Edition 1

LÜTZE-REPORT

The international magazine of the Lütze

VALVE AMPLIFIERS IN USE AT LISEC

AN EYE CATCHER! FIRST-LIGHT CHANGES THE «SIGNS»

LÜTZE CONGRATULATES ON 50TH ANNIVERSARY – TRAPO KÜNG AG WILL SOLVE ANY TRANSPORT PROBLEM!

OPEN HOUSE AT HH BARNUM IN DETROIT

PRESSMAC USES COMPACT ASSEMBLIES FOR INNOVATIVE IDEAS

DELAYED REACTION DESIRED: LÜTZE IS BETTING ON NEW TIME-DELAY RELAY FAMILY

NEW TESTING AND CALIBRATION SYSTEM GUARANTEES LÜTZE QUALITY

LÜTZE

Systematic Technology

editorial

EDITORIAL

Friedrich Lütze
founder of the
Lütze Group

An exchange of core competencies will benefit both partners

In our everyday interaction with customers, we try to familiarize ourselves with their problems so that we can work out solutions which will benefit them. In many cases we have worked in a team with our customers and succeeded in developing solutions that met or even exceeded their expectations.

Technology continues to play an ever more important role in acquiring knowledge and in accelerating the transfer of information and skills within and among companies.

We are prepared to meet these challenges and are offering you our competent cooperation.

Yours sincerely,

F. Lütze

INDEX

IMPRINT

Published by:
LÜTZE INTERNATIONAL GmbH
P.O. Box 1224 • Bruckwiesenstrasse 17-19
D-71384 Weinstadt Germany
Tel0049 71516053-0 • Fax0049 715160 53-277
e-mail: info@luetze.de
Internet: www.luetze.com

Editorial/Coordination:
LÜTZE AG
Oststrasse 2 • CH-8854 Siebnen/Switzerland
Tel 0041 55 450 23 23 • Fax 0041 55 450 23 13
e-mail: info@luetze.ch
Internet: www.luetze.ch

Copywriting/Layout:
RITTER KREATIV....
Unternehmensberatung + Kommunikation AG
Gerberngasse 44 • 3000 Bern 13
Tel 0041 31 313 30 30 • Fax 0041 31 313 30 39
e-mail: info@ritterkreativ.ch
Internet: www.ritterkreativ.ch

Photography by:
zVg + FOTarena Bern • Tel 0041 31 313 30 36
e-mail: fotarena@complot.ch

Printed by:
Schaer Thun AG, Uetendorf

OUR PRESENCE AT TRADE FAIRS AND EXHIBITIONS

Lütze goes around the world:

Trade Fair	Place	Date	
INELTEC 2001	Basel (CH)	04.09. – 07.09.2001	Lütze CH
MSV Maschinenbau	Brno (CZ)	24.09. – 28.09.2001	Lütze A
Motek	Sinsheim (D)	25.09. – 28.09.2001	Lütze D
Eltefa	Stuttgart (D)	26.09. – 28.09.2001	Lütze D
SOBODNA ELEKTRONIKA	Ljublijana (SLO)	01.10. – 05.10.2001	Lütze A
Viet	Vienna (A)	09.10. – 12.10.2001	Lütze A
Electrical Engineering Exhibition	Glasgow (GB)	09.10. – 10.10.2001	Lütze GB
SPS	Nuremberg (D)	27.11. – 29.11.2001	Lütze D
ET 2001 (Eisenbahntechnologie)	Basel (CH)	05.12. – 07.12.2001	Lütze CH
EMV	Düsseldorf (D)	09.04. – 11.04.2002	Lütze D

DQS CERTIFICATE

Friedrich Lütze GmbH & Co. in Weinstadt has been certified by the DQS according to DIN EN ISO 9001 since early 1995. The second re-certification – which included the Lütze companies in Austria and Switzerland for the first time – took place in March 2001. It is worth mentioning that this re-certification was based on the DIN EN ISO 9001: 2001 published only in December 2000 and did not require any modification. Thus, Lütze Germany, Switzerland and Austria are among the very first companies worldwide to have been certified according to the completely revised quality standard.

