

# TRS-1540

## 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-1540 is a high performance and a highly intelligent traction converter suitable with either permanent magnet synchronous or induction motor.

TRS-1540 with its new IGBT technology and advanced control algorithms provides safe, reliable and efficient operation.

### Typical Applications:

- Light Railway Vehicles
- Metros
- Electrical Multiple Units

### 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

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### Technical Specifications

#### Ratings

Operating Voltage Range	: 1000-1950 VDC
Nominal Voltage	: 1500 VDC
Peak Power (30 sec)	: 600 kW
Continuous Power	: 400 kW
Bandwidth	: 200 Hz
Efficiency	: 96 %
Control Voltage Range	: 24/36/48/72/ 96/110 VDC
Auxiliary Input Voltage Range	: 380-480 VAC 3Ø

#### Thermal & Mechanical Data

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

#### Standards

Electrical	: EN50155, EN50163, EN50124-1, EN50124-2, EN50388, EN61287-1, EN61377-3
Mechanical	: EN61373
Electromagnetic Compatibility (EMC)	: EN50121-3-2

### Dimensions:

