BOLLHOFF



Your partner for 360° joining technology



Good cooperation is the basis for success. Our customers' and ours.

Secure fastener connections under maximal dynamic stress.

SMARTconverter 3 - NORD-LOCK® Wedge-loc



About Dinghan SMART Railway Technology GmbH

Dinghan SMART Railway Technology GmbH is a manufacturer of innovative auxiliary power converters for international rail traffic. The product spectrum ranges from individual devices such as battery chargers or air conditioning converters to complete auxiliary power converters for passenger coaches and multiple units.

The versatile system technology is characterized by future-oriented power electronics, high reliability and robustness. The subsidiary of Beijing Dinghan Technology Group Co, Ltd. is based in Kassel (Germany).





The auxiliary power converter for rail vehicles: SMARTconverter 3

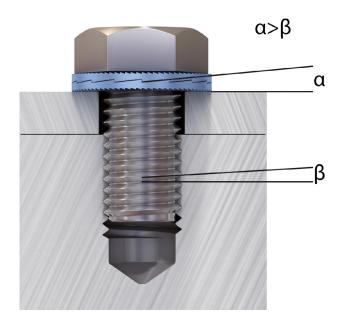
SMARTconverter 3 is a standardized on-board converter for rail vehicles. This third generation of SMARTconverter is a consistent further development and sets standards. The auxiliary power converter was designed as a platform device for rail vehicles such as underground and suburban trains, streetcars and regional multiple units. Thus, SMARTconverter 3 offers the primary system characteristics such as minimum weight and high efficiency. Developed for worldwide applicability, the third product generation meets all relevant European standards and also takes into account specific requirements of important growth regions.

Due to its modular design, a SMARTconverter can be delivered in underfloor containers, roof-mounted systems and "open frame" systems, always with an eye on the customer's weight and space requirements. A device that meets the highest has demands – and relies on NORD-LOCK®.

Proven loosening protection - NORD-LOCK® wedge-locking washers

In the case of components used for railroads, it is immensely important to create reliable and resilient connections. As described in the DIN 25201 standard initiated by the railroads, appropriate measures must be taken in the case of screwed connections that pose a risk to life and health if they fail.

king technology in use





NORD-LOCK® wedge-locking washers have a long tradition in railroads when it comes to maintaining the preload force, despite vibrations and dynamic transverse forces.

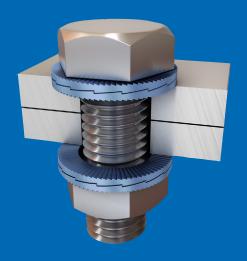
Dinghan SMART relies on NORD-LOCK® to ensure that the connections on and in the SMARTconverters can withstand the loads and thus generate correspondingly secure fastened connections.

Wedge-locking technology

NORD-LOCK® wedge-locking technology complies with DIN 25201 and secures fastened joints by clamping force instead of friction. The wedge-locking washers have wedge surfaces on the inside and radial ribs on the outside. The angle of the wedge surfaces between NORD-LOCK® washers is greater than the lead angle of the thread. In addition, the radial ribs ensure a positive fit with the mating material. The bonded washers come in pairs and are used so that the wedge surfaces lie on top of each other. The NORD-LOCK® range includes the original washers, SC washers for steel construction, wheel lock nuts and customer-specific solutions.

Customer benefits

- Maximum safety against unintentional loosening
- Established locking system for screw connections
- Can be used with screws/nuts of all property classes (up to 12.9)
- Easy easy to install and to reuse without loss of performance
- Rail-certified/approved locking element
- Wide range of dimensions



Böllhoff Group

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Passion for successful joining.

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