



The Trailer Company.

S.KOe COOL SMART mit S.CU ep85



Produktmanagement Cargobull Cool GmbH & Co. KG

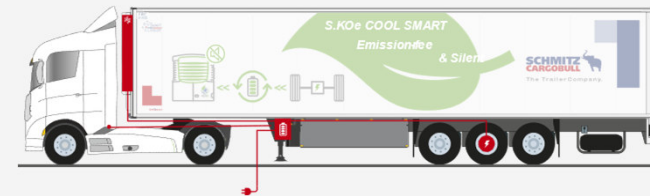
- EU directive by 2025/30: **<15/30% less CO2 compared to 2019**
- A large number of cities in Europe will have **"Zero Emission Zone" by 2025**
- **In the Netherlands by 2025:** Amsterdam, Rotterdam, The Hague, Utrecht, -> Zero emission distribution transport

Conventional vehicles

- ❌ Diesel costs
- ❌ Toll
- ❌ Taxes
- ❌ Zero Emission Zones
- ❌ Diesel Thievery

E-Vehicles

- ✅ Ecological Aspects
- ✅ Emission Free City Traffic
- ✅ System efficiency Funding
- ✅ Legal boundary conditions
- ✅ Green Footprint
- ✅ CO₂ Reduction
- ✅ NO_x Reduction
- ❌ System costs



Emission-free refrigerated trailer - What are the arguments in favour?



Access to "Zero Emission Zones"!



No CO2 emissions!

Refrigerating machine works emission-free



Green Label

- Diesel: ~2.5 l/h 24 kW
Efficiency ~ 30%
- Electric: ~7.5 kW
Efficiency ~ 90%



Modular construction kit

- Extension with E-axle enables charging while driving Buffer for traffic jams, etc.
- Recharging via standard CEE plug - no special charging infrastructure required

Emission-free refrigerated trailer - What are the arguments in favour?



Quiet

Delivery in early morning and late evening hours



E-Axle

- Safety during unscheduled stops, e.g. traffic jams
- Minimise battery recharging times
 - ➔ Reduce waiting times at the distribution centre



Full integration in Schmitz Cargobull telematics

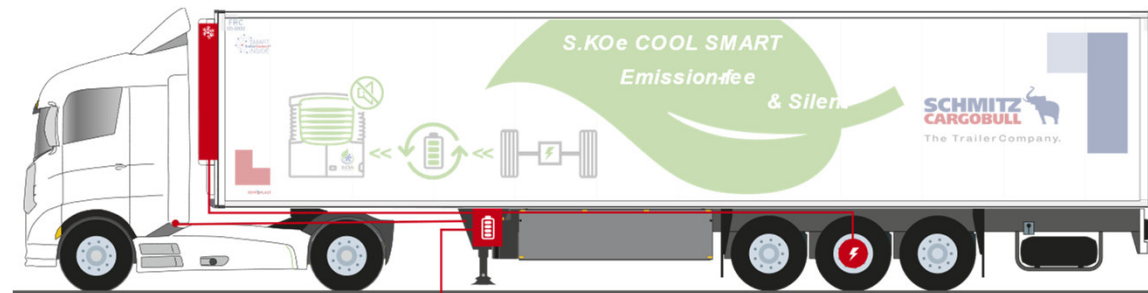
- Control and transparency of system status
- Display of charge status and remaining battery system runtime
- Display of remaining battery charging time



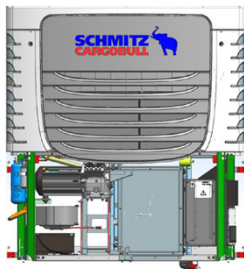
Coordinated and reliable overall system as a „One-Stop-Shop“ from Schmitz Cargobull

- Semi-Trailer, Cooling Unit, Telematics and Battery System
- Schmitz Cargobull Service Netzwerk

S.KOe COOL SMART – Components



S.CU ep85



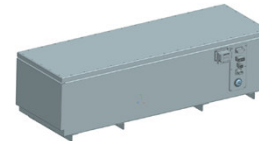
- Power supply (400 V AC, 50 Hz) via battery system or mains supply

Charging infrastructure



- Charging with CEE plug via three-phase mains (400V, 32A, 50Hz)
- On-Board Charger 22kW

