

# INSIGHT

A Tour Through Murrelektronik





**26 BRANCH OFFICES  
AND 4 PRODUCTION PLANTS**

**Oppenweiler, Germany**  
Production of Fieldbus Systems,  
Interface Modules

**Stollberg, Germany**  
Production of Connectors

**Stod, Czech Republic**  
Production of Interface Modules, Switch  
Mode Power Supplies, Transformers



**STAY CONNECTED – REPRESENTED ON  
ALL CONTINENTS WORLDWIDE**

The company was founded  
in 1975 by Franz Hafner

Over 1,900 employees, including  
200 sales reps and customer  
service center technicians

Top student training is very important  
for Murrelektronik. Each year we offer  
a large number of apprenticeships in  
technical and commercial areas, as  
well as in logistics



# MURRELEKTRONIK

## FIGURES & FACTS

**Shanghai, China**  
Production for the  
Asian markets



### MURRELEKTRONIK IS YOUR PARTNER

- Over 65,000 products available to order conveniently in our online shop
- Subdivided into four product groups:
  - **Electronics in the Control Cabinet**
  - **Interfaces**
  - **Connection Technology**
  - **I/O Systems**
- For industries and market segments like:
  - **Machine Tools**
  - **Machine Building and Plant Engineering**
  - **Assembly and Handling Technology**
  - **Food & Beverage**
  - **Automotive Industry**
  - **Warehousing and Logistics**
- Founded in Oppenweiler, Germany, in 1975
- Family-owned company
- Over \$260 million turnover in 2014





**CUSTOMER  
SERVICE**  
INDIVIDUAL  
AND RELIABLE  
ON-SITE HELP

Products for process-  
optimized installations

Developing cost-efficient solutions



# MURRELEKTRONIK

## YOUR BENEFITS

### MURRELEKTRONIK OFFERS REAL BENEFITS

- Over 200 sales reps and personal contacts in technical and inside sales
- On-site support
- Murrelektronik Express Service (MEX) guarantees the production of individual cable lengths within 48 hours
- 4 international warehouses (USA, Brazil, China, Germany)
- 1 million products in stock

**mex**  
More service



Development, production, logistic – all processes  
focus on our customers



## SYSTEMATIC AND SUSTAINABLE QUALITY MANAGEMENT ACCORDING TO EN ISO 9001

Accredited test center and  
EMC laboratory



Endurance tests under  
extreme conditions



Practice-oriented test  
procedures guarantee best  
product quality





# MURRELEKTRONIK QUALITY

## MURRELEKTRONIK STANDS FOR QUALITY

- Accredited test center and EMC laboratory
- Individualized advice and support
- No hazardous materials used
- Complies with RoHS requirements
- First-class design and production quality:  
“Made in Germany”

Product tests are already  
done in the early project  
phases





**WORLDWIDE AND INDUSTRY-WIDE!**  
BENEFIT FROM OUR CROSS-INDUSTRY EXPERIENCE  
AND EXPERTISE

Warehousing & Logistics



Food & Beverage



Machine Tools



Automotive Industry



Airports



Offshore Industry





# MURRELEKTRONIK REFERENCES

## WE STAY CONNECTED TO OUR CUSTOMERS

- Customers in many industries
- Regional, national and international references
- ABB / Arburg / Atlas Copco Rock Drills / Audi  
BMW / Bosch / Bosch Rexroth / Chiron / Daimler  
Deckel Maho Gildemeister / EMAG / Festo  
FORD-Werke / Grob / HAWE Hydraulik / Heller  
Hermle / Homag / Index Werke / Krones / Liebherr  
LQ / Moeller / Mori Seiki / OKU / Rieter / Rosenbauer  
Salvagnini / Schneider Electric / Schuler / Schweiger  
Sidel / Siemens / Stihl / Teamtechnik / Trumpf  
Volkswagen / Witron

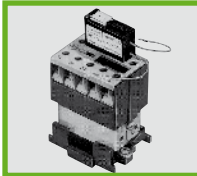
Paper Industry



## stay connected

At Murrelektronik, we create  
lasting connections, both  
personally and technically.



