# aselsan

### **TRS-740T** TRACTION CONVERTER FOR RAILWAY VEHICLE APPLICATIONS





#### **Product Description**

ASELSAN'S TRS Series is a family of traction converters in different power/voltage levels developed from a unique technology platform for railway vehicles.

TRS-740T, roof mounted version of TRS-740, is a high performance and a highly intelligent traction converter suitable with either permanent magnet synchronous or induction motor.

TRS -740T with its new IGBT technology and advanced control algorithms provides safe, reliable and efficient operation.

#### **Typical Applications**

- Trams
- Light Railway Vehicles

#### **Product Features**

- Control of single or two parallel connected traction motors
- High performance drive using vector control algorithm even at low speeds
- Efficient switching methods
- Dynamic braking (regenerative and rheostatic)
- User selectable torque/speed control mode
- Integrated Traction Control Unit and flexible algorithm development architecture
- MVB and CANopen interface options
- Encoder/Resolver interface
- Analogue inputs and discrete IOs
- Overvoltage, overcurrent and overtemperature protection
- Passive discharge
- Galvanic isolation between HV and LV
- Fully automated self-test at start-up
  - Railway qualified components
- Complies with EMC requirements
  - High IP protection



## TRACTION CONVERTER FOR RAILWAY VEHICLE APPLICATIONS

#### **Technical Specifications**

#### Rating

Operating Voltage Range Nominal Voltage
Peak Power (30 sec)
Continuous Power
Switching Frequency
Torque Bandwidth
Efficiency
Control Voltage Range
Auxiliary Input Voltage Range

: 500-1000 VDC : 750 VDC : 600 kW : 400 kW : 2.5 kHz : 200 Hz : 97% : 24/36/48/110 VDC : 380-480 VAC 3Ø

#### **Thermal & Mechanical Data**

Cooling Type Weight	: Forced air cooling : 600 kg
<b>Operational Temperature</b>	:-40 °C / +50 °C
Storage Temperature	:-40 °C / +65 °C
Sealing	: IP65 electronic parts

#### Standards

Electrical

Mechanical Electromagnetic Compatibility (EMC)

#### : EN 50155, EN 50163, EN 50124-1, EN 50124-2, EN 50388, EN 61287-1, EN 61377-3 : EN 61373 : EN 50121-3-2

#### Dimensions