HV-Battery



- Li-iron phosphate accumulator
- Capacity: 32 kWh
- Autonomous running time: Ø 4.5 h
- Charging time: approx. 2h
- Voltage: 660V

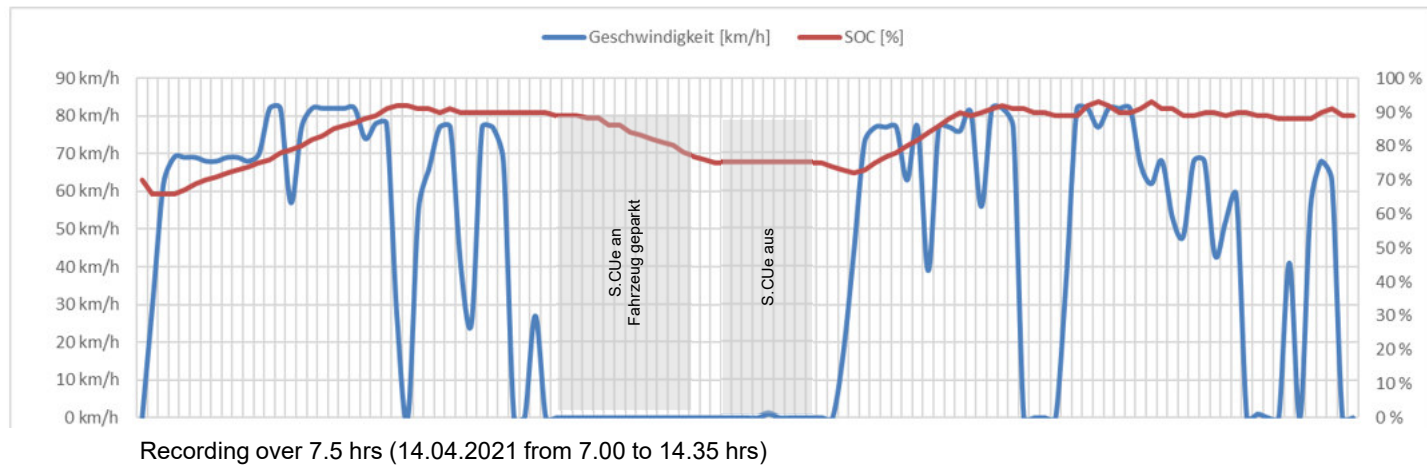
E-Axle



- Recharging while driving or braking
- Power: 22 kW peak
- Reduced battery charging times during charging/discharging or breaks

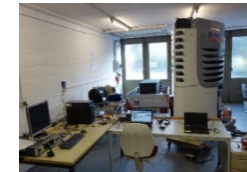
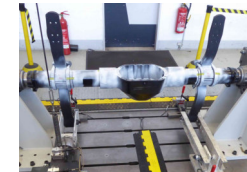


S.KOe COOL SMART with S.CU ep85 mt – Driving Profile



The driving profile in detail:

- Multitemp cooling, setpoints -20°C / + 5°C
- Intercity and motorway driving
- Recharging the battery while driving
- Data recording via Schmitz Cargobull Telematik TrailerConnect® (full integration of data)



Sustainability

- Purely electric - locally emission-free
- Access to Zero-Emission Zones

Geringe Lautstärke

- due to the elimination of the diesel engine
- Silence Kit, Piek certification, day and night delivery possible

Safety during unscheduled stops

- The e-axis also allows recharging while driving

24-month service contract

- Full service incl. pro-active monitoring

Highest cooling and heating capacity

- Same performance as diesel S.CU, as same concept and compressor always driven by electric motor



Reduced maintenance costs

- No oil changes
- No belt changes
- Electrical components are maintenance-free
- Electrical components are protected in the S.CU

Operation and use

- No special infrastructure required (charging via CEE socket)
- Cooling operation and charging possible at the same time
- Short battery charging times due to e-axis

TrailerConnect® – Trailer telematics

- Full integration in SCB Telematics
- Smart Trailer functions integrated
- Incl. 2-way communication

Complete solution - everything from a single source

- everything from a single source Optimally matched components
- complete system integration
- Only one contact partner