**1975**

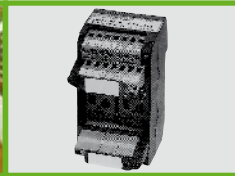
**Company founded** |  
Pioneer product:  
**RC-S01/220**

**1976**

**First international  
branch office in  
Switzerland**

**1977**

**First presence at  
trade fairs: Eltec,  
Dortmund and  
EMO, Hanover  
(Germany)**

**1978**

**Interface technology**  
the second product  
range | **30 employees**  
working in Oppenweiler

**1982**

Murrelektronik  
becomes **sponsor of  
the TV Oppenweiler**

**1983**

**Branch office in China  
founded** | **First trainee**  
is hired

**1984**

Third product  
range developed:  
**valves and sensor  
connectors**

**1985**

**Beginning of auto-  
mation technology** |  
Number of **employees**  
rises to **148**

**1986**

Murrelektronik  
enters the field  
of power supplies  
**with switch mode  
power supply units**

**1989**

Moving to the  
**current building with  
270 employees** |  
Pioneering into  
**fieldbus technology**

**1993**

Murrelektronik  
acquires the  
**company KSG**  
in **Stollberg**,  
Germany

**1994**

**Interface technology**  
is expanded |  
**Branch office in USA**  
is founded

**1995**

**Commitment made to  
Brazilian charity house  
for children: Casa do  
Zezinho** | **Branch office  
in Brazil** founded

**1997**

Murrelektronik has  
**online presence**,  
and unveils the  
**new company logo**

**1999**

**New trade fair concept**  
is created | **400 employees**  
in Oppenweiler

**2001**

The Murrelektronik  
group expands to  
**1,000 employees  
worldwide** | Launch  
of the **MVK plastic  
fieldbus system**

**2002**

Start of **SAP** |  
Launch of **MVK  
Metal**, a product  
for demanding  
requirements

**2004**

Milestone: **Cube67**  
wins the coveted  
**Automation Award**

**2005**

Breaking ground for the  
new **logistics center** in  
Oppenweiler | **30 years  
Murrelektronik**

**2006**

Murrelektronik's  
**Cube67** receives the  
**IF Design Award**

# MURRELEKTRONIK HISTORY

## Murrelektronik unites Yesterday, Today and Tomorrow ...

In 1975, Franz Hafner began this company in Oppenweiler with a vision. Today, Murrelektronik is a worldwide company that is still owner-managed and driven by that vision.

**2007**



Murrelektronik's **hot air balloon** takes off | Introduction of **MICO** = Top product

**2008**



Murrelektronik is among the **TOP 100** Mid-Sized Companies

**2009**



Start of the campaign **CONNECTIVITY**

**2010**



Entry into **active safety technology** | **Branch office in Turkey** is founded

**2012**



**CONNECTIVITY** by Murrelektronik becomes a system consulting brand

**2013**



Murrelektronik's Connectivity App Wins the **Automation App Award** | Murrelektronik has **1,700 employees** worldwide

**2014**



Murrelektronik has received the award for: **Best B2B Shop** in the Electronic Industry

**2015**



Murrelektronik has received the **"Best Place to Learn"** award | **40 years Murrelektronik**



# MURRELEKTRONIK HAS OFFICES WORLDWIDE TO ASSIST YOU



## GERMANY

Murrelektronik GmbH  
Falkenstraße 3  
D-71570 Oppenweiler  
Phone +49 7191 47-0  
Fax +49 7191 47-130  
info@murrelektronik.com  
www.murrelektronik.com



## ARGENTINA

NAKASE SRL  
ventas@nakase.com  
www.nakase.com.ar



## AUSTRALIA

Sick Pty. Ltd.  
sales@sick.com.au  
www.sick.com.au



## AUSTRIA

Murrelektronik GmbH Austria  
info@murrelektronik.at  
www.murrelektronik.at



## BELGIUM

Murrelektronik B.V.B.A.  
info@murrelektronik.be  
www.murrelektronik.be



## BRAZIL

Murrelektronik do Brasil  
Indústria e Comércio Ltda.  
info@murrelektronik.com.br  
www.murrelektronik.com.br



## BULGARIA

Murrelektronik GmbH Austria  
info@murrelektronik.at  
www.murrelektronik.at



## CANADA

Murrelektronik Canada  
2sales@murrelektronik.ca  
www.murrelektronik.ca



## CHILE

Electrónica Rhomberg Ltda.  
ventas@rhomberg.cl  
www.rhomberg.cl



## CHINA

Murrelektronik Components Co. Ltd.  
info@murrelektronik.com.cn  
www.murrelektronik.com.cn



