

**Press release**

Munich/Düsseldorf, March 24, 2022

## **Sustainable city mobility: Milan orders 50 more trolleybuses fitted with Kiepe Electric IMC<sup>®</sup> technology**

- **Milan's local mass transit operator ATM Milano secures contract option for the purchase of another 50 18-meter Solaris trolleybuses equipped with IMC<sup>®</sup> technology from Kiepe Electric**
- **ATM Milano aims to electrify bus fleet by 2030 with the help of IMC<sup>®</sup> technology**
- **Modena and Parma mass transit authorities also rely on electrical equipment from Kiepe Electric for their new Solaris IMC<sup>®</sup> trolleybuses**

**Munich/Düsseldorf, March 24, 2022 – Local mass transit operator Azienda Trasporti Milanesi (ATM Milano) has secured a contract option for the purchase of another 50 Solaris trolleybuses equipped with In Motion Charging (IMC<sup>®</sup>) technology from Kiepe Electric, a brand of Knorr-Bremse AG, global market leader for braking systems and other rail and commercial vehicle systems. The 50 new trolleybuses are scheduled for delivery from the end of 2022 through the first half of 2024. By then, a total of 125 ATM trolleybuses will be equipped with Kiepe Electric traction systems.**

By 2030, almost the entire ATM Milano bus fleet should be running on electricity – and Kiepe Electric is actively supporting this project by supplying reliable, sustainable IMC<sup>®</sup> technology. ATM Milano has now secured a contract option to purchase additional Trollino trolleybuses from Solaris Bus & Coach, fitted with drive systems from Kiepe Electric. The trolleybus line is the main bus backbone of Milan's mass transit system. Laid out in a ring around the city center, it acts as an efficient feeder for the many streetcar lines that serve various parts of the city, for example. IMC<sup>®</sup> trolleybuses charge their batteries while running on electricity from overhead lines, switching over to battery-powered mode wherever overhead lines are not available. This allows for highly flexible route planning.

“Emission-free drives for buses are an important part of the mobility revolution, contributing to a better quality of life for society in general. So we're delighted to be able to support the shift to eco-friendly city mobility in Milan, one of Italy's major economic and cultural centers, with our e-mobility solutions,” says Dr. Peter Radina, Member of the Management Board of Knorr-Bremse Rail Vehicle Systems and responsible for Kiepe Electric.

### **Complete electrical solutions from Kiepe Electric**

The Kiepe Electric drive technology in ATM Milano's trolleybuses has proved its reliability over more than two decades. Back in 2020, 30 Solaris trolleybuses from a previous order entered service in Milan. Like the 50 buses to come, their electrical systems were supplied exclusively by Kiepe Electric. Each system includes power converters for traction, as well as motors, powerful 45 kWh lithium-titanate-oxide traction batteries, and auxiliary systems. During bus journeys, the system transfers up to 200 kW of energy from the overhead lines to the modular traction battery, giving each bus a range of up to 24 battery-powered kilometers.

This obviates the need for prolonged recharging at each end of the route. The smart energy management system is also capable of feeding energy back into the overhead line network from the high-performance battery. Thanks to this e-drive system, IMC buses are capable of providing continuous – potentially 24/7 – service, thus effectively have an “unlimited range”.

### **New trolleybuses in Modena and Parma use Kiepe Electric technology**

In the words of Alexander Ketterl, Managing Director of Kiepe Electric: “As in Milan, many other Italian mass transit companies have also been impressed by the Kiepe technology used in existing and new trolleybus networks. With our modular electric products and close, personal in-market presence, we’ve established an enormously strong market position in Italy.” Other recent orders confirm as much. In October 2021, TEP Parma took up the option to order eight more 12-meter trolleybuses from Solaris, and SETA Modena has ordered another two buses of the same type. All 10 buses will be fitted with drive technology from Kiepe Electric.

#### **Caption:**

**Figure 1:** Another 50 IMC® Trollino buses equipped by Kiepe Electric will enter service in Milan over the next few years. | © Kiepe Electric

**Knorr-Bremse (ISIN: DE000KBX1006, ticker symbol: KBX)** is the global market leader for braking systems and a leading supplier of other rail and commercial vehicle systems. Knorr-Bremse’s products make a decisive contribution to greater safety and energy efficiency on rail tracks and roads around the world. About 29,500 employees at over 100 sites in more than 30 countries use their competence and motivation to satisfy customers worldwide with products and services. In 2020, Knorr-Bremse’s two divisions together generated revenues of EUR 6.2 billion. For more than 115 years the company has been the industry innovator, driving innovation in mobility and transportation technologies with an edge in connected system solutions. Knorr-Bremse is one of Germany’s most successful industrial companies and profits from the key global megatrends: urbanization, sustainability, digitization and mobility.

Knorr-Bremse subsidiary **Kiepe Electric**, based in Düsseldorf, Germany, is a globally active supplier of electrical systems to the leading rail vehicle and bus manufacturers. The company offers efficient solutions and ecologically sustainable concepts for low-emission public transportation in the form of eco-friendly electrical equipment for light rail vehicles, metros and regional rail networks, as well as electric buses and trolleybuses fitted with In Motion Charging (IMC) and High Power Charging (HPC).

#### **Media contacts:**

Julian Ebert  
Press Officer Rail Vehicle Systems  
T +49 (0)89 3547 1497  
E [julian.ebert@knorr-bremse.com](mailto:julian.ebert@knorr-bremse.com)

Knorr-Bremse AG  
Moosacher Straße 80  
80809 Munich, Germany