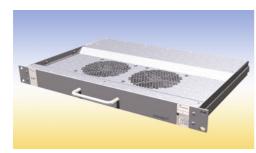
Press Release 12/02



Intermas UFanRail®

Innovative Cooling-Solution for Railway Applications

With *UFanRail*[®] Intermas-Elcom presents a fan unit, certified according to EN 50155, for the InnoTrans 2012. Specially developed for applications in the railway sector, *UFanRail*[®] ensures an efficient and steady cooling of modular units within 19 inch cabinets and housings. A standard fan shelf achieves a well-aimed airflow exclusively limited to fan area. The air flow conduction of Intermas *UFanRail*[®] however guarantees an effective, homogenous cooling of the modular units and therewith avoids the forming of hotspots. That increases the MTBF of the electronics and electromechanical and moreover enables the operation with higher system efficiency.



Depending on the ambient temperature, the fan speed is regulated linearly in a range between 50% and 100%. Besides advantages such as less noise generation as well as energy conservation, it also increases the life time (MTBF) of the fans. To make a diagnosis, the states "overand under-voltage, blocked rotor, fan

speed, operating hours, downtime, ambient temperature" are controlled.

The data communication occurs either via TPC/IP respectively SNMP or via field bus MVB (multifunction vehicle bus) specific to railways. To guarantee the signal transmission even in harsh environment, the signals are conducted via a robust floating plug connection.

Another special feature of *UFanRail*® is a wide input voltage range from 24 to 110 DC, whereby the input is protected by a surge-filter from over-voltage and voltage reversal. According to T1 of EN 50155, the *UFanRail*® can be used at a ambient temperature from -25 to 70°C. The storage temperature range from -40 to 85°C.

UFanRail® fulfills the fire standards CEN TS 45545-2 as well as NF F 16-101 / NF F 16-102 for rail cars. Furthermore the fan unit is tested for the standards EN 50155-2007, IEC 61375-1, IEEE 1473-T, NF F 61-005, EN 50121-3-2, NF EN ISO 13857, STM-E-001 and NF EN 60068-2-14.

About Intermas-Elcom GmbH:

Intermas-Elcom as a specialist for electronic packaging offers 19 inch and custom housings as well as electronics-solutions for industrial applications. Intermas-Elcom has a product development and a production department with extensive experience. With flexibility and customer focus, diverse products have been developed, licensed, according to DIN EN 50155, and applied in trains all over Europe.

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