



**TRADITION, EVOLUTION, VISION.**

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**HIGH CURRENT COMPONENTS.  
BAUTEILE FÜR STARKSTROMANLAGEN.**

With our experienced team we successfully meet the requirements of our customers.

The list of Kunz references is evidence of long-standing and reliable partnerships.

## THE COMPANY

Knowhow and commitment as to the realization of optimum solutions in favour of our customers have determined the history of Gebr. Kunz GmbH since 1922. Since the end of the sixties we have been developing and producing high-quality components for heavy-current installations. Today the enterprise – in its beginnings rather a craftsman's establishment – is operating on the market very successfully in its 3rd generation. The name Kunz is representing flexible and innovative overall solutions in the field of heavy-current engineering.

Then as today it has been our managerial philosophy that – based on traditional values – enduring success always arises from progress and competence.

Our performance is composed of a strongly developed high-quality and – before all – customer orientated consciousness. With this in mind we take, of course, into account the steadily growing requirements as to the saving of energy and environmental protection. This being one of the reasons that we have been belonging to the innovative and successful manufacturers of components for heavy-current installations for many years. We are permanently rethinking our activities – acting and looking ahead, deliberately developing, constructing and manufacturing for the requirements of the market.



Even in times determined by faster and faster changes of the competition, markets and target groups we will be successful. Therefore we learn quicker and better to permanently revive in order to create essential customer and managerial values.

## **OUR MISSION:**

**„WE DO EVERYTHING**

**THAT YOU ACHIEVE**

**YOUR COMPANY OBJECTIVE!“**

In the era of globalization markets are steadily changing. Those enterprises will be successful which succeed in adapting themselves faster to changed situations. And we wish to rank among them.

# ENGINEERING

We supply you with the complete heavy-current technology as overall solution out of one hand only.

Within the scope of our services we, of course, also integrate products and services from third suppliers. For you the interfaces for a variety of services will thus be reduced.

Thanks to our knowhow acquired worldwide our engineers will attend, based on your installation layout, to the:

## **PLANNING**

of the components required ensuring their integration into your plant and installation.

## **CALCULATION**

of the components of the system.

## **CONSTRUCTION**

of the system components in modern CAD technology.



## QUALITY MANAGEMENT SYSTEM

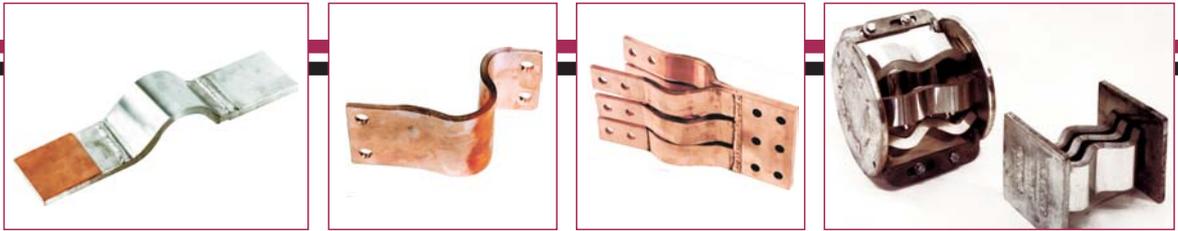
Based on the expansion and innovative revision of our products we take up the demands of our customers at home and abroad. We assure quality in line with market conditions from the acceptance of the order via manufacturing up to the delivery of the product desired.

The organization structure orientates itself by the customer. Therefore we always adapt our QA management system to the latest standards according to DIN EN ISO, environmental protection and safety at work particularly ranking high. The VDE (Association of German Electricians) is the competent certifying body of this part of the market.

## OUR QUALITY PRINCIPLE:

**“QUALITY CANNOT BE TESTED**

**BUT ONLY BE PRODUCED!”**



For more than 30 years Kunz has managed to be near the market in order to be recognized as the customer's partner both home and abroad.

## PRODUCTION OF COMPONENTS

We produce a wide spectrum of components for heavy-current installations. Both the qualification and experience of our manufacturing staff guarantees a high quality standard of our products. This has been appreciated by our customers for many years. Whether expansion connectors, barrings or special components – we supply the solution for your special field of application.

### **POWER GENERATION AND DISTRIBUTION**

Generator leakings, switches, transformer connexions.

### **PRIMARY INDUSTRY**

High current components for electrolyses or melting.

### **TRAFFIC ENGINEERING**

Converter barrings, earth connectors, thermoelectric coolers.

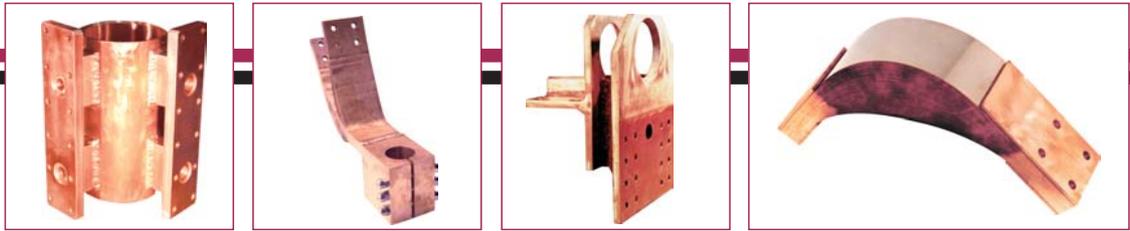
### **MECHANICAL ENGINEERING**

Current connectors for welding machines and industrial robots.

