ Multi-level safety concept 	 <p>BATTERY SYSTEM</p>  <ul style="list-style-type: none"> ■ Scalable modular battery system ■ Optimal mechanical design for buses ■ Safe and reliable for a long service life
 <p>TRACTION</p>  <ul style="list-style-type: none"> ■ Traction inverter for two 3-phase motors ■ Dynamic and energy-efficient motor control ■ Highest power density on the market 	 <p>AUXILIARY</p>  <ul style="list-style-type: none"> ■ High pressure and cooling capacity ■ Very low noise and vibrations ■ Reliable design for lifetime 	 <p>FLEET MANAGEMENT</p>  <ul style="list-style-type: none"> ■ Dynamic adaptation of necessary charging power ■ Periodic collection and transmission and of relevant operational data

KIEPE ELECTRIC Kiepe Electric GmbH | Kiepe-Platz 1 | 40599 Düsseldorf | Germany

Kiepe Electric Germany, Düsseldorf
info.kiepe@knorr-bremse.com | +49 211 74 97 0

Kiepe Electric Switzerland, Niederbuchsiten
info.kes@knorr-bremse.com | +41 62 389 88 88

Kiepe Electric Italy, Cernusco sul Naviglio
info.kiepe-italy@knorr-bremse.com | +39 02 92 14 81 48

Kiepe Electric Austria, Mödling
kiepe.austria@knorr-bremse.com | +43 2236 409 0

Kiepe Electric USA, Alpharetta, GA
info.ATL@kiepe.knorr-bremse.com | +1 770 754-0918

Kiepe Electric Canada, Vancouver, BC
info.VAN@kiepe.knorr-bremse.com | +1 604 324 2454

