

Siemens receives first order for Tractronic Thinity, the next generation of traction transformers

Siemens, one of the most innovative suppliers of distribution transformers, signed a contract to supply Tractronic® Thinity™ transformers for Deutsche Bahn (DB) (German Railways) Regio trains. The Tractronic Thinity is the latest innovation in the field of traction transformers. It is very light-weight and at the same time fully compliant with all other requirements for rolling stock equipment. This includes EMC behavior and being mechanically robust enough to withstand all rolling stock environmental conditions without any compromises, regardless of where they are mounted – rooftop or even underfloor. The Tractronic Thinity transformers will be installed in the latest trendsetting Siemens regional train platform Mireo®. The first call-off order consists of 24 transformers.

Newly designed materials, components, and layout resulted in the

ultra-low weight of the Tractronic Thinity. Insulation material, optimized cooling through the use of CFX oil flow simulation, a completely new active part setup, and a well-thought-out shape for the tank ultimately leads to the infinity-symbol-shaped transformer design. This technology will reduce the weight of the unit by approximately 850 kg (about 25 percent) and save energy. There will be more room for monitoring equipment that can help make transport infrastructure more efficient and transparent (for example, smartboxes for freight transportation) as well as for passenger infotainment or to simply transport more passengers.

Mireo was ordered by DB Regio for the Rheintal network, and will operate as a regional train (Regionalbahn; RB) along the Offenburg – Freiburg – Basel/Neuenburg route with approximately 1.9 million train kilometers a year. As a regional express train, Mireo will

cover the distance 30 minutes faster than previously. The new trains, including transformers, will be ready for the first test run on the track in mid-2018 and will be the first on the tracks to have an optimized low weight to high power ratio. The entire Rheintal network will be put into operation in June 2020.

DB Regio selected Siemens because of its ability to meet DB Regio's expectations in terms of price, delivery capacities, weight, and overall efficiency. Dr. Berthold Sedlmaier, head of Traction Transformers, said, "With this major step forward, Siemens transformer technology demonstrates that we always get the maximum output from the assets we design and manufacture. Combined with a highly standardized manufacturing process, we can easily adapt this to other projects/applications to address our customers' needs."

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