




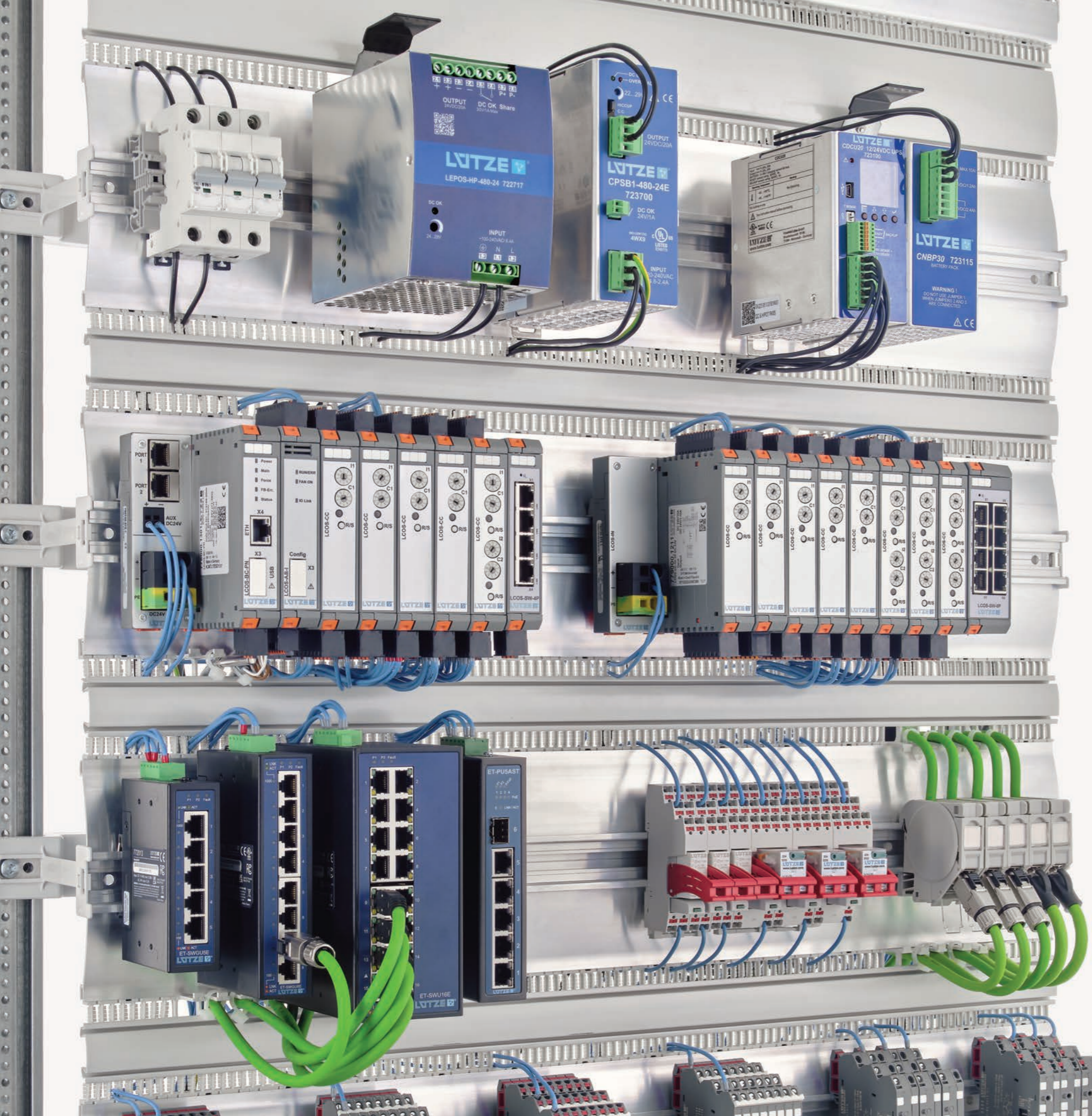




## LUTZE INTERNATIONAL GROUP Product Overview

-  Cable
-  Connectivity
-  Cabinet
-  Control
-  Transportation



# Welcome to LUTZE

## LUTZE - WIRED FOR WHAT MATTERS

Over 65 years of tradition in automation - with numerous pioneering achievements and patents, LUTZE INTERNATIONAL GROUP is today one of the leading companies in the automation industry and railway technology.

LUTZE AUTOMATION designs and manufactures control components for industrial automation as well as system solutions for a wide range of industries. The comprehensive, perfectly coordinated product range extends from flexible and continuous motion cables and cable assemblies to the energy-efficient **AirSTREAM®** wiring system for control cabinets and intelligent Industry 4.0 solutions in the areas of interface technology, current monitoring, power supplies and Ethernet infrastructure.

LUTZE INTERNATIONAL GROUP has multiple locations throughout Europe, Asia and North America, and numerous authorized distribution partners across the world to provide global product availability and service to our customers in all markets.

[www.lutze.com](http://www.lutze.com)

