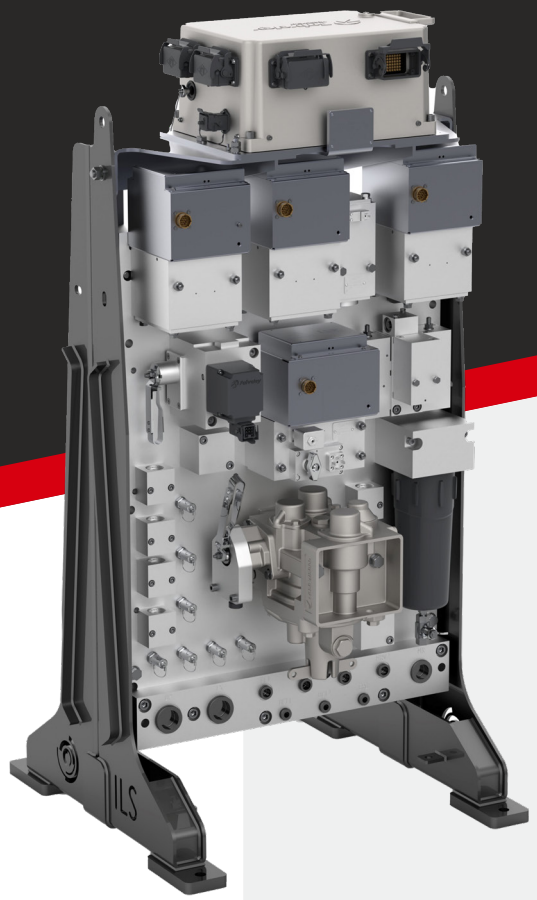
DATA SHEET

ILS

Integrated Locomotive System

The modular and configurable brake control system for Locomotives, based on a distributed electronic architecture



CUSTOMER BENEFITS

Improved mission reliability
Mission reliability and train availability are improved thanks to ILS redundant design and internal automatic reconfiguration features.

Ready for integration with other systems
Ready to interface with Automatic Train Protection and Distributed Power Wireless Control System (DPWCS)

High level of Configurability
Network based electro-pneumatic air brake system configurable for different market requirements (e.g. IR, UIC)

Compliance with main IEC/EN standards
Each LRU of the system has been designed and validated according to IEC/EN standards for environmental, EMI-EMC, S&V, RAMS and SW design. All embedded sofwares are SIL2 according to EN50657.

Life Cycle cost reduction and improved diagnostic
Maintainability LRUs concept, standard modules, embedded self-diagnostic are the base for optimized and easy maintenance along the whole life-cycle. Integration with IoT module for condition monitoring and predictive maintenance. Full customer service support available for analytics.

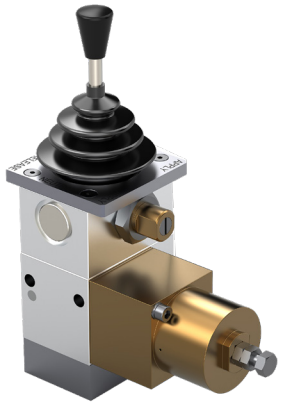
APPLICATIONS

- TSI GE/Wabtec Locomotives – Turkey and Finland
- WAG 9 Locomotive – India
- WAG 10 Locomotive – India

OPTIONAL SUPPLY COMPONENTS

Driver Brake Controller

Backup Brake Valve

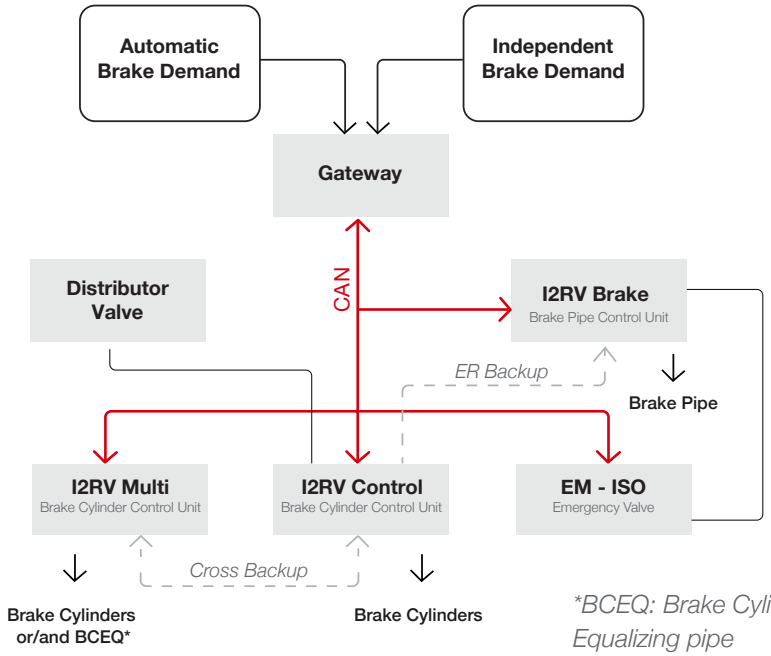


PRODUCT SPECIFICATIONS*

Dimensions	835 (L) x 768 (W) x 1273 (H)
Weight	335 kg

*may vary upon needs

ILS DIAGRAM



*BCEQ: Brake Cylinder Equalizing pipe

MAIN TECHNICAL FEATURES

- Max working pressure: 10 bar
- Air quality: ISO 8573-1:2010 Class 4-3-4
- Operating Voltage: 72-110VdC according to EN50155
- Operating Temperature: -40°C/ + 70°C
- Category 1 Class B according to IEC 61373
- IP Rating: up to IP65
- Double redundant CAN brake internal network
- Different operating modes possible
- Ethernet maintenance port
- Option: In-built vigilance control device (Indian Railway application)
- In-built fault and event logging capability
- Compact LRUs with reduced weight for single operator handling
- Redundancy features: 1st level via electronics and 2nd level via pneumatic
- TCN Interfaces: Ethernet, RS485

CONTACT

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