Technical Data

Power supply:	
Supply voltage	185V AC - 253V AC, frequency 45 - 65 Hz
Power consumption	maximum 5 VA
Hedging	External fuse required: max. 2 A (time-lag)
Inputs	
S0-Inputs	12 galvanically connected inputs. S0 interfaces (DIN 43864) for connecting potential-free contacts. Voltage with open contact: 15V Max. line width Resistance: 800 Ω Short circuit current: 18mA
Temperature inputs	3 PT100 inputs for 4-wire measurement. Measuring range -50°C to 180°C Accuracy +/- 2°C
Outputs	
Relay outputs	8 bistable relays, potential-free, AC 250V AC, maximum 3A DC 30V DC, maximum 3A
Interfaces	
Ethernet interface (web interface, Modbus TCP, FRAKO bus over Ethernet)	100-Mbit/s-Ethernetstandard 100 BASE-T. Ports used: 80, 502, 8000
RS485 (FRAKO bus)	RS485, characteristic impedance 120 Ω, for connection to the FRAKO energy management system
Connection	
Connections	via pluggable screw terminals
AUX supply, Rated data	Conductor cross-section: max. 2.5 mm², min. 0.2 mm² min. 250 V AC, 70 °C
USB for update (service interface)	USB connector types USB-C
Ethernet interface	100BASE-TX (100 Mbit/s) Cat5e or higher, 4×2 TP RJ45 (8P8C), T568B Max. 100 m segment Shielded recommended (F/UTP or S/FTP)
FRAKO power bus (FRAKO bus)	Line type: 1 × 2 cores, twisted, shielded (foil + braid) Characteristic impedance: 120 Ω ± 20 % Conductor cross section: 0.25…0.34 mm² (AWG 24…22) Capacity: ≤ 60 pF/m (low cap recommended) E.g. LAPP UNITRONIC® BUS LD 1×2×0.34 mm², 120 Ω Topology: Line (bus), no star/ring topology Branch lines (stubs): as short as possible, ≤ 2 m

Construction data	
Dimensions (WxH×D)	162 mm x 90 mm x 62 mm case
Mounting	35 mm DIN rail according to DIN EN 50022
Weight	approx. 0.4 kg (without packaging)
Protection class	Housing IP30 Terminals IP10 according to DIN EN 60529 Pollution degree 2 according to EN 61010-1:2011-07
Electrical Execution	Housing, protection class II according to DIN EN 61010
Housing design	Flammability class according to UL 94 V0 according to the housing manufacturer's specifications
Duration of use	At ambient temperature +25 °C 15 years
EMC	Conducted interference emissions from network connections: EN 55011:2016+A1:2017+A11:2020 Radiated interference emissions: EN 55011:2016+A1:2017+A11:2020 ESD (electrostatic discharge): EN 61000-4-2:2009 Immunity to radiated RF electromagnetic fields: EN IEC 61000-4-3:2020 Immunity test against fast electrical transients Disturbances / Burst: EN 61000-4-4:2012 Surge immunity test: EN 61000-4-5:2014+A1:2017 Interference immunity tests in the event of voltage drops, Short-term interruptions and voltage fluctuations: EN IEC 61000-4-11:2020
Environmental conditions	
Temperature range	-25 °C to +65 °C, no condensation
Installation altitude	max. 2000 m above sea level (a.s.l.)

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