## CROATIA

Murrelektronik GmbH Austria  
info@murrelektronik.at  
www.murrelektronik.at



## CZECH REPUBLIC

Murrelektronik CZ spol. s.r.o.  
info@murrelektronik.cz  
www.murrelektronik.cz



## DENMARK

Murrelektronik Aps  
info@murrelektronik.dk  
www.murrelektronik.dk



## EGYPT

DANA Import & Export  
usama@dana-egy.com  
www.murrelektronik.com/en



## FINLAND

Murrelektronik Power Oy  
sales@murrelektronik.fi  
www.murrelektronik.fi



## FRANCE

Murrelektronik S.A.S.  
info@murrelektronik.fr  
www.murrelektronik.fr



## GREAT BRITAIN

Murrelektronik Ltd.  
sales@murrelektronik.co.uk  
www.murrelektronik.co.uk



## HUNGARY

Murrelektronik Kft.  
info@murrelektronik.hu  
www.murrelektronik.hu



## INDIA

Murrelektronik India  
chetan.t.a@murrelektronik.in  
www.murrelektronik.in



## INDONESIA

PT Sensor Haustama Jaya  
adminid@sensorhaus.com  
www.sensorhaus.com



## ISRAEL

O.M.S.T Marketing & Import Ltd.  
miki@omst.co.il  
www.omst.co.il

Ancitech Ltd.  
info@ancitech.com  
www.ancitech.com



## ITALY

Murrelektronik S.r.l.  
info@murrelektronik.it  
www.murrelektronik.it



## JAPAN

K.MECS Co., Ltd.  
info@kmecs.co.jp  
www.kmecs.co.jp



## KENYA

Profa-Tech Ltd.  
info@profa-tech.com  
www.profa-tech.com



## MALAYSIA

SensorHaus (M) Sdn. Bhd.  
adminmy@sensorhaus.com  
www.sensorhaus.com

PAN-M Solution  
pms@gmail.com  
www.murrelektronik.com



## NETHERLANDS

Murrelektronik B.V.  
sales@murrelektronik.nl  
www.murrelektronik.nl

# MURRELEKTRONIK REPRESENTED WORLDWIDE



## NEW ZEALAND

Sick Pty. Ltd.  
sales@sick.co.nz  
www.sick.co.nz



## NORWAY

Murrelektronik A.S.  
post@murrelektronik.no  
www.murrelektronik.no



## PAKISTAN

Overseas Enterprises  
info@oe.com.pk  
rehan\_k@oe.com.pk  
www.oe.com.pk



## POLAND

Murrelektronik Sp. z o.o.  
info@murrelektronik.pl  
www.murrelektronik.pl



## PORTUGAL

F.Fonseca S.A.  
ffonseca@ffonseca.com  
www.ffonseca.com



## ROMANIA

Murrelektronik GmbH  
info@murrelektronik.at  
www.murrelektronik.at



## RUSSIA

Murrelektronik  
igor.kalinin@murrelektronik.de  
www.murrelektronik.ru



## SERBIA

Murrelektronik GmbH Austria  
info@murrelektronik.at  
www.murrelektronik.at



## SINGAPORE

Pan-M Pte. Ltd.  
alvin@pan-m.com.sg  
www.murrelektronik.com



## SINGAPORE

SensorHaus Pte. Ltd.  
adminsg@sensorhaus.com  
www.sensorhaus.com



## SLOVAKIA

Murrelektronik GmbH Austria  
info@murrelektronik.at  
www.murrelektronik.at



## SLOVENIA

Murrelektronik GmbH Austria  
info@murrelektronik.at  
www.murrelektronik.at



## SPAIN

Murrelektronik Spain S.L.U.  
ventas@murrelektronik.es  
www.murrelektronik.es



## SOUTH AFRICA

Rubicon Electrical  
and Automation  
greg@rubiconsa.com  
www.rubiconsa.com



## SOUTH KOREA

Murrelektronik Korea Ltd.  
info@murrelektronik.kr  
www.murrelektronik.kr



## SRI LANKA

Sim Lanka (Pvt) Ltd.  
info@simlanka.com  
www.simlanka.com



## SWEDEN

Murrelektronik AB  
info@murrelektronik.se  
www.murrelektronik.se



## SWITZERLAND

Murrelektronik AG  
info@murrelektronik.ch  
www.murrelektronik.ch



## TAIWAN

Lintronix Co. Ltd.  
info@lintronix.com.tw  
www.lintronix.com.tw



## THAILAND

Maxtech Control Co., Ltd.  
info@maxtechcontrol.co.th  
www.maxtechcontrol.co.th



## TURKEY

Murr Elektronik San. ve Tic. Ltd. Sti  
info@murrelektronik.com.tr  
www.murrelektronik.com.tr



