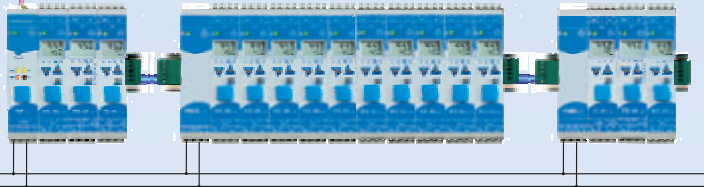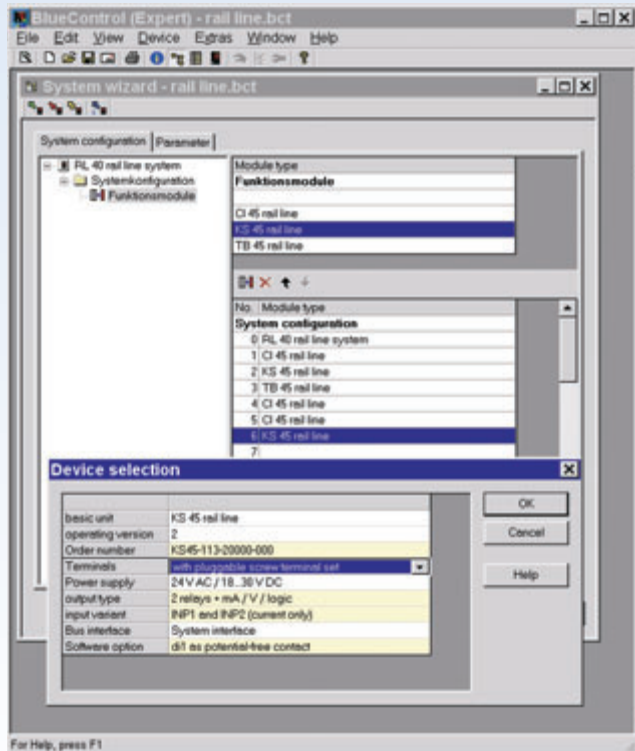# Flexible

- Centralized supply voltage
- Expansion via power supply modules
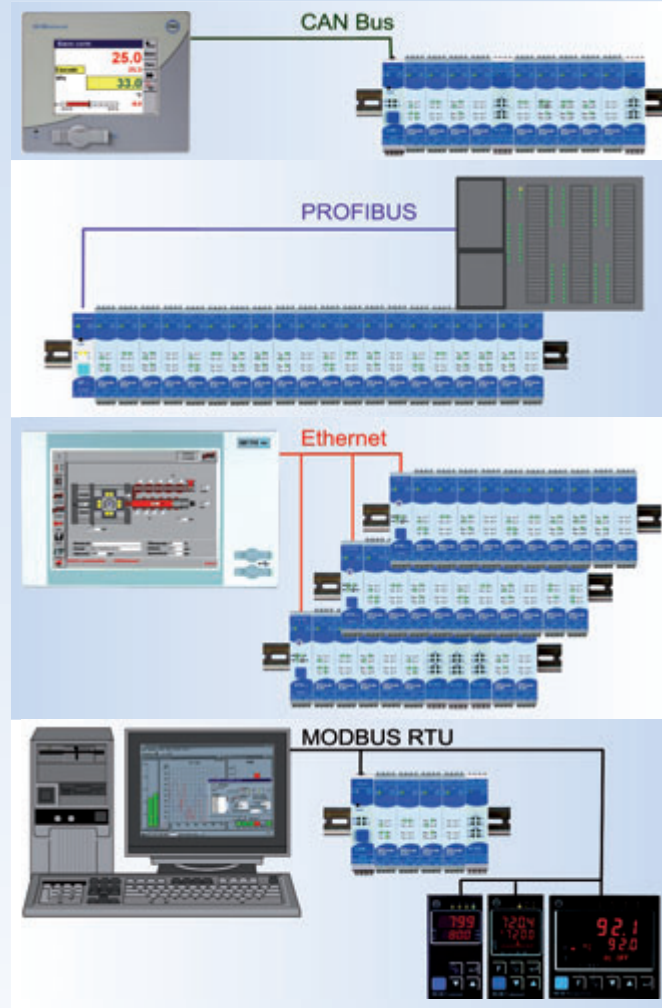
- System Wizard in BlueControl®
- Centralized Engineering