VALVE AMPLIFIERS IN USE AT LISEC

Gottfried Kainradl

The LISEC company, based in Hausmening/Seitenstetten (Austria) is the international leader in assembly lines and machines for insulating glass manufacturing. **LISEC delivers complete systems for production of insulating glass disks to customers all over the world.** The company keeps presenting complete assembly lines at the biannual Glasstec trade fair in Düsseldorf that are an impressive demonstration of LISEC's market leadership.

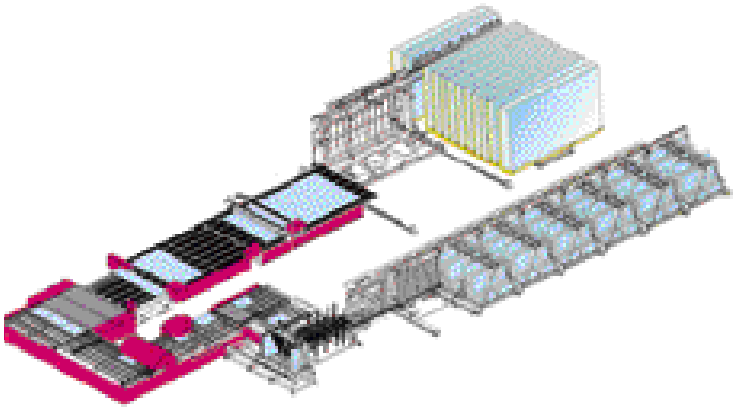
Finished insulating glass disks consist of several elements, and their production requires maximum precision in order to meet quality demands. Another requirement is high throughput **in order to increase the productivity of the machines and to lower production costs.** This is primarily achieved by means of a fully automated, process-controlled production system. Only supervisory personnel is required, i.e. production does not involve any manual operator intervention.

The first step is to cut and sort the glass disks. This is followed by extremely thorough cleaning since the insides of the assembled disks are no longer accessible after production. Then the aluminum or stainless steel spacer frame is adhered to one of the two glasses. These frames are cut at a separate station and bent according to the disk size.

Once the second disk has been placed on the first one in perfect coincidence, gas is optionally pumped between the disks in order to improve the temperature insulation of the final product. Finally, the element is pressed, and the edge joint is sealed with a special sealant. Versions to provide maximum functionality are manufactured with 3 disks; however, 2-disk versions are adequate for most applications thanks to gas filling and a special coating on the glass.

Lütze valve connectors have been used in LISEC machines for years. LISEC makes full use of the versatile characteristics of this variable connector. The connector is fitted with suppressors to suppress spikes when the inductance is switched off. This improves the EMC of the system.

As a particularly cost-effective solution, LISEC uses large quantities of the Lütze valve amplifier.
A transistor amplifier installed in the same connector housing permits hydraulic valves with up to 48 W to be switched with the PLC control signal. Power conversion directly in the connector eliminates the need for interface modules in the switch cabinet and associated wiring. Moreover, the control can be equipped exclusively with low-cost output cards, without any need to take into account high-power valves.



Safe usage in energy management chains is possible thanks to connection to a **SUPERFLEX line from Lütze**; the various cable lengths are assembled by Lütze in Vienna. This guarantees quick and flexible delivery to the customer.

LISEC systems and machines are sold in many countries all over the world. Maximum reliability and quality of the products used contribute to ensure LISEC's position as the market leader with the best price-performance ratio.

AN EYE-CATCHER! FIRST-LIGHT CHANGES THE «SIGNS»

Nigel Broad

Every day the commercial world ensures we are all bombarded with adverts for everything from toilet paper to the very best that money can buy. The media used range from simple newspaper adverts to the most sophisticated television spots, the trick being to present the product to the right people at the right time. While this may sound simple, it is the essence of successful advertising, and for those who can deliver for their clients there are rich rewards.