Cable

Connectivity

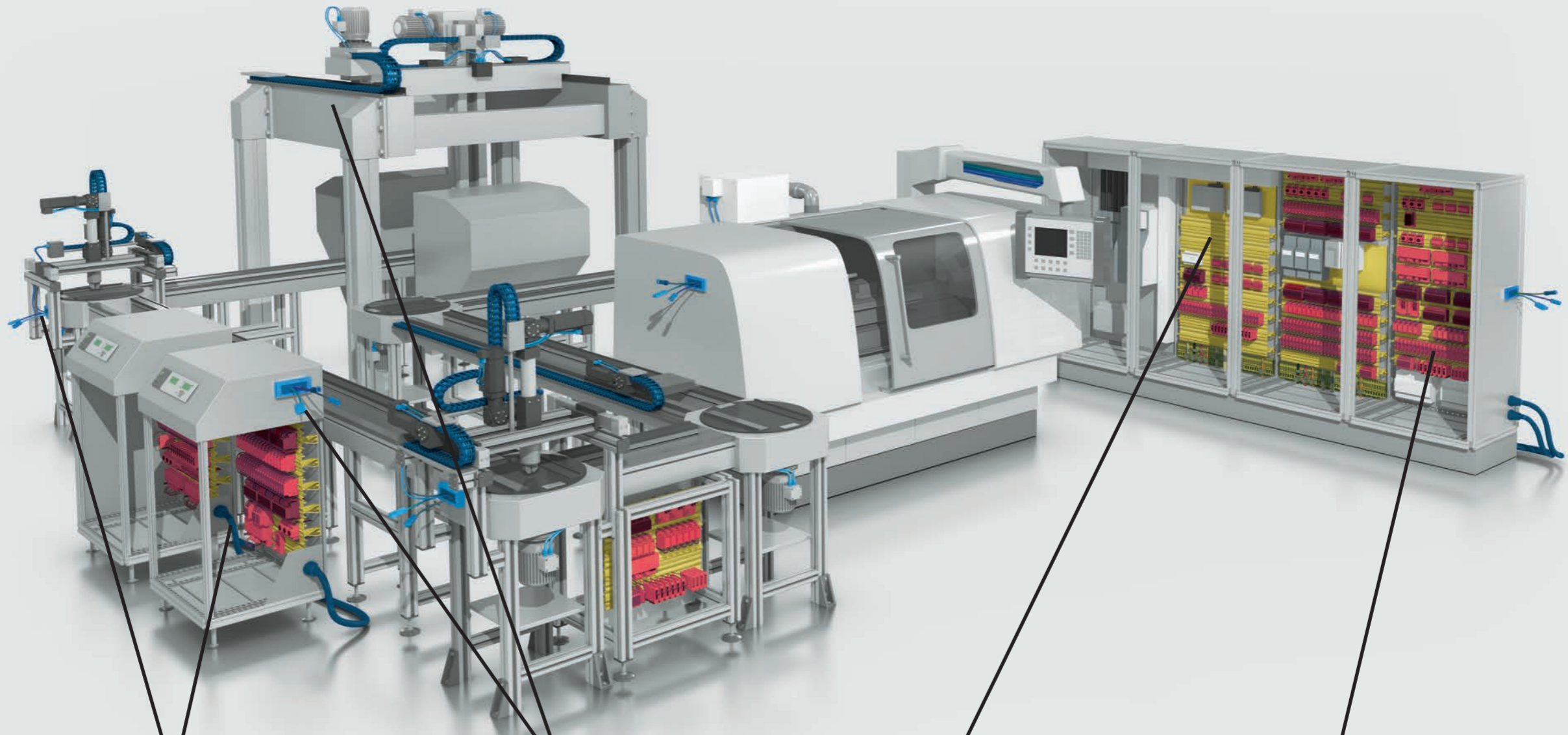
Cabinet

Control

Transportation

**LUTZE**   
AUTOMATION  
an Amphenol Company

# Efficiency in Automation - **LUTZE solutions at a glance**



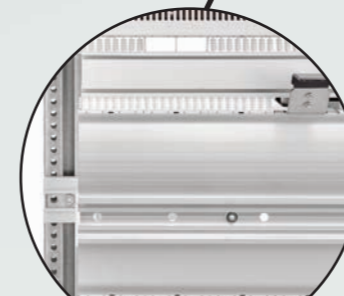
## Cable Solutions

Flexible and continuous motion cables with UL approvals for the industrial automation market  
Page 6 - 8



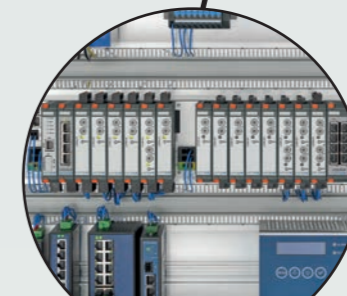
## Connectivity Solutions

Connectors for Industrial Ethernet and Actuator Sensor devices. Servo cable assemblies according to Allen-Bradley, Siemens, and Bosch Rexroth standards  
Page 9 - 11



## Cabinet Solutions

Innovative wiring management alternative to traditional back panel in control enclosures  
Page 12 - 15



## Control Solutions

Electronic circuit breakers, compact power supplies, relays and Ethernet switches  
Page 16 - 20



## Cable Solutions

### Flexible cables for industrial automation

LUTZE is your ultimate partner in cable and connectivity products for industrial automation. Our products are designed for harsh environments and carry multiple approvals for code compliance.

LUTZE specializes in flexible and continuous motion industrial control, power and network cables for various applications in industrial automation.

- LUTZE SILFLEX® for stationary and flexible applications
- LUTZE MOTIONFLEX® for linear flexing, torsional twisting and stationary applications
- LUTZE SUPERFLEX® for continuous motion and high flexing applications
- DRIVEFLEX® for motor, VFD and servo applications

## Network and Bus Cables

- LUTZE offers robust, industrial grade fieldbus and network cables for the most commonly used systems worldwide
- Suitable for stationary and flexible applications as well as linear continuous motion and torsional twisting applications
- Industrial Ethernet from Cat5 to Cat7
- Single Pair Ethernet



Online  
Product Finder



### Motor and VFD Cables

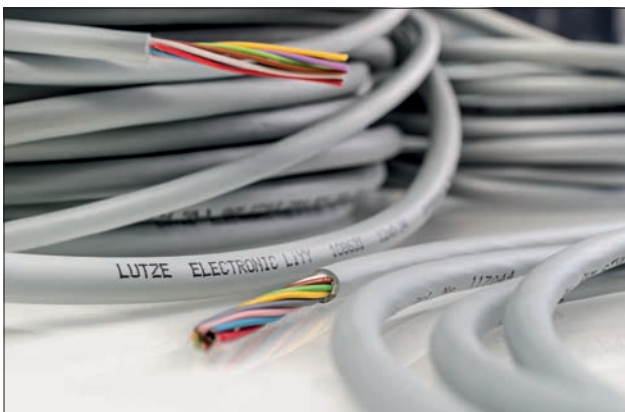
DRIVEFLEX® - Your ideal solution for VFD applications

- The most flexible drive cable in its class
- Easy to strip, route and terminate
- Superior electrical values
- LUTZE SILFLEX® Motor
- LUTZE MOTIONFLEX® Motor
- LUTZE SUPERFLEX® Motor



