C.BUS



# IMC<sup>®</sup> E-Buses for La Spezia

### **19 MODERN IMC® E-BUSES FOR ATC ESERCIZIO**



## Your advantages

The transit agency ATC Esercizio S.p.A in La Spezia has expanded its fleet with an order for 19 new environmentally friendly trolley buses, equipped with KIEPE's patented IMC<sup>®</sup> technology. Fourteen Solo Trollino nT12 and 5 Articulated Trollino nT18 vehicles have been added to the fleet.

In Motion Charging (IMC<sup>®</sup>) e-buses recharge their batteries during travel using electricity from overhead lines and switch to battery mode in areas without overhead lines. This enables highly flexible route planning.

The electric systems are exclusively supplied by KIEPE. Each system includes power inverters, motors, high-performance 45- kWh lithium-titanate-oxide traction batteries, the KIEPE current collector and auxiliary power systems. During travel, the system charges the batteries from the overhead lines, thus enabling an off-wire range of 24 kilometres in battery mode. This eliminates the need for lengthy charging stops at the terminus. IMC® e-buses are capable of continuous – potentially 24/7 – operation, effectively achieving "unlimited range."

#### Advantages of IMC<sup>®</sup> Technology:

- Emission-free public transit
- Long lifespan of trolley buses
- An off-wire range of up to 24 km in battery mode
- Possible 24/7 operation
- Flexibility in route planning

## **Mechanical Data**

Туре	Trollino nT12	Trollino nT18
Vehicle Weight	19,000 kg	30,000 kg
Number of seats	21	31
Number of Standees	64	109
Traction Motor	160 kW	2 x 160 kW
Motor Control	patented KIEPE Traction Control	patented KIEPE Traction Control
Energy Storage	Lithium Titanate Oxide (LTO) with over 45 kWh installed and 37 kWh usable energy	Lithium Titanate Oxide (LTO) with over 45 kWh in- stalled and 37 kWh usable energy
Range in Battery Mode	Up to 35 km	Up to 24 km
Battery Charging Concept	IMC <sup>®</sup> (In-Motion-Charging)	IMC® (In-Motion-Charging)
Energy Consumption	Up to 500 kW during operation (IMC® 500)	Up to 500 kW during operation (IMC® 500)
Pantograph System	Automatic lowering and rewiring	Automatic lowering and rewiring
Installed DC 24 V Power Supply	12.4 kW @28.4V	12.4 kW @28.4V
Installed Heating Capacity DC 600 V	40 kW @ DC 600 V	40 kW @ DC 600 V



## IMC® E-Buses for La Spezia

# **Technical Drawing**





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