First Light, a UK-based advertising consortium, set about bringing these key concepts to the domain of street billboard-style advertising. Vast advertising experience was focussed on a concept of changing billboard adverts by remote control to target the type of people in the vicinity of the advertisement at the time.

The technical challenges involved in implementing this concept reliably were considerable. The system design is based on a PLC-controlled servo drive with a GSM modem and permits up to 12 posters to be managed via central control. The posters are located in the advertising board and can be changed on command at any time by remote programming.

First Light knew the demand for the product would be considerable and needed to move from prototype to production models very quickly with hundreds of systems to appear on the streets of London by the end of 2001.

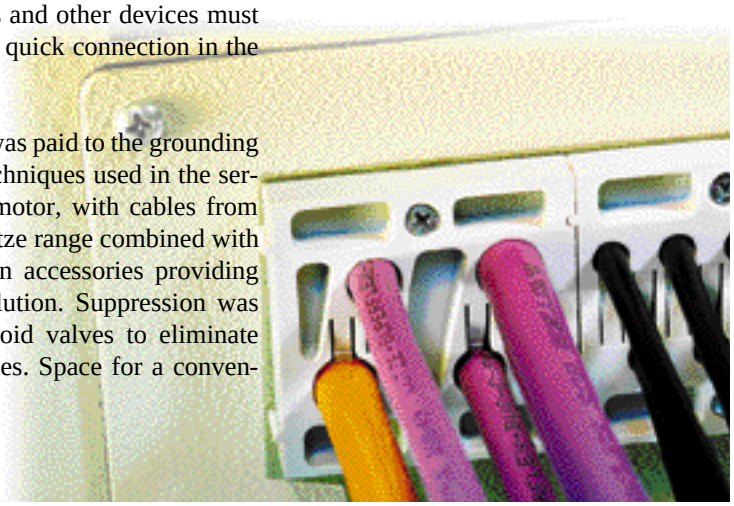
Lütze, working closely with Logicon Systems, one of its key distributors based in Burgess Hill in the South of England, was asked to assist in the design of the cabling and assembly of the product. Clear criteria were established:

- EMC standards must be met.
- The product must permit quick assembly, and the electrical control, including wiring, must be completely tested prior to the boards being installed, thereby ensuring minimal commissioning times.
- All cable connections to motors, sensors, solenoids and other devices must be suitable for quick connection in the field.

Close attention was paid to the grounding and shielding techniques used in the servo control and motor, with cables from the extensive Lütze range combined with EMC termination accessories providing the optimum solution. Suppression was applied to solenoid valves to eliminate any voltage spikes. Space for a conventional control box was not available, so a customised control box was designed and elements from the Lütze LSC wiring system, which is specifically designed to save space in control panels, were utilized to mount the majority of components inside the panel. The cables emanating from the control box were combined into three separate looms, and to facilitate cable entry Lütze cablefix were used, a product which allows up to 8 cables to enter a control panel through a single opening measuring only 48 x 48 mm. This method of construction meant that the complete electrical assembly could be tested prior to installation and commissioning.

The advertising system passed independent EMC tests in December 2000 and went into production early this year, with the first products being installed on the streets in March 2001.

Peter Thompson of Logicon Systems commented, **«The involvement of Lütze at an early stage was important to the success of the project.** Their ability to supply on time and quickly react to design changes has been vital. Their service has been first class.»



LÜTZE OFFERS CONGRATULATIONS ON 50TH ANNIVERSARY

TRAPO KÜNG AG WILL SOLVE ANY TRANSPORT PROBLEM!

Karl Heberle

Founded in 1951 by Josef Küng, this company has become an established and competent partner for building owners and planners in the area of goods transshipment within companies. It supplies individual and intelligent solutions for conveyance tasks to commerce and industry.