### Control cables

- LUTZE SILFLEX® for stationary and flexible applications
- LUTZE MOTIONFLEX® for linear flexing, torsional twisting and stationary applications
- LUTZE SUPERFLEX® for continuous motion and high flexing applications



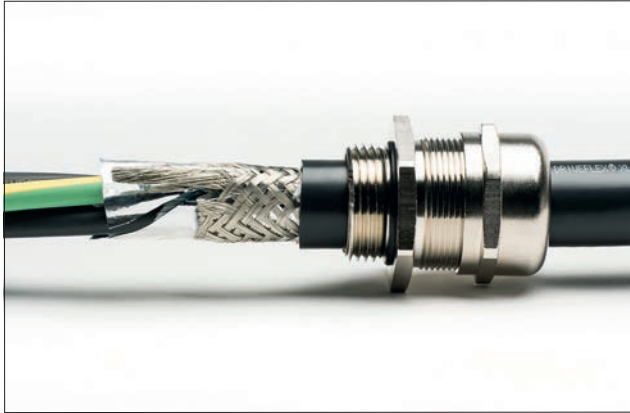
### Electronic cables

- LUTZE SILFLEX® for stationary applications
- LUTZE SUPERFLEX®TRONIC for use in drag chains
- Actuator sensor systems
- Low capacitance



## CABLEFIX® X and CABLEFIX® One Cable Entry Systems

- Wire and cable management components to simplify cable installation into control cabinets
- Easy to install
- Significant time and space savings compared to installing traditional cable glands
- CABLEFIX® Vario: Modular strain relief system



## LUTZE EMC fittings

- NPT and metric EMC fittings for optimal shielding
- Easy handling for quick EMC connection of the braided shield
- Integrated strain relief



## LUTZE cable fittings and accessories

- Available in NPT, PG and metric
- Wide sealing and clamping range
- Available in plastic and metal



## Connectivity Solutions

### High Quality Cable Assemblies

LUTZE solutions in the field of cable assembly are utilised by almost all industries, but particularly by the mechanical engineering, energy technology and electromechanical sectors. LUTZE has more than 30 years of experience in this field and works closely with its globally represented sales companies and agencies for the majority of its international customers.

For optimized flexibility and delivery, LUTZE International Group manufactures various cable assemblies at the LUTZE Connectivity Competence Center in the Czech Republic as well as at the LUTZE manufacturing facility in Massachusetts, USA.

The overriding principle for cable assemblies is quality assurance in accordance with the ISO 9001 QM management system, supported by internal CIP processes.

# LUTZE PANELCON® KEYSTONE

Modular communication interface with a wide range of industrial modules

- Reliable industrial-grade service interfaces for control panels and operator panels
- A large variety of inserts such as RJ45, M12, HDMI, USB and USB-C
- Protection class IP 65/67/69, suitable for indoor and outdoor applications



Online  
Product Finder



## LUTZE PANELCON®

PANELCON, a family of IP69 panel pass through devices with a transparent hinged cap for control cabinets and enclosures.

PANELCON is available with RJ45, in Cat5e or Cat6<sub>A</sub>, and USB 3.0, with or without a cord. There are six different cord lengths ranging from 0.3 - 5.0 m.



## Industrial Ethernet

LUTZE field-wireable RJ45 and M12 connectors and cabinet accessories provide reliable end-to-end connectivity for industrial networking.



## Connectors for all application areas

LUTZE offers a wide variety of industrial connectors ensuring optimal and reliable connectivity. Industrial network connectors include RJ45, IDC, M8, M12, and valve connectors, to name a few.



## High Quality Cable Assemblies

### Customized servo cables

LUTZE offers cable assemblies that are 100% compatible with the common servo drive system standards.

### Customized options

On request, we customize servo assemblies according to the user's specifications and requirements. LUTZE gladly assists with project planning and documentation.



## Interference suppression technology

### Suitable protection for contactors, valves, and motors

As a specialist in suppressors, LUTZE offers suitable overvoltage protections in various housing options for contactors, valves and motors or other inductors.

Special functions or designs are available on request.



## Actuator-sensor in automation technology

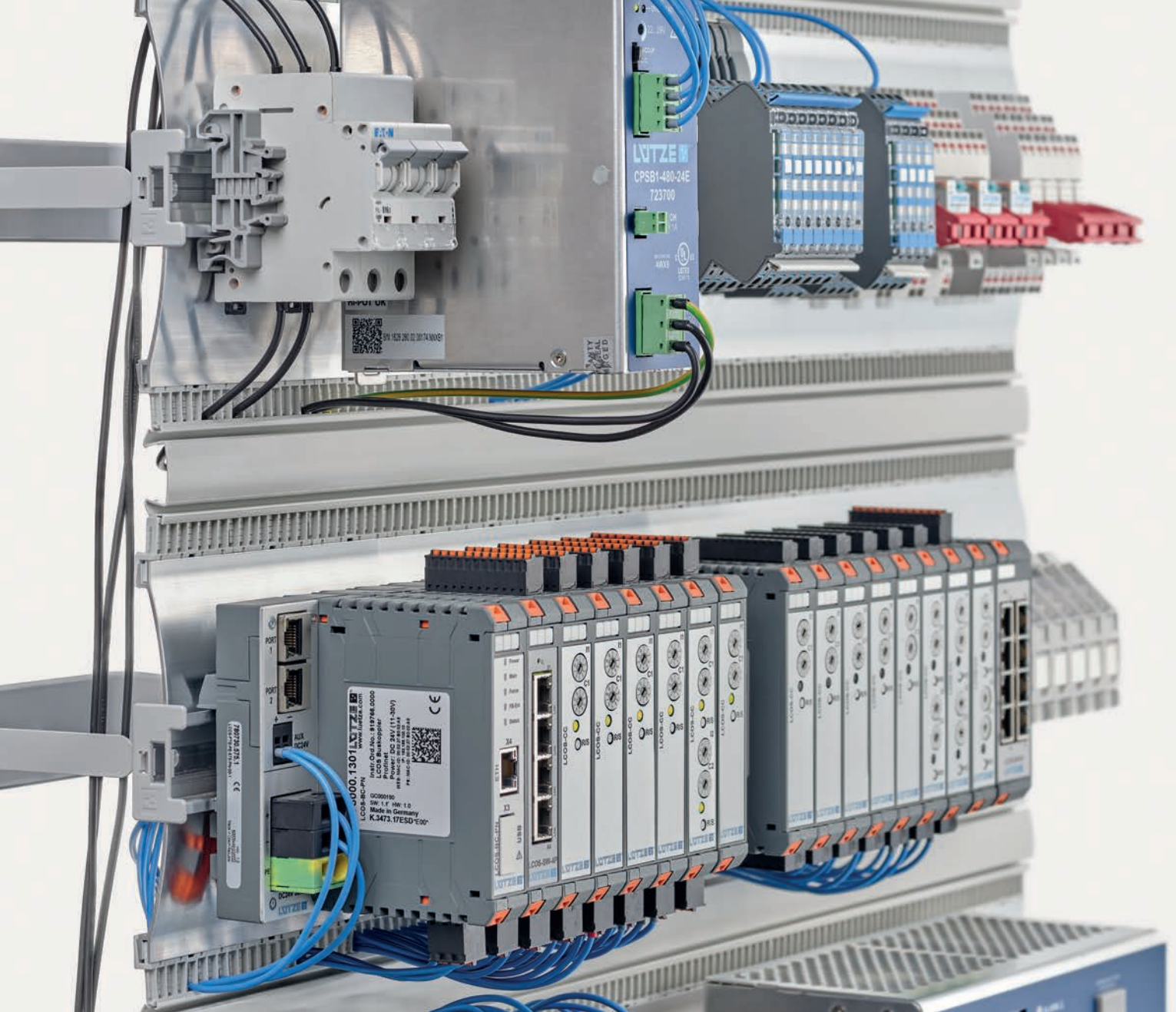
The area of actuator networks is currently experiencing significant growth, not least because of the digital transformation of an increasing number of Industry 4.0 applications. Whether in automation or other fields, these networks are always composed of numerous sensor or actuator nodes, providing data to be observed and analyzed for forming various decisions.