## UNITED ARAB EMIRATES

King Power Electrical Accessories  
Trading  
kpower@emirates.net.ae  
www.murrelektronik.com/en



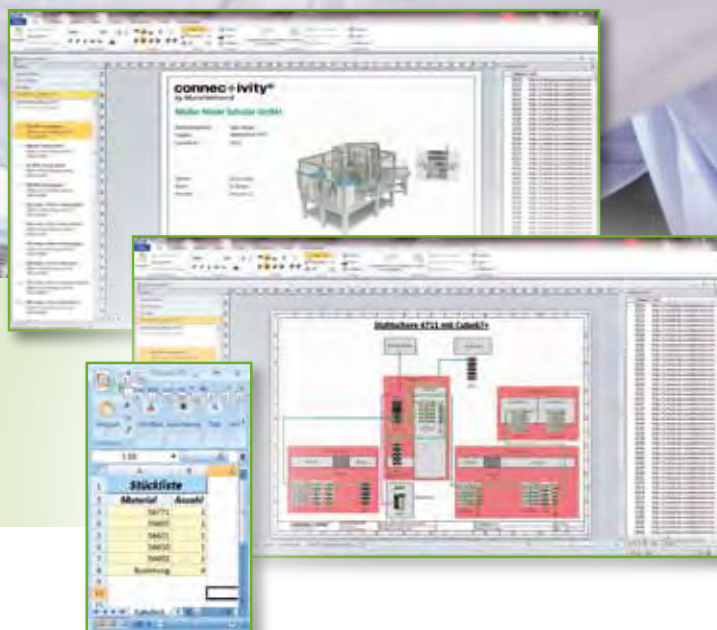
## USA

Murrelektronik Inc.  
2info@murrinc.com  
www.murrinc.com



## VIETNAM

OMINA Industrial Automation J.S.C  
inquiry@omina.com.vn  
www.omina.com.vn



## OUR CONSULTING TOOLS CREATE SOLUTIONS

### SYSTEM ADVICE WITH CONNECTIVITY CITY

Go from the industry overview  
to your application ...

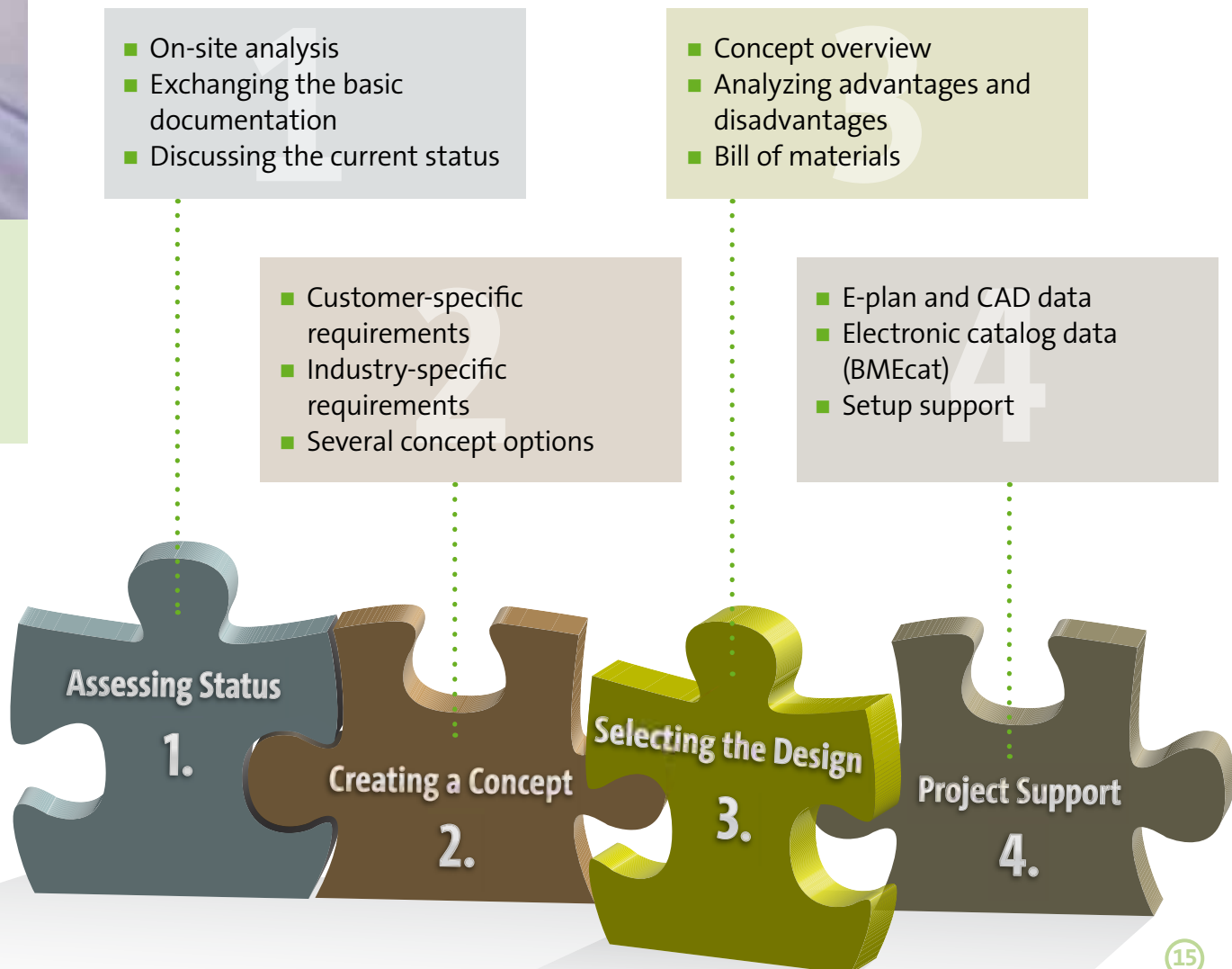
... to the appropriate product ... ... and link to the online catalog