The company, managed by Hanspeter Küng and Elisabeth Delaquis-Küng since 1979, has 100 employees at the production plants in Basel and Zwingen. **Trapo Küng AG produces passenger and freight elevators, fully automatic pallet elevators, special elevators, adaptation ramps, elevating platforms and transporting plants. Custom solutions, e.g. for building renovation or expansion, are one of the strengths of this innovative firm.**

René Farner, Trapo Küng AG

In addition to the commercial division which sells industrial swing doors, high-speed doors, pallet-elevating trucks, forklifts and pipe couplings, the company also focuses on maintenance services.

Trapo Küng AG and Lütze AG have been working together in an excellent partnership for many years. Besides control components, such as motor interference suppression products, connectors and transfer elements, Trapo Küng AG also uses the Lütze «LSC-C» wiring system.

Two years ago, René Farner, in charge of support, engineering and electronics at Trapo Küng, decided to use the «LSC-C wiring system» with units completely preassembled by Lütze.
His decision in favor of this modern wiring system was based on the following criteria:

- **Reduction of the number of cabinet types to only two dimensions** (for all control systems used in a wide variety of equipment)

- **Extremely high packing density,** which means reduced dimensions of cabinets or extra space for equipment to be added at a later point in time
- Implementation **of maximum switch cabinet efficiency**
- Equipment installation and wiring outside of cabinet permits significantly faster, more cost-efficient work
- **Excellent price-performance ratio**

Statement by René Farner:
«The modern Lütze wiring system has convinced me in all areas. I have been using this system with great success for some time now and will continue to do so in the future.
As the planner and designer of the controls for our systems, I am glad to report that all the people in production, commissioning and service fully support the Lütze wiring system and like to work with it.
I am extremely pleased with the delivery and consulting services provided by Lütze, but also with their flexibility. This is a company I am glad to recommend.»

OPEN HOUSE AT HH BARNUM IN DETROIT

Richard Vinnence

HH Barnum, Lütze Inc.'s partner in Charlotte, hosted an open house on June 8, 2001, to celebrate the recent expansion of their facilities. HH Barnum is a key control supplier to many industries, including the automotive industry. The expansion doubled the size of their office/warehouse complex to better serve their customers.

Along with over five hundred and fifty guests representing a wide range of industries, ten of HH Barnum's top vendors, including Lütze Inc., attended the open house, offering product displays and presentations. Lütze Inc., featured a working display of our new DIONet products. The DIOPC created a considerable amount of interested among HH Barnum's customers. Lütze also presented its cable product range, the LSC wiring system, the relay and interface modules and power supply products.

YANOK JOINS LÜTZE USA MANAGEMENT TEAM

Udo Lütze

George Yanok joined the Lütze Inc. management team in June 2001 as the Sales Manager for Wire and Cable. Mr. Yanok has been selling and marketing industrial control cables for over 10 years in the North American marketplace. His expertise and product knowledge are expansive, and he will be available to assist our customers and distributors with their cable needs.
Adding Mr. Yanok to the management team shows **a strong commitment by Lütze Inc. to develop the cable market in the USA. It is our goal to provide service, value and product availability to our customers**