## Panel pass throughs

To prevent increased risk when the control cabinet door is open, LUTZE offers panel pass throughs for the control cabinet for M8, M12, RJ45, and USB. With the pluggable Plug-and-Play standard interfaces, the connections between all control and data cables and the control cabinet are guaranteed.

The LUTZE panel pass through devices have IP65, thus providing easy and safe access to the components and devices in the control cabinet.



## Cabinet Solutions

### **AirSTREAM®** wiring system for modern control systems

Industrial control components are becoming increasingly compact while their load capacity continues to rise. As a result, thermal loss rates are also increasing. Furthermore, heat accumulation in and around standard wire pathways can lead to trapped heat, causing hot spots inside control cabinets.

LUTZE **AirSTREAM®** Wiring System promotes effective hot spot dissipation by keeping the temperature at optimal level to avoid severe and costly consequences like decreased lifetime of components and possible machine downtime.

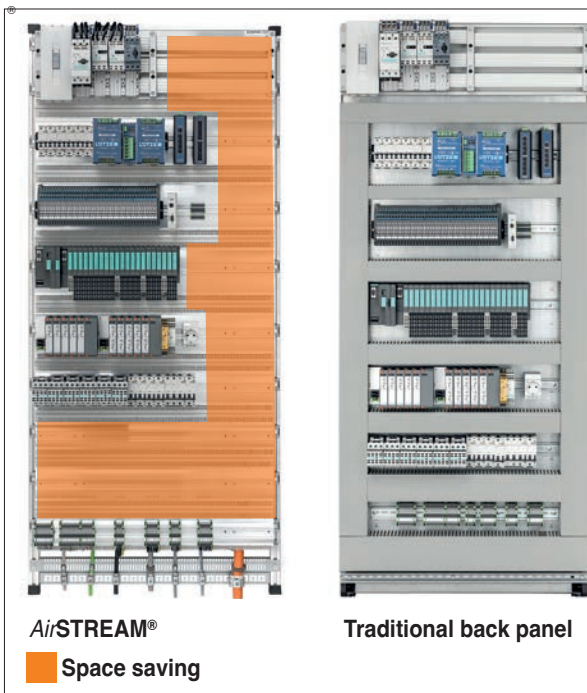
The LUTZE **AirSTREAM®** Wiring System is an innovative alternative to traditional back panels in control cabinets, offering an advanced wiring management solution. It is specifically designed to ensure fast and reliable thermal control within the cabinet, enhancing overall energy efficiency and performance.

# AirBLOWER® Control Unit

The *AirBLOWER*® control unit LCOS-AB-I is designed to manage the operation of LUTZE *AirBLOWER*® modules in control cabinets. It ensures efficient and configurable fan control for optimized thermal management.



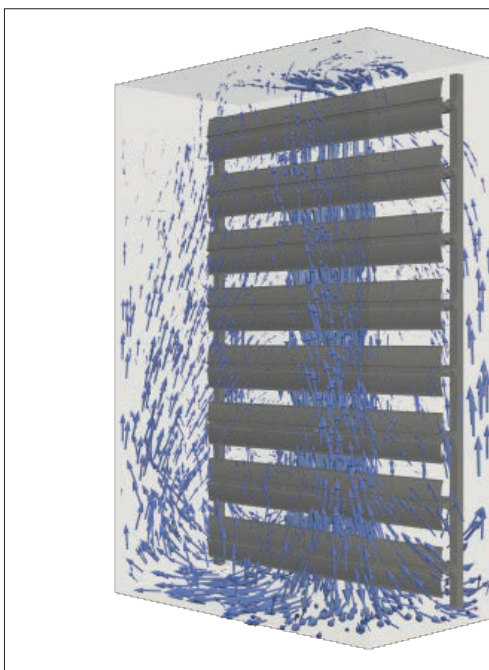
Online  
Product Finder



## More space in the control cabinet

The compact high-strength aluminum profiles create a lightweight, state-of-the-art wiring and component management system. By integrating wiring management within the frame, they enable a more compact and efficient design.

As a result, *AirSTREAM*® (shown left) allows for reduced control cabinet volume compared to the traditional back panel by optimizing space utilization (space gain shown in orange). Control cabinets can be smaller, or space can be saved. Alternatively, space is available for subsequent changes to the control system.