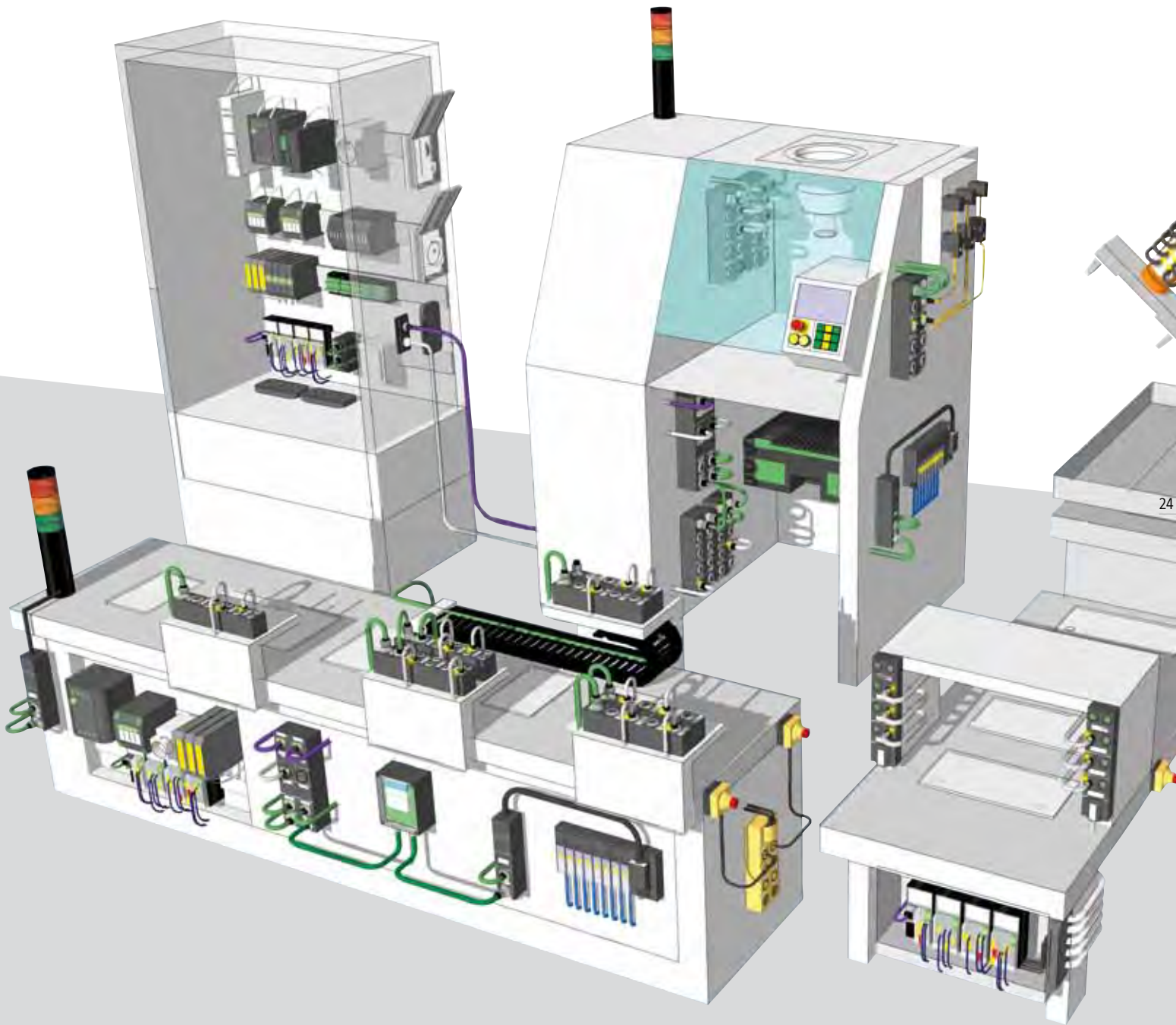




# CONNECTIVITY BY MURRELEKTRONIK

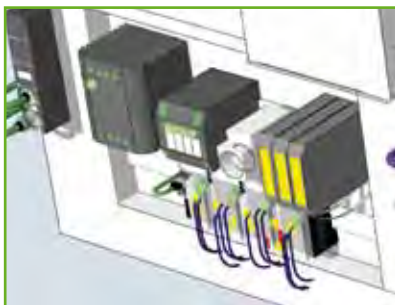
## PROCESS OVERVIEW





**WITH CUSTOM INSTALLATION CONCEPTS  
SAVE TIME AND MONEY!**

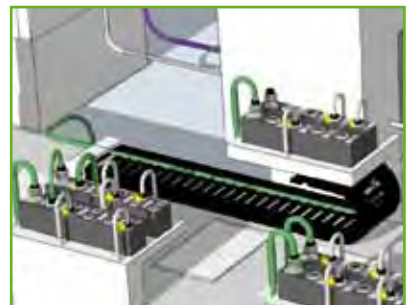
**ELECTRONICS IN  
THE CONTROL CABINET**



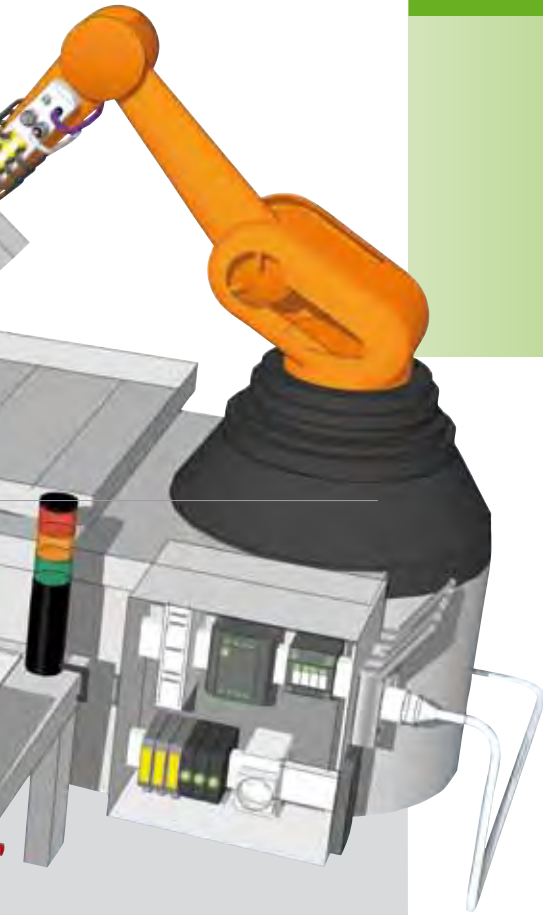
**INTERFACES**



**CONNECTION TECHNOLOGY**



# MURRELEKTRONIK BEST PRACTICE APPLICATIONS



## REDUCING THE TOTAL COSTS WHEN INSTALLING I/Os

- Flexible installation concepts =>  
Optimized processes in all segments
- Convenient diagnostics =>  
Increased machine availability
- Reducing assembly and setup time
- Optimizing logistics
- Fewer wiring efforts

## INTEGRATED APPROACH = COST-EFFECTIVE RESULTS!

### I/O SYSTEMS







**1** ELECTRONICS IN THE CONTROL CABINET



**2** INTERFACES



**3** CONNECTION TECHNOLOGY



**4** I/O SYSTEMS

# PRODUCTS

## 4 PRODUCT RANGES

### **1** **ELECTRONICS IN THE CONTROL CABINET** EMC FILTERS, SUPPRESSION TECHNOLOGY, INTERFACE, POWER SUPPLIES AND POWER DISTRIBUTION

Electronic components for applications in the cabinet, for different tasks and applications on a high technical level.

