NEXT GENERATION OF HIGH PERFORMANCE COMPUTING

This new PLC gives you utmost flexibility new extendable up to SIL 4

In vehicle automation, everything depends on the control system. The new 94x family of control units is revolutionizing the control architecture of modern rail vehicles.

Why? For the first time it is possible to virtually integrate several independent, freely programmable controllers (vPLCs) into one device. Different applications such as vehicle control, Train Control and Management Systems (TCMS), traction, brake and diagnostics run simultaneously, independently and non-interacting on a single certified vehicle control unit.

The new vPLC 94x has been developed according to the highest standards for safety and Cybersecurity and thus offer maximum protection for people and systems. By adding a safe processor extension, the Safety Integrity Level up to SIL 4 can be achieved.

Safety-relevant and non-safety-relevant applications are separated from each other.

SELECTRON

Convincing user benefits offer cost advantages

Generic and open programmable, qualified, highly flexible SIL-PLC shortens the approval process of new vehicles for retrofits throughout the entire vehicle life cycle.

High computing power and **large memory** simplify IEC-application engineering.

Independent virtual PLC (hypervisors) offer multiple applications in one device.

Division into safety-relevant and non-safety-relevant applications in one device structures TCMS architectures and simplifies vehicle approvals.

Simply add a safe processor extension and gain a Safety Integrity Level **up to SIL 4** which enables completely new application areas.

Independent SIL applications on one control hardware that do not interact with each other reduce recurring equipment costs.

Optional DIN rails or 19" mounting (3 RU) simplifies control cabinet mounting.

For both maximum flexibility and effcient "just enough" ethernet architectures.

Simple setup and programming thanks to the well-conceived toolchain.

Faster homologation of safe application thanks to pre-certified components.

Basic Integrity, SIL 2 and SIL 4 applications on the same device thanks to the virtualization possibility.

Easy integration into any TCMS.

Technical data

SIL 2 PLC - 94x Family

- ■ Quad Core 64-bit ARM®-based processor 1.6 GHz
- ■ Hypervisor operating system
- ■ 3 x Gigabit Ethernet
- ■ 1 x USB device
- ■ Electrical power supply 24 – 110 V DC
- ■ 2 x rotary switches for configuration
- ■ Memory card

Safe Processor Extension (up to SIL 4)

- ■ SIL 4 remote I/O nodes
- ■ Connected via Ethernet
- ■ Variants with 4 Inputs / 2 Outputs or 12 Inputs / 6 Outputs
- ■ 24VDC, Outputs with max. 0.5A

Discover the entire range of Selectron solutions

Communication Technology

Invisible to the eye from the outside, train bus couplers, switches and converters perform indispensable functions in the safe operation of modern rail vehicles. The industry is currently in the midst of the transformation to Ethernet-based communication - with major challenges for train manufacturers and rail operators.

Our services - your success

Nothing is more important than responding to customer- and project-specific needs. We help projects achieve rapid success - with the right hardware architecture, reliable components, efficient software tools and overall knowledge transfer. Our job is to support you from the initial concept idea to the end of the lifecycle.

Holistic cybersecurity approach

The digitization of the railways is moving at high speed. The flip side of the coin: The rapid pace of technological development makes rail vehicles vulnerable to cybercrime. All the more important is that you can rely on someone who keeps an eye on the big picture. Selectron is on the spot with its forward-looking cybersecurity solutions.

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