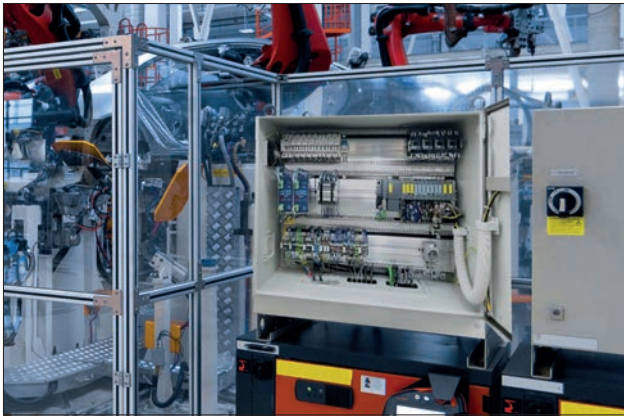


## More energy efficiency and less CO<sub>2</sub> through demand-based cooling

With the *AirSTREAM*® system, *AirBLOWER*® fan systems, and the accessories, LUTZE offers tailored solutions for uniform heat distribution in various control cabinets.

As numerous scientific studies have shown, the intelligent *AirSTREAM*® overall concept minimizes thermal stress on the components. *AirSTREAM*® enables demand-based control cabinet cooling that is precisely adapted to the power loss of power electronics, cabinet parameters, and environmental conditions.

In summary, this means less cooling power is needed, hot spots are avoided, components last longer, and operational safety increases.



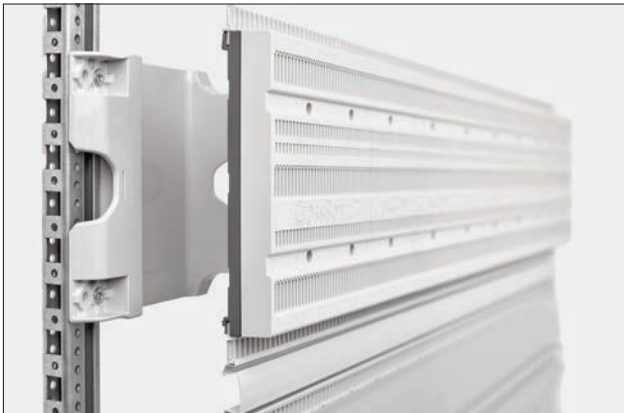
## AirSTREAM® Compact

The compact and space-saving version of the *AirSTREAM*® was specifically developed for small control cabinets and enclosures. The same rail profiles of the classic *AirSTREAM*® are mounted in the compact version using special supports. This saves space at the back of the cabinet. Furthermore, the extensive accessories of the *AirSTREAM*® can also be used for *AirSTREAM*® Compact.



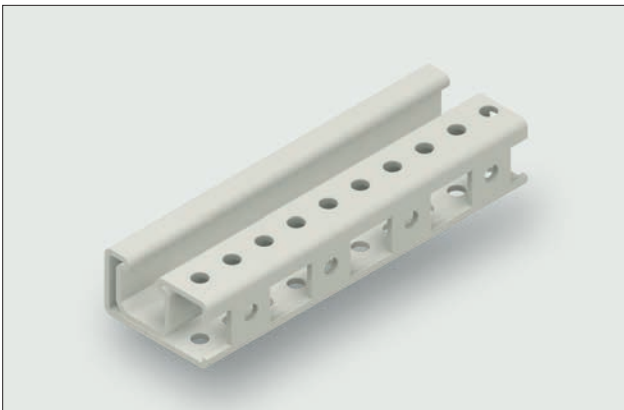
## AirTEMP® 2.0 - Temperature simulation

With *AirTEMP*® 2.0, practical thermal forecasts for control cabinets equipped with LUTZE *AirSTREAM*® wiring systems can be created – including an import function for EPLAN part lists and type test compliance according to EN 61439 (Chapter 10.10 | temperature limits). Thanks to this online tool, the most effective measures for demand-based cooling can be swiftly and easily identified.



## CrossBoard®

The CrossBoard® from WÖHNER brings a busbar system up to 160 A to the *AirSTREAM*® wiring frame. The CrossBoard® is an out-of-the-box busbar system that allows for innovative power distribution to be implemented quickly and conveniently. The CrossBoard® is available in the standard lengths of 500, 700, 900 and 1100 mm and covers the standard cabinet widths and *AirSTREAM*® frame widths.



## AirSTREAM® - The modular system from LUTZE

Mounting rails, brackets, comb segments and various rail profiles form the *AirSTREAM*® modular system for maximum flexibility in the control cabinet. These few elements open up almost infinite possibilities for control cabinet builders and designers. Even handling large and heavy components is very simple.

AirBLOWER®



## Better climate with **AirBLOWER®** and **AirBLOWER® Compact**

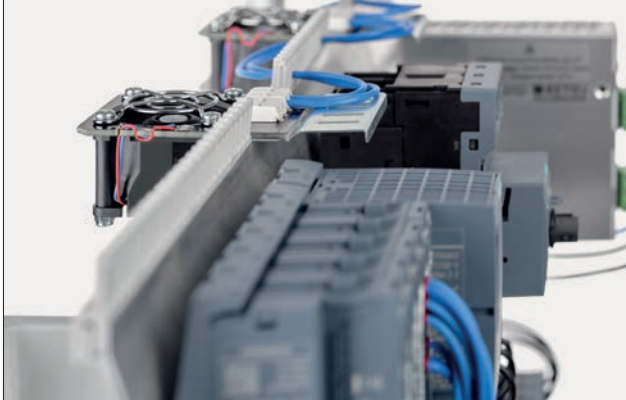
The **AirBLOWER®** fan system and **AirBLOWER® Compact**, together with accessories such as control units and temperature sensors, provide tailored solutions for achieving uniform climate throughout the control enclosure.

**AirBLOWER®** clip-in fans can be easily mounted in the wiring frame from the front without tools.

The **AirBLOWER®** fan system removes hot spots, improves air circulation, and optimizes the control cabinet climate.

In addition to the classic **AirBLOWER®** fan bank for standard and larger control cabinets, there is the **AirBLOWER® Compact**, for smaller control cabinets and electrical enclosures, which can be strategically placed throughout the **AirSTREAM®** frame.