### **2** **INTERFACES** SERVICE INTERFACE, CABLE ENTRY SYSTEMS, SIGNAL TOWERS

Over 4,000 interface combinations possible to go from the control cabinet into the field, offering maximum flexibility.

### **3** **CONNECTION TECHNOLOGY** CONNECTORS, CABLES

Murrelektronik offers one of the most comprehensive product ranges on the market to connect sensors and actuators.

### **4** **I/O SYSTEMS** FIELDBUS TECHNOLOGY, DISTRIBUTION SYSTEMS

I/O Systems are the distributing link between PLC and sensor/actuator level that go from passive distribution systems to fieldbus technology in compact or modular design.



# 1

## EMC FILTERS

EMC filters are essential components that ensure interference-free operation of machines and systems. They function in two directions: First, they dampen interferences that originate from the inside of a machine or a system, a problem that is hard to avoid. Second, they ensure that interferences from adjacent machines and installations do not disturb the intact field within the system. Murrelektronik offers a comprehensive product line with single and 3-phase units (up to 180 A).

Filters are available in a slim book design with convenient DIN rail mounting. Two-stage filters help to meet the limits of radio frequency interference in residential and mixed zones. Ground straps are another important suppression technology: They connect filters to the protective earth (PE). This way, ground straps discharge all interference safely and comply with the relevant standards.



# PRODUCTS

## ELECTRONICS IN THE CONTROL CABINET

### 1 SUPPRESSION

Suppressor modules from Murrelektronik help avoid damage when load voltage spikes create problems (for example contactors, motors or valves). They enable an EMC-compatible design of systems, machines, and equipment. They considerably limit voltage spikes – especially if they are installed close to the interference source. Using a suppressor increases the lifetime of contacts and coil-windings, as well as reduces the operating and maintenance costs. When developing the products, Murrelektronik collaborates closely with the manufacturers of motors, contactors, and valves. Therefore, the modules are precisely matched for the sources of voltage spikes.





# 1

## POWER SUPPLY AND DISTRIBUTION

Power supply modules are the heart of every control cabinet. They set the pace. Murrelektronik is your one-stop supplier for these products! We offer a wide range of transformers for adjusting voltages – they are available as control, isolation and safety transformers.

Rectified power supplies (for transforming AC voltage into smoothed DC voltage) and switch mode power supplies (for transforming into regulated DC voltage) are also offered in a wide product range.

Murrelektronik's portfolio also features a wide selection of redundancy and buffer modules. They protect power supplies from interferences. Intelligent current management is another important product line. MICO monitors currents, indicates when approaching the maximum load, and detects over-stress.

# PRODUCTS

## ELECTRONICS IN THE CONTROL CABINET

### 1 INTERFACE TECHNOLOGY

Converting, amplifying, transferring signals – interface components have to fulfill various requirements while being potential-free. Murrelektronik offers a comprehensive product range for this field of automation technology. Relays are available for all voltage ranges. They are especially slim, so they don't take up a lot of space in the control cabinet.

Optocoupler modules from Murrelektronik are suitable for coupling and isolating elements for various control functions. Active interface modules collect signals and transfer them into formats that the following receiver can process. Murrelektronik's active brake rectifiers simplify connecting DC brakes. The tree switches can combine up to eight Ethernet terminal devices in a single, compact device.







# PRODUCTS INTERFACES

2

## SERVICE INTERFACE, CABLE ENTRY SYSTEMS, SIGNAL TOWERS

Interfaces that connect the control cabinet to the field are an important part of all machines and installations. Murrelektronik's MSDD Modlink front panel interfaces are a modular system for servicing the panel. They are designed to connect analysis or programming devices to the control cabinet. The MPV control cabinet coupling is the right solution for permanent plug connections. Murrelektronik also supplies cable entry systems that ensure sealed connections. The innovative MSDD hybrid fieldbus couplings combine repeater and entry systems. Eurocard holders connect individual parts to control units. We have large number of outlets available for almost all countries worldwide. For optical indication of all operating states, the signal towers of the Modlight product group are available in different models for all kinds of machines and installations.

# PRODUCTS

## CONNECTION TECHNOLOGY

### 3 CONNECTORS AND CABLES

Murrelektronik offers one of the most comprehensive program ranges on the market for connecting sensors and actuators. A great number of connectors are available from stock or will be produced within 48 hours from when you place your order – with order quantities starting from 1 piece!

