TransTech frost® Ground Return Units provide a return path for electricity through a ground ring on the axle. The frost® brand of electrical ground return products is an established and service-proven product line used in Europe for transit rail vehicles for over 70 years. TransTech manufactures frost® products for the North American market with 100% Buy America compliance. The CMR250 Ground Return Unit is a drop-in replacement ground return assembly for one of the most widely used solutions in North America.
Permanent-Mold Cast Metal Housing

The TransTech Frost® Ground Return Unit CMR250 is produced using a copper-zinc alloy. It is substantially stronger and more durable than the competitive plastic units, which allows it to better withstand the shocks and impacts associated with its location on the axle.

Broached Brush Box

The CMR250 brush box is precision machined to meet NEMA brush tolerances, providing optimal fit and support of the brush. Precision tolerances lead to improved brush life, longevity, and performance.

Constant Force Spring

The CMR250 utilizes a uniquely designed backup plate with a constant force spring rather than a coil spring or a spring mounted to the cover. The freestanding backup plate minimizes replacement cost, provides reliable and constant brush pressure, and eases installation of the cast metal cover.

Optimized Brush Support

The CMR250’s CNC machined design allows the brush box length to be optimized to support the brush over its entire length to the grounding ring. In contrast, competitive plastic designs employ a “one size fits all” approach, which causes unsupported gaps between the brush box and ground ring, leading to shortened brush life.

Configurable

The CMR250 is configurable to the needs of individual applications. TransTech is able to manufacture Ground Return Units with customized fits and alternate shunt attachments as required by the application. The CMR250 is 100% Buy America compliant.