AirBLOWER® Compact



## **AirBLOWER®** control unit

Technical data for **AirBLOWER®** control unit LCOS-AB-I:

- -25 °C to 70 °C
- Communication via IO link
- Configured via FDT/DTM
- 24 V power supply
- 2 W power consumption
- 24 V connection for fan module
- Isolated output alarm signal



## **AirBLADE®** eliminates hot spots

In hot spot areas, the use of an **AirBLADE®** is recommended. **AirBLADE®** units are like comb segments with a 50 mm grid and can be easily replaced. Hot spots are reduced thanks to the precise ventilation.

The **AirBLADE®** should be strategically positioned to optimize airflow around heat sensitive components.





## Control Solutions

### Components and Solutions for IIoT / Industry 4.0

LUTZE offers components and solutions for the Industrial Internet of Things (IIoT), designed to seamlessly integrate into your applications while enhancing safety and efficiency.

LUTZE specializes in electronic overload and short-circuit protection, along with a comprehensive range of industrial power supplies.

The LOCC-Box electronic circuit breakers provide intelligent and reliable DC current monitoring with fieldbus communication capabilities, seamlessly complementing LUTZE's extensive selection of switch-mode power supplies.

## LEPOS® - The entry Series

LEPOS® power supply units are a cost-optimized series of power supply units for standard applications. In addition to a 1-phase Low Power series, the 1-phase Performance series is available for more complex requirements. The multi-phase input Wide Range series is the ideal choice for global applications. The 3-phase devices offer full performance without compromise.



Online  
Product Finder



### COMPACT - Series

- Power supplies for inductive, resistive, and highly capacitive loads
- Input: single-phase, three-phase, and 1-/2-/3-phase options
- Output power ranging from 120 W to 2400 W
- Output voltage: 12, 24, 48 or 72V
- Very compact design
- Efficiency up to 95.9%
- DC/DC converters, uninterruptible power supplies, and redundancy modules



### LOCC-Box® Electronic Circuit Breakers

- Electrical and optical status reports
- Communication via field bus systems such as PROFINET-IO, EtherCAT or Ethernet/IP and CANopen
- Communication via serial protocol such as IO-Link
- Very narrow ECB housing with 8.1 mm per channel
- Single-channel and two-channel versions
- Adjustable current range 1-10 A
- Patented adjustable characteristic curves (5)
- NEC Class 2 versions



### LOCC-Box®- Mini ECB

The 1-channel current control in a miniature format

- Adjustable current range 1-8 A
- Adjustable characteristic curves (5)
- Optimal size, installation depth < 8.8 cm
- Smallest stand-alone module with 40 setting options
- Replacement for miniature circuit breakers
- Communication via field bus systems and IO-Link
- Direct connection the load to + and -



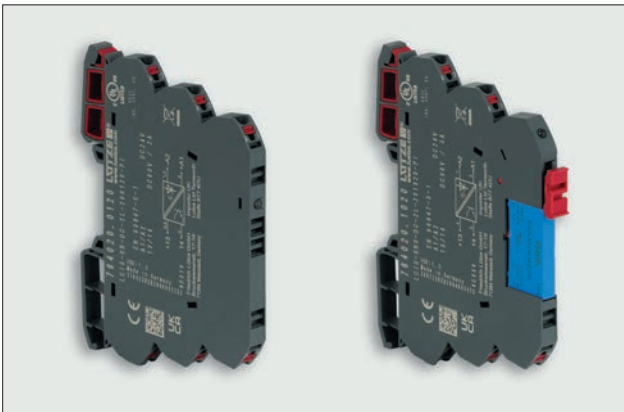
## Unmanaged Ethernet Switches

- Redundant AC/DC wide range supply  
DC 12-48 V, AC 24 V
- PoE+ Switches with 4- and 8-ports
- 10/100/1000 Mbit/s Unmanaged Ethernet Switches, 5, 8, and 16 ports
- Expanded temperature range -40 - +75 °C
- Intelligent energy management
- SFP - Ports for fibre optic connection
- QoS-Quality of Service
- Output alarm relay



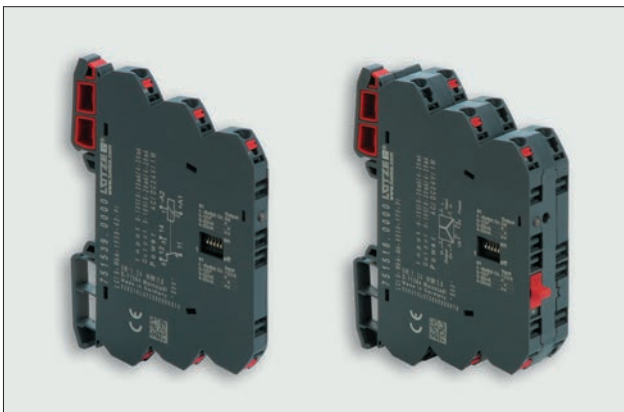
## LCIS electromechanical relay modules

- For the potential-free switching of small loads
- Space-saving housing widths: 6.2 mm, 15.9 mm and 31 mm
- Pluggable and non-pluggable designs
- Control voltage of DC 12 V - AC/DC 230 V
- Relay with 1, 2 and 4 change over contacts
- Screw or Push-In termination
- UL and DNV approval
- Low installation depth



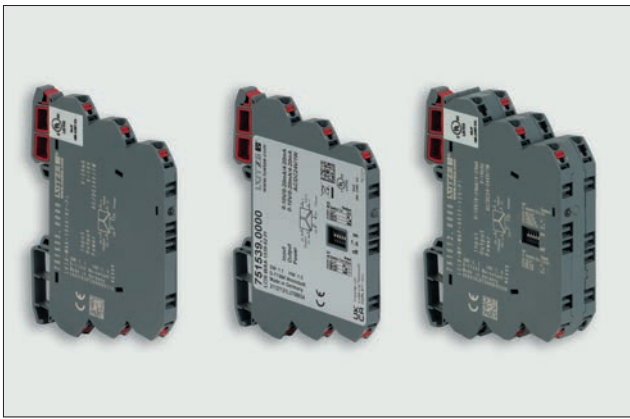
## LCIS® solid state relay modules

- Solid state devices for loads up to 10A
- Switching voltages up to AC 275 V
- Space-saving 6.2 mm width
- Pluggable and non-pluggable designs
- 2 and 3-conductor technology
- Screw or Push-In termination
- UL and DNV approval
- Low installation depth