Mr. George Yanok

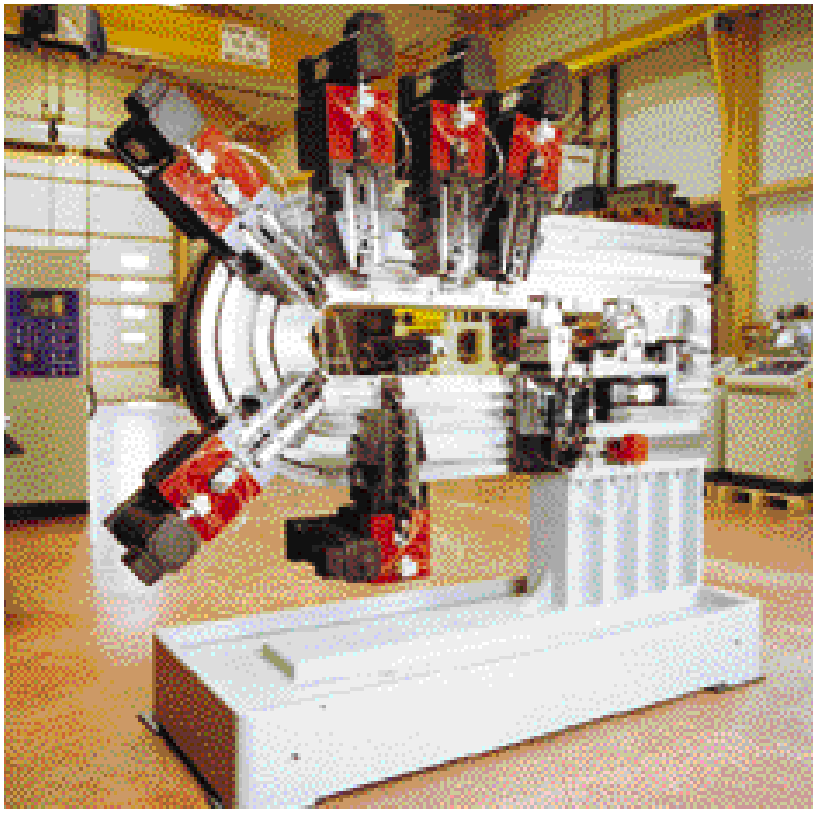
PRESSMAC USES COMPACT ASSEMBLIES FOR INNOVATIVE IDEAS

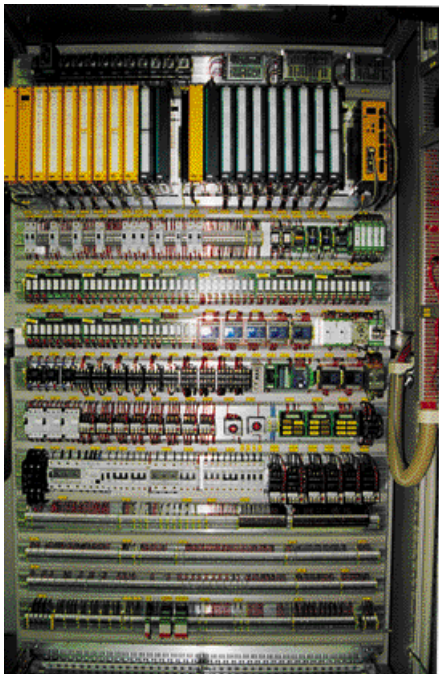
Bruno Comby

PRESSMAC, a company with headquarters in Besançon, France, has been awarded a much-coveted prize – the golden MICRON – during the last MICRONORA trade fair for its innovative cut-off/embossing machine. This system indeed stands for a true revolution because it is to today's standard cut-off machines what digital controls were to the machines of the previous generation. In the past it frequently took an experienced operator more than a day to set up the equipment for a change in production; this time can be reduced with the CMP250 system by 30 to 50%. Moreover, this system permits new applications, such as, for example, prototyping, small series production, etc.

PRESSMAC came up with the idea of making all production parameters programmable. This includes the properties of the cut-off/embossing rams and their position. This decisive advantage is achieved by systematic usage of high-performance motors to control and position the rams.
To automatically control this complex system, PRESSMAC has developed a control system which normally would have required a substantially larger switch cabinet. **However, the closely cooperating development departments at Lütze and PRESSMAC were able to reduce the size of the switch cabinet by one third using the Lütze LSC wiring technology, thereby creating a compact assembly with proportions adapted to those of the machine.**

The control concept was developed by PRESSMAC in cooperation with Lütze. The basics of the control were developed using CAD equipment, implemented and integrated in the machine.





The Lütze LSC wiring system permits an optimization of time, space requirements and cost involved in the design and implementation of switch cabinets for machine controls. Thanks to customized design according to your specifications by our development department, you can reduce the machine dimensions, save on development and assembly time and optimize wiring. The result: savings of up to 25 to 30% on the overall costs for development and implementation of a switch cabinet!