The connectors are available in various forms. The product range includes the classic M8- and M12 round plug connectors, valve connectors and many more models. Different types of connectors are offered: with connection cable, with open ended wires or for field wiring. They feature various cable materials, wire sections, jacket colors, and number of poles. Murrelektronik offers models for demanding industrial environments (as used in machine and plant construction) as well as for applications that require quick connections, like in handling technology. Furthermore, the selection comprises versions for outdoor applications, the Food and Beverage industry, or for the mobile hydraulic sector.





## 4 FIELDBUS TECHNOLOGY

With Murrelektronik's fieldbus technology you can connect sensors and actuators conveniently and systematically to a higher control level. This allows cost-effective installation and automation solutions in machines and plants for many industries like: assembly and handling technology, machine building, materials-handling technology, logistics, process technology and building installations.

Murrelektronik offers solutions for any application. Cube67 is a modular system especially for application-friendly installations. Impact67 equals major cost savings. MVK Metal is made for demanding industrial environments. MASI is unique because of its extremely simple installation technology. Murrelektronik's fieldbus modules enable convenient and thorough diagnostics: with a clearly visible LEDs at the port and error messages in the control. The principle of "changing the bus without changing the system" provides flexibility. For safety-related applications, suitable solutions are available that guarantee optimum protection of man and machine. Products for the control cabinet complete the fieldbus technology range.



# PRODUCTS

## I/O SYSTEMS

### 4 DISTRIBUTION SYSTEMS

Murrelektronik's passive distribution boxes provide a convenient method for connecting sensors and actuators to the control cabinet. These cost-efficient, safe and space saving installation solutions are designed for small and mid-sized machines. A wide range of application is possible. The comprehensive product portfolio enables the use in normally dry applications (warehousing, packaging, handling), heavy duty applications (metal and wood working, or polymer processing), in the Food and Beverage sector up to mobile outdoor applications.

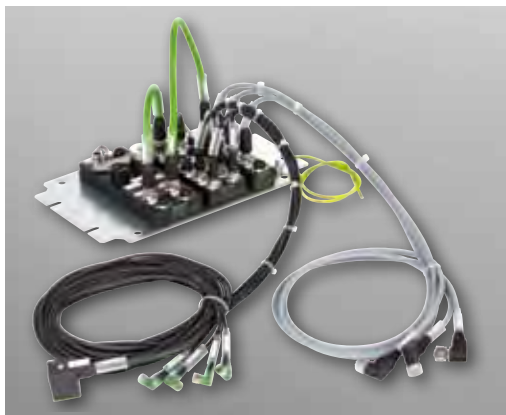
Compared to single wire solutions with terminal boxes, installations with passive distribution boxes offer many advantages: smaller design, tighter connections, shorter assembly time and fewer materials are needed. Their integrated LEDs enable diagnostic options. Moreover, pluggable solutions with distribution boxes (M8 and M12) eliminate wiring errors.





**BE CLEVER – REDUCE COSTS AND INCREASE EFFICIENCY**  
WITH PREDEFINED COMPONENTS OR PRODUCTS THAT ARE  
SPECIALLY DESIGNED FOR YOU

Murrelektronik offers a wide range of predefined products  
that meet your specific requirements



# SERVICE RESOURCES

## BRIGHT IDEAS

- Kabelbutler™
- Value Added Assembly
- Customized Developments



The right part in the right quality at the  
right time in the right place –  
Kabelbutler™ is your logistics solution







## INCREASE EFFICIENCY AND COST-EFFECTIVENESS BENEFIT FROM THE TECHNICAL EXPERIENCE

They always find the answers to your questions – Murrelektronik's Customer Service Center (CSC)

Convenient online ordering:  
👉 [shop.murrelektronik.com](https://shop.murrelektronik.com)



# SERVICE SUPPORT

## SERVICE WITH TECHNICAL BACKGROUND

- Technical Support for Cross Referencing
- Customer Service Center (CSC)
- eCatalog/BMEcat
- Online Catalog
- Murrelektronik App

### Murrelektronik App

Murrelektronik product information in the palm of your hand – perfect for use in the field. Just scan the bar code or type in the part number and receive access to installation instructions, data sheets, construction files and many more.





➔ [www.murrelektronik.com](http://www.murrelektronik.com)

The information contained herein has been compiled with the utmost care. Liability for the correctness, completeness and topicality of the information is restricted to gross negligence.

Our company embraces social responsibility in all aspects of our business activities. Our brochures are printed using environmentally friendly production techniques and products.