System solutions
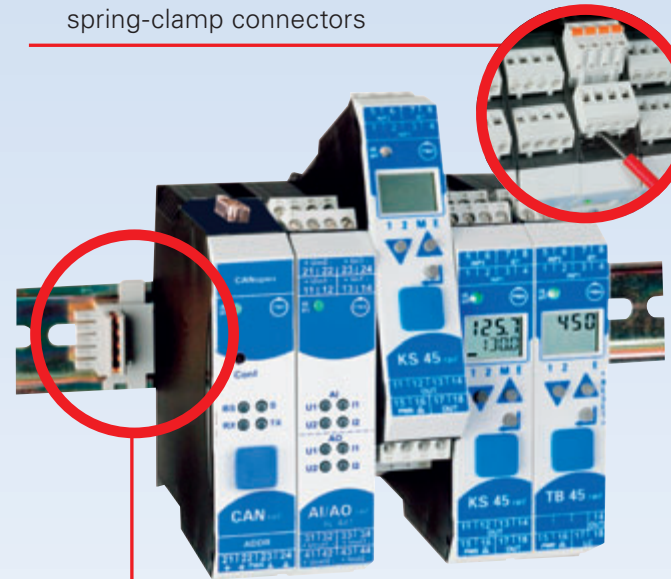
with standard field buses

CAN Bus

PROFIBUS

Ethernet

MODBUS RTU

rail line

Practical

- Plug-in screw terminals or spring-clamp connectors

- Direct inter-module links
- Simple, close-packed mounting
- Hot swappable

Do you have any questions regarding your specific needs?
Please contact us directly – we will be happy to help you.

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RL 400 I/O-System

Intelligent fieldbus modules
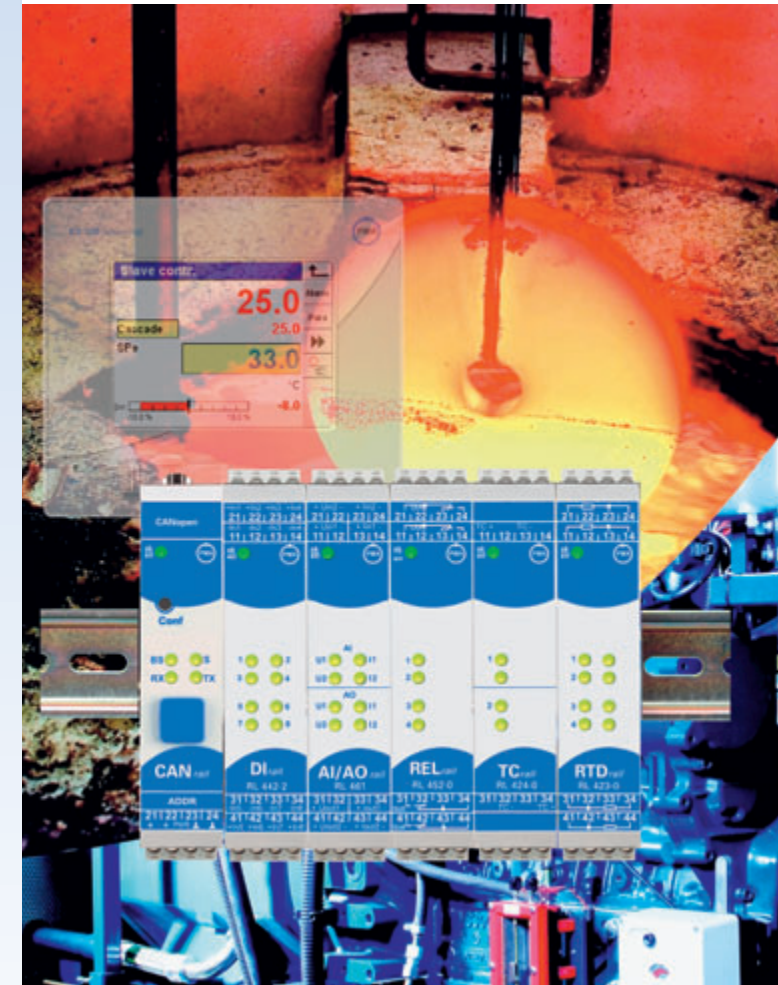
rail line

High-grade signal processing

Wir kriegen's geregelt
Close the loop with PMA

PMA

G070081 5/2007

Comprehensive

Intelligent fieldbus modules
rail line

22,5 mm/0.87"