LÜTZE INTERNATIONAL

Think globally, act locally
Make direct contact with your local Lütze partner.

LÜTZE Ltd.
Unit 4, Brabazon Court
Borman
Lichfield Road Industrial Estate
GB-Tamworth, Staffordshire B79 7T A
Phone 0044/(0)1827/31 3330
Fax 0044/(0)1827/31 3332
e-mail: sales.gb@lutze.com
www.lutze.com

Friedrich Lütze GmbH & Co.
Postfach 1224 (PLZ 71366)
Bruckwiesenstrasse 17-19
D-71384 Weinstadt
Tel. 0049/7151/60 53-0
Fax 0049/7151/60 53-277
e-mail: info@luetze.de
www.luetze.de

LÜTZE AG
Oststrasse 2
CH-8854 Siebnen
Tel. 0041/55/450 23 23
Fax 0041/55/450 23 13
e-mail: info@luetze.ch
www.luetze.ch

LÜTZE
Elektrotechnische Erzeugnisse GmbH
Niedermoserstrasse 18
A-1220 Wien
Tel. 0043/(0)1/257 5252-0
Fax 0043/(0)1/257 5252-20
e-mail: office@luetze.at
www.luetze.at

LÜTZE S.A.
52 avenue des Châtaigniers
BP 76
F-95157 Taverny CEDEX
Tél. 0033/1/34 18 77 00
Fax 0033/1/34 18 18 44
e-mail: lutze@lutze.fr
www.lutze.com

LÜTZE Inc.
13330 South Ridge Drive
USA-Charlotte, NC 28273
Phone 001/704/504-0222
Fax 001/704/504-0223
e-mail: info@lutze.com
www.lutze.com

❒ We would like more information about this magazine:

Subject _____ Page _____

_____ Page _____

_____ Page _____

❒ We would like more information about your complete range of products

❒ We would like your advice. Please telephone us.

Sender:

