



# Oil Free Compressor VV1000-T



## APPLICATIONS

The VV1000-T is designed for AAR-type heavy-haul locomotives. When coupled with a GE-bearingless type motor, it can directly replace old-technology AAR oil-lubricated compressors, fitting in the same location and interfacing to the same controls.

**KNORR-BREMSE**



# DESCRIPTION

The VV1000-T is an oil free compressor for heavy-haul freight locomotives with significant LCC and train availability advantages. The VV1000-T is a nominal 5000 l/min (185 cfm) air-cooled, 2-stage, 3-cylinder, 10 bar (145 psi) compressor with integral after-cooler. It is designed for an 8-year service interval, made possible by the proprietary Knorr-Bremse oil free technology employed.

"Oil free" further means there is no oil carry-over in the outlet air; there is no disposal of lubricating oil during maintenance; and with no oil in the crankcase, the VV1000-T will start at -40 °C without preheaters. It is available in a full range of drive motor options, including the highly compact "GE-bearingless" type, typically used in North America.

## OPTIMIZED USE OF MATERIALS

- up to 25% lighter than comparable products
- oil free (0 L) vs competitors, who have up to 60 L (16 gal) of oil

## ENHANCED MAINTAINABILITY

- very low maintenance input due to oil free technology; only annual intake air filter change and cleaning of the after-cooler

## IMPROVED TRAFFIC MANAGEMENT / SAFETY

- no oil... no risk of fire
- no oil... no slipping risk due to oil leaks
- safety over-pressure relief valve on each cylinder

## LESS LIFECYCLE COSTS

- 2x overhaul in 24 years
- low maintenance costs
- high locomotive availability due to high reliability, low maintenance, and long service life

## INCREASED ENERGY EFFICIENCY

- high efficiency
- more efficient than oil-lubricated compressors
- on-demand compressor start-stop at low temperatures vs. continuous unloaded operation required for oil-type compressors in the cold

## REDUCED EMISSIONS

- no oil contamination in the product air
- no oil contamination in the condensate discharge
- no oil leaks on the locomotive floor
- no used-oil disposal

Disclaimer: We have prepared the product description with due care but cannot exclude any errors. The product description does not contain any warranty or guarantee, in particular neither regarding correctness, accuracy and completeness of contained information nor regarding quality, negotiability, adequacy for certain purposes and compliance with laws and patents of described products.