## LCIS® Universal Converter

- Universal setting of measuring ranges thanks to DIP-Switch
- 2- and 3-way isolation
- Wide range supply of AC/DC 24 - 240 V
- Isolation voltage up to 4kV
- Frequency and standard signal converter
- Variants for building technology with "Manual - 0 - Automatic" function
- UL and DNV approval



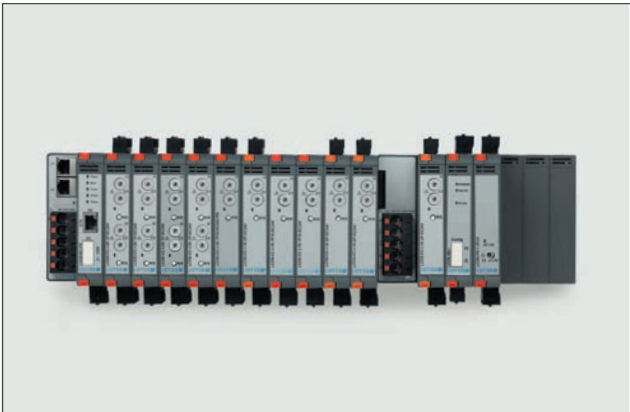
## LCIS Temperature Converter

- Universal setting of measuring ranges via DIP-Switches
- 2- and 3-way isolation
- Wide range supply of AC/DC 24 - 240V
- Temperature sensors as PT100 or TV-type K and J
- Wide temperature range between -50 and +1200°C
- Isolation voltage up to 4kV



## LCON® programmable converter FDT/DTM

- Complete galvanic isolation
- High precision
- Analogue splitter
- 1 kHz transmission frequency
- Temperature converters for PT, TE and more
- Analogue converter with input +- 30 V, +- 5 A
- Temperature and analog limit switch
- Setting via software (PACTware) and/or DIP switch
- Various analog outputs
- UL and DNV approval



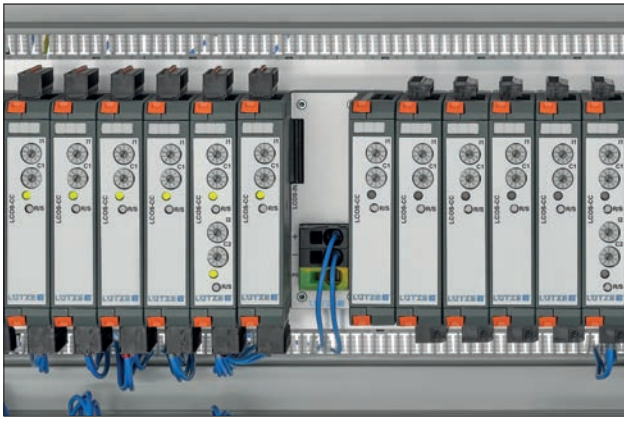
## LCOS® LUNA®

- Maximum supply current of 100 A
- Supply voltage DC 24 V - max. AC/DC 230 V
- 6 and 11 slot options, active and passive variants
- Integration in fieldbus systems possible
- Expansion through extension modules or individual LCOS function carriers
- Data bus forwarding to expansion modules with renewed power supply up to AC/DC 230 V, 100 A
- No accessories necessary



## LCOS®-PS

- Single-phase power supplies with wide input range for worldwide use
- 30 W, 60 W and 120 W units
- Usable as a stand-alone module or within the "LUTZE Communication System" - LCOS LUNA
- Very high output reserve, e.g. 150% for 5s at 24 V
- Extremely compact design
- Remote input for switching the output voltage on / off
- Pluggable Push-In terminals



## LCOS® CC

- Electronic load monitoring within the "LUTZE Communication System"
- Adjustable current range from 1 A to 16 A
- Adjustable characteristic from fast to super slow
- Electrical and optical status reports
- Single-channel variant with 2-pole disconnection (galvanically isolated)
- Can be used in Fieldbus systems such as Profinet, EtherCAT or Ethernet/IP
- Direct connection the load to + and -



## LCOS® Unmanaged Ethernet Switches

- AC/DC 24V power supply
- Variable power supply
  - Energy bus or
  - 3-pin clamp-type terminal Push-In
- Can be used as a standalone module or in the "LUTZE Communication System"
- Compact design and universal application
- QoS - Quality of Services



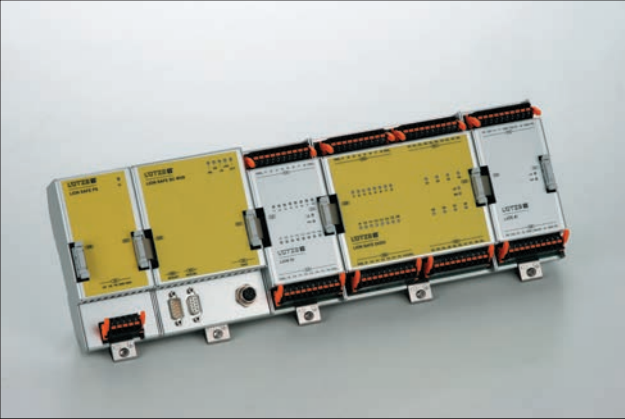
## LUETZE Transportation

### We are on Track - Electronic Control for Rail Vehicles

LUETZE TRANSPORTATION has been involved in railway technology for more than 35 years. With its expanding relevance, the technical industry requirements are evolving accordingly. Thanks to consistently developing expertise and know-how advantage, LUETZE TRANSPORTATION can today develop and deliver a variety of products and solutions for this demanding application field.

LUETZE is considered one of the world's leading suppliers thanks to its high-quality, reliable and long-lasting rail portfolio.

LUETZE rail engineering products can be found practically on every track in the world, be it commuter railway systems, underground systems, trams, freight locomotives or high-speed trains.



### LION Remote I/O - System

is a modular remote I/O- fieldbus system designed for use in railway and rolling stock applications.