Company _____

Name / First Name _____

Address _____

_____

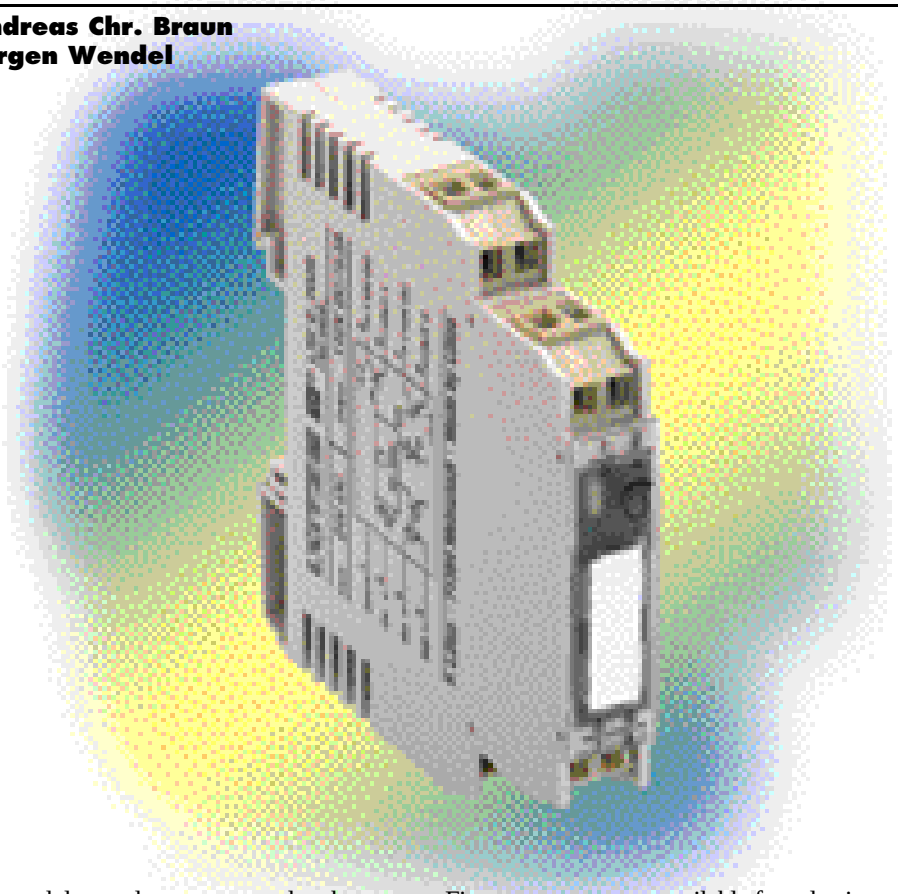
Tel _____

Fax _____

e-mail _____

DELAYED REACTION DESIRED: LÜTZE IS BETTING ON NEW TIME-DELAY RELAY FAMILY

Andreas Chr. Braun
Jürgen Wendel



Time-delay relays are used wherever timed sequences are to be controlled. While they are frequently replaced by program steps in PLC or NC controls today, there still is a significant demand for time-delay relay modules, particularly because they are an affordable alternative to PLCs or small control systems when used in conjunction with contactors and relays. In order to supply our customers with these control functions in the usual high quality, Lütze, as a system provider, recently introduced a family of time-delay relays.

Five components are available for selection:

- **Time-delay relay, delay on release**, with one changeover contact element, 7 time ranges (0.05 to 100 s), nominal voltage 240 V AC
- **Time-delay relay, pick-up delay**, with one changeover contact element, 15 time ranges (0.05 s to 100 h), nominal voltage ranges 24 V AC/DC and 200 to 240 V AC
- **Time-delay relay for star/delta starting of three-phase AC motors** with two make-contacts, a time range of 3 to 60 s and nominal voltage ranges 24 V AC/DC and 200 to 240 V AC
- **Multifunctional time-delay relay** with two changeover contact elements, 16 adjustable functions, nominal voltage range 24 to 240 V AC/DC
- **Time-delay relay, delay on release**, with two long-life make-contacts (semiconductors) 110 V DC / 1.3 AΩ, a time range of 30 to 600 s and nominal voltage of 24 V DC

This time-delay relay is equipped with a microcontroller which guarantees precision time control. However, this module can also be configured differently as required by the user: the adjustable time can be increased and decreased between 60 and 300 s, the semiconductor outputs can be configured as normally closed or normally open contacts or as a mixture of the two. More importantly, the existing pick-up delay can be reprogrammed to obtain a dropout delay or a flashing function with an adjustable time.

The relay module housings are 22.5 mm wide, while the semiconductor housing width is 17.5 mm. All time-delay relays fulfill the requirements of the oscillation/shock standard IEC 60068 and the vehicle standard EN 50155. Additional arguments in favor of the new Lütze time-delay relay family are safe and loss-free switching, fast operating sequence, high repeat accuracy of the time setting, wide time ranges and low intrinsic consumption. The usual high Lütze quality is guaranteed by fully automatic production and testing of the time-delay relays.

NEW TESTING AND CALIBRATION SYSTEM GUARANTEES LÜTZE QUALITY

Andreas Chr. Braun

Based on its own DIONet technology, Lütze in Weinstadt in cooperation with the Binder & Föhl engineering firm has developed a new PC-controlled, automatic testing and calibration system for interface converters. This compact system checks the functionality of single and multi-range converters. Following converter placement on a test plate, the test and programming heads are positioned. Then the specimen is calibrated and tested. The DIONet components used in the initial phase are a DIOPC with DIOTERM for control and diagnostics and various DIOCOM I/O modules to control the automated sequence. The entire system was programmed using the standard «Multiprog» PLC programming system by Klöpper + Wiege, which is based on DIN/ISO 6 1131-3.

With this new testing system, Lütze continues to meet the exacting quality demands we place on our own products thereby providing customers with maximum reliability and long life in the recently expanded converter family range.