99,0 mm/3.90"

117,5 mm/ 4.63"

- Field bus coupler
- Digital and analog inputs/outputs
- Transmitter UNIFLEX CI 45
- Universal controller KS 45
- Temperature limiter TB 45

At a glance

- **Field bus coupler**
  - CANopen: RL40-CANopen
  - PROFIBUS DP   RL40-DP
  - Ethernet ModBus/TCP   RL40-ETH
  - ModBus RTU   RL40-MOD *)
- **Bus extension from 16 up to 62 modules**
  - PWR Power supply module   RL40-PWR

Analog and digital inputs and outputs

- **Analoge inputs**

AI Universal module	RL 422-0 AI	Analog inputs, 4 x I / U / TPS / potentiom. (16 bits)
AI Module Pt 100	RL 423-0 RTD	4 x Pt 100 galvanically isolated
AI Module Pt 1000	RL 423-1 RTD	4 x Pt 1000 galvanically isolated
AI Module Pt 100/Pt 1000	RL 423-2 RTD	4 x Pt 100/Pt 1000 galvanically isolated
AI Thermocouple module	RL 424-0 TC	2 x TC galvanically isolated
AI Thermo./Lambda module	RL 424-1 TC	2 x TC / O_2 (mV)
AI Thermocouple module	RL 424-2 TC	4 x TC galvanically isolated 2/2 *)

- **Analog outputs**

AO Analog outputs	RL 431-0 AO	4 x I / U (±10 V / ±20 mA, 12 bits) *)

- **Analog inputs/outputs**

AIO Combi-module	RL 461-0 AI/AO	Combination module
		2 x AI (±U / ±I, 16 bits) Difference inputs
		2 x AO (±U / ±I, 12 bits)

- **Digital inputs**

DI Digital inputs	RL 442-0 DI	Digital inputs 2 x 4 x 24 VDC (pnp)
DI Digital inputs	RL 442-1 DI	Digital inputs 2 x 4 x -24 VDC (npn)
DI Digital inputs	RL 442-2 DI	Digital inputs 2 x 4 x contact (potential-free)
	RL 443-0 DI	4 x contact, potential-free (115/230 VAC)

- **Digital outputs**

DO Digital outputs	RL 451-0 DO	Digital outputs 2 x 4 x 24 VDC/2A
DO Digital outputs	RL 451-1 DO	Digital outputs 2 x 4 x 24 VDC/2A (freewheel diode)
DO Digital outputs	RL 452-0 REL	Relay outputs 4 x 230 VDC/5A

*) in preparation

RL 400
in a nutshell

- Supported field buses:
  - o CANopen
  - o Ethernet with ModBus/TCP protocol
  - o PROFIBUS DP with DPV1 protocol
  - o ModBus RTU
- Simple field bus integration for:
  - o Analog I/O modules
  - o Digital I/O modules
  - o Universal transmitter UNIFLEX CI 45
  - o Universal controller KS 45
  - o Temperature limiter TB 45
- Signal processing in output modules, e.g. automatic pulse response
- Signal processing through individual linearization
- Compact design, only 22,5 mm wide
- Top-hat rail mounting (EN 50 022)
- Plug-in screw terminals or spring-clamp connectors
- Function modules replaceable during operation (hot swap)
- Direct inter-module connections in top-hat rail
- Centralized 24 VDC energization
- Coupler handles up to 16 function modules
- Expandable up to 62 modules by means of additional supply units
- **BluePort**®-interface for the Engineering Tool
- **BlueControl**®-software with system Wizard and centralized access to all function modules

rail line