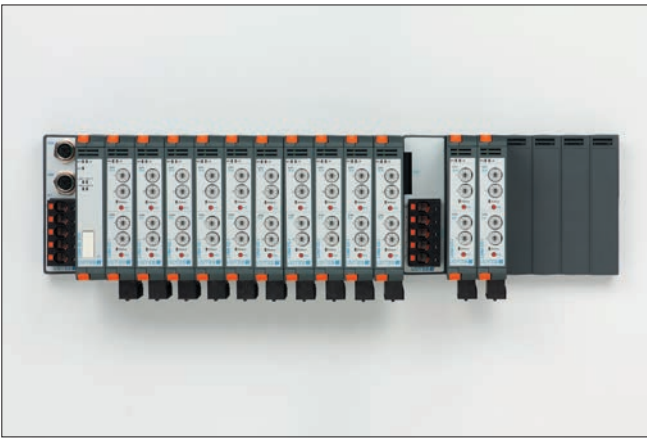
- Bus coupler with MVB and TRDP with and without safety layer SDTv2
- Up to 32 modules
- Up to three I/O sections are possible, connected via line couplers (max. 10 m)
- Safe and non-safe modules possible in one system
- Optional up to SIL2
- SIL2 backplane bus
- SIL2 modules (DI, DO, AI) 24 - 110 VDC



### TLM - Train Line Modem

Train Line Modem for transmitting Ethernet networks over existing lines, for example, to connect two cars via the coupling or to establish point-to-point connections within the vehicle.

- TLM configuration tools for parameterising and setting the TLM
- Heartbeat with diagnostic information
- Plug and play
- Up to 1 Gbits
- Data logger via FTP



## LUNA

Intelligent system for controlling, monitoring and protecting 24V actuators via Ethernet TRDP. Continuous data acquisition for preventive maintenance on trains.

- 2-channels per module
- 2-pole switching with galvanic isolation (relay contacts)
- Current ranges up to 10 A per channel
- 5 different characteristics per channel
- Triggering behavior independent of temperature
- Parameter setting optionally via rotary switch or configuration data
- Up to 32 current control modules per bus coupler
- Supply current up to 100 A per supply- or extension module



## LCON-Rail-Infinity

Series of compact, programmable signal converters and threshold switches specifically designed with broad range of functions and applications.

- Analog input up to AC/DC 300 V and AC/DC 10 A
- Temperature input for PT100 / PT 1000, 2-, 3-, 4-wire, potentiometer and thermocouplers
- 1 Analog output
- 2 Solids state limit switches DC 110 V / 1,5 A
- Configurable via software FDT / DTM
- Wide range input power DC 24 V - 110 V
- Galvanic 5-way isolation



## Audio Signal Transducer with TRDP

- Configuration (IP + audio) via web server
- Audio playback is controlled via TRDP message data telegrams or digital inputs
- Up to 256 audio files possible, limited to ca. 15MB
- Copy and paste of configurations possible via webserver
- Volume control
  - Predefined presets
  - Default (100%), configured volume or TRDP sent volume possible



## USB Charging Solutions

- 230 V sockets (Type E or F) with integrated charging ports USB-A and/or USB-C as well as USB-C 65W PD
- DC 24 V charging ports with 2 x USB-A
- DC 24 – 110 V wide range charging system with suitable passive charging cables



# Business Management: Sustainable and forward looking

## The future is blue

Sustainable enterprise means thinking and planning ahead, understanding and embedding the belief that long lasting success is more important than short-term profit maximisation.

This is an attitude that has existed within LUTZE for quite some time.

Economic and environmental responsibilities complement each other well and are reflected in the sustainable management and product policy - and from now in the *SkyBLUE* campaign.

We manufacture our products in a resourceful and energy-conscious manner. We use long lasting, environmentally-friendly materials. And our products, in turn, help our customers save energy and resources.

Good for everyone: for us, for the environment, for our customers a win-win-win situation.

## Goods with real value

The value of a product or a solution from LUTZE is determined by its sustainable qualities as well. Every innovation is only as successful in the future if it has a long-term positive effect. Therefore, we provide long lasting as well as highly efficient components. We are incorporating the necessary knowledge and manufacturing competence in numerous joint projects with the objective of improving energy efficiency and sustainable technologies and industries. Thus, LUTZE provides answers and demonstrates how to handle resources responsibly, with our environment and our future in mind.



# RoHS

### Cable Solutions

Flexible and continuous motion cables for industrial applications

### Connectivity Solutions

Industrial Ethernet, Cable Assemblies, Actuator Sensor Interface, Connectors and Suppression Technology

### Cabinet Solutions

*AirSTREAM* complete system for thermally optimized and space-saving cabinet wiring

### Control Solutions

Industrial Power Supplies and Electronic Circuit Breakers for Industrial Internet of Things. Infrastructure for Industrial Networks, Signal Converters, Relays and modular Electronic Housing

### Transportation Solutions

Solutions for the demanding Railway Sector, for example Control Technology, Interface Solutions and Signalling

### Germany

Friedrich Lütze GmbH  
Bruckwiesenstraße 17-19  
D-71384 Weinstadt  
Tel.: +49 71 51 60 53-0  
info@luetze.de

### USA

LUTZE INC.  
13330 South Ridge Drive  
Charlotte, NC 28273  
Tel.: +1 704 504-0222  
info@lutze.com

### United Kingdom

LÜTZE Ltd.  
Unit 3 Sandy Hill Park  
Sandy Way, Amington  
Tamworth, Staffs, B77 4DU  
Tel.: +44 1827 313330  
sales.gb@lutze.co.uk

### Austria

LÜTZE Elektrotechnische  
Erzeugnisse Ges.m.b.H.  
office@luetze.at

### Switzerland

LÜTZE AG  
info@luetze.ch

### France

LUTZE SASU  
lutze@lutze.fr

### Spain

LUTZE, S.L.  
info@lutze.es

### China

Luetze Trading (Shanghai) Co.Ltd.  
info@luetze.cn

**SkyBLUE**  
LUTZE



**RoHS**

[www.lutze.com](http://www.lutze.com)

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AUTOMATION  
an Amphenol Company