C.BUS



# IMC<sup>®</sup> E-Buses for Verona

MODERN IMC<sup>®</sup> ARTICULATED ELECTRIC BUSES FOR A NEW TROLLEY BUS SYSTEM



### Your advantages

Verona, the charming economic hub in the heart of Veneto region, is receiving 39 trolleybuses from KIEPE equipped with the patented IMC<sup>®</sup> technology.

The IMC buses will operate on four new trolleybus routes integrated into the city's bus system. The new routes serve the city's two main axes, north-south and west-east, connecting key landmarks and facilities. The total length of the routes is approximately 24 km, of which 7 km will be operated without overhead lines.

IMC<sup>®</sup> electric buses charge their batteries while driving using electricity from overhead lines and switch to battery mode in areas without overhead lines. This enables highly flexible route planning.

The electrical systems are exclusively supplied by KIEPE. Each system includes traction inverters as well as motors, high-performance 45- kWh lithium-titanate-oxide traction batteries, and auxiliary power systems. The modular traction battery provides a range of up to 24 kilometers in battery mode. The ability to charge the battery from the overhead lines while the bus is in operation eliminates the need for lengthy charging at each end of the route. IMC<sup>®</sup> electric buses are capable of continuous – potentially 24/7 – operation, effectively granting them ,unlimited range.

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

- Emission-free public transit
- Long lifespan for trolley buses
- An off-wire range up to 24 km in battery mode
- Continuous 24/7 operation possible
- Flexible route planning

# **Mechanical Data**

Туре	<b>Verona</b> (6 buses)	<b>Verona NEW</b> (33 buses)
Desing/Type	BGT-N2D Swisstrolley4, Hess Carrosserie AG	BGX-NXD / BGT-N2D / 70080 / Hess Carrosserie AG
Vehicle dimensions	18 m length x 2.55 m width x max. 3.5 m height	18.75 m length x 2.55 m width x max. 3.5 m height
Number of Seats	33 (+2 folding seats)	38 (+2 folding seats)
Number of standsees	120	ca. 107

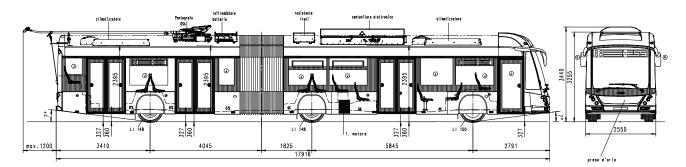
Drive motor	2 x 160 kW asynchronous motors on the 2nd and 3rd axle	
Motor control	patented Kiepe Traction Control	
Energy storage	Lithium Titanate Oxide (LTO) with over 45 kWh installed and 37 kWh usable energy	
Battery charging concept	IMC® (In-Motion-Charging)	
Vehicle power consumption	Up to 500 kW while driving (IMC® 500)	
Current collector system	Automatic lowering and re-wiring	
Installed onboard power supply DC 24V	12,4 kW @ 28,4V	
Installed capacity 3AC 400 V / 50Hz	2 x 27 kVA	



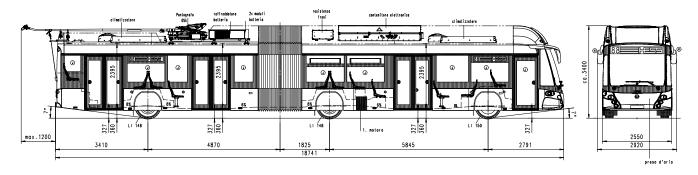
## IMC® E-Buses for Verona

## **Technical Drawing**

#### Verona (6 buses)



#### Verona NEW (33 buses)





Austria | Canada | Germany | India | Italy | Switzerland | USA



www.kiepe-group.com