

10.07.2018 | LÜTZE Transportation GmbH at INNOTRANS 2018 Hall 6.2/203 INNOTRANS 2018 | LION SAFE CCU | LION SAFE Remote I/O System

Intelligent and scalable safety

Railway technology specialist LÜTZE Transportation presents LION SAFE Control, a complete solution for centralized and decentralized processing of safe and non-safe signals. The system can be used as both a decentralized I/O node and a subsystem controller in applications up to SIL2.

On the modular and safety-related LION SAFE REMOTE I/O system, both safe (SIL1 and SIL2) and non-safe (SIL0) I/O modules can be controlled and monitored with almost unlimited combination possibilities. With the programmable control LION SAFE CCU, train manufacturers can also program their own functions, including local fire and temperature monitoring. Two bus coupler versions are available for the LION SAFE REMOTE I/O system: a bus coupler with MVB and SDTV2 as a secure protocol set and a TRDP bus coupler. In addition, the communication protocols CANopen, CAN2.0 (J1939), Ethernet (TCP & UDP-IP), Modbus and Profinet are available on the LION SAFE CCU. With its wide voltage range of 24 to 110 V, the LION SAFE Control system is set up for global approvals on various vehicle types. The benefits are obvious: cost reduction, less wiring, less weight and considerably lower approval costs. The LION SAFE Control system is SIL2-certified in compliance with the standards EN50126, EN 50128, EN 50129, EN 50155, EN 50159, EN 50121-3-2 and EN 50124-1 with a company-wide audit of production in Category 1.

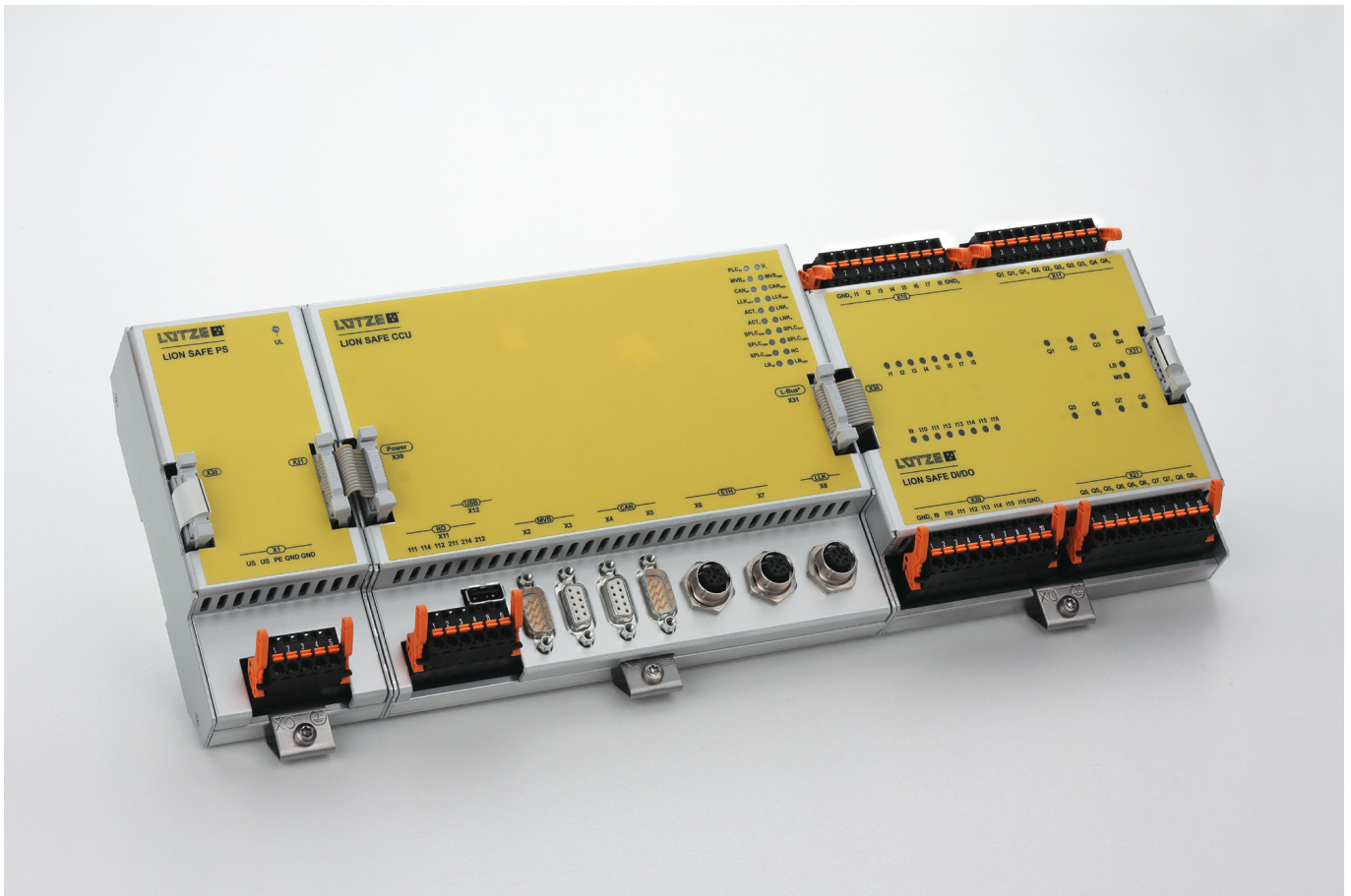


Fig.: LION SAFE CCU

LION SAFE CCU

LION SAFE CCU is a safety-related, programmable logic controller (PLC) that allows operators to implement decentralized logic and intelligence in railway technology separately from train control systems. This leads to considerably faster reaction times and less wiring. LION SAFE CCU can process SIL2, SIL1 and SIL0 signals. SAFE CCU has two separate microcontrollers: one is a safe CPU and the other a standard CPU. Both CPUs communicate with one another via a DPM interface. Both CPUs are programmed separately with independent IEC 61131-compliant software development tools. Therefore, modifications within the standard CPU have no impact on the hardware or software side of the safe CPU.

LION SAFE Remote I/O System

As a scalable SIL2 I/O system LION, depending on the application, enables the connection of various safe and non-safe modules, or a combination of bus couplers, line couplers, digital and analogue I/O modules with safe and non-safe input and output signals. The LION SAFE Control system ensures high availability and a prolonged product life cycle through the use of railway-compatible technology, e.g. robust aluminium housing and gold-plated connections. Its flat

design means that the LION SAFE system can also be mounted below the driver's desk or in the wall panelling.

Characters: 3090 incl. spaces