### **BARRINGS AND SPECIAL COMPONENTS**

are manufactured by us according to your drawings, specifications or to the layout of your plant or installation.

Please contact our Product Development Department.



## EXPANSION CONNECTORS

are used as links between switches, transformers, heavy-current components and their inflexible barrings. In contrast to inflexible connectors they compensate mechanical changes arising from switch gear operations, vibrations or from expansion caused by current heat. There are various manufacturing technologies available for each mode of application. In this respect please pay attention to our

### Recommendations for Choice of Types:

- **Pressure welded copper expansion connectors**  
high elasticity, good conductivity, optional thickness, DIN form
- **Press riveted copper expansion connectors**  
for extremely high motion frequencies
- **Inert-gas welded copper expansion connectors**  
good conductivity, facultative form of terminal ends
- **Inert-gas welded aluminium expansion connectors**  
for aluminium connexions
- **High-flexible copper braid**  
high mobility, special applications

**As surface coating of the contact areas we recommend, should the**

- **conducting material be copper:**  
tinning or silvering
- **conducting material be aluminium:**  
nickeling or silvering



We are offering more than a wide spectrum of successful products.

We are furthermore offering a comprehensive service for mounting and revision.

## MOUNTING



Our offer is complemented and rounded off by the possibility of site mounting. You will thus get rid of another interface problem.

Whether site welding, providing of a supervisor or the installation of complete plant components: We will carry through all works according to your wishes.



## REVISION

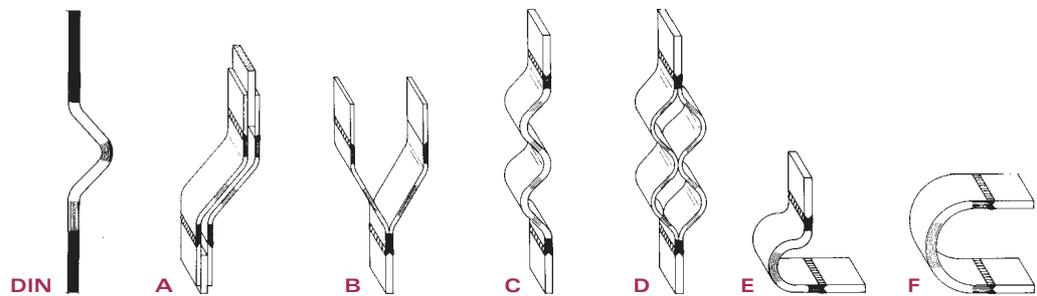


Our mounting staff has a lot of experience as to the realization of revisions in the fields of medium and low voltage – above all in power plants.

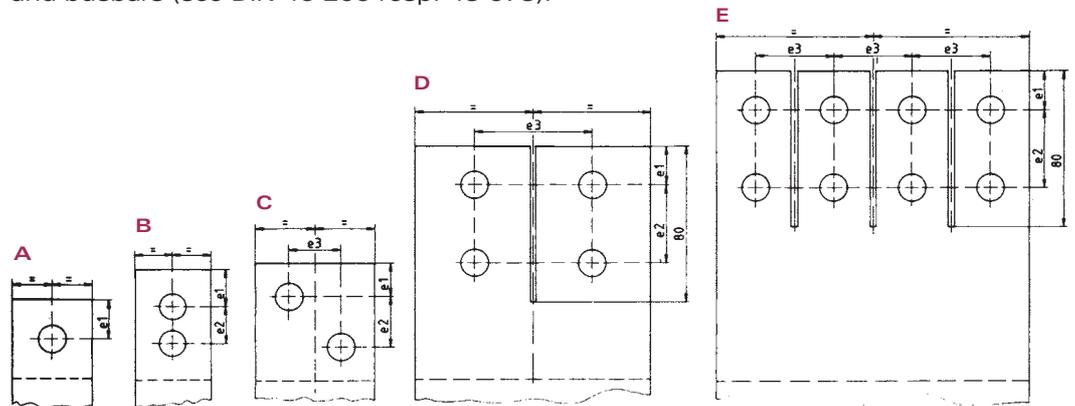
If required, please ask for our performance specification POWER PLANT SERVICE and our list of references.

We will also be happy to have a talk with you on your site.

## POSSIBLE FORMS AND SHAPES OF EXPANSION CONNECTORS



**SHEETS OF DRILLINGS** for connexions between expansion connectors and busbars (see DIN 46 206 resp. 43 673).



Form	A	B	B	B	C	C	D	D	D	E	E	E
Width	40	40	50	60	50	60	80	100	120	160	200	240
e1	20	20	20	20	14	17	20	20	20	20	20	20
e2	-	40	40	40	22	26	40	40	40	40	40	40
e3	-	-	-	-	22	26	40	50	60	40	50	60

All drillings D=14 mm

The drillings in the expansion connectors are suitable for longitudinal, angular and T-connexions; on request with slots of respective thickness.

# PRESSURE WELDED COPPER EXPANSION CONNECTORS

## DIN 46 276 - SERIES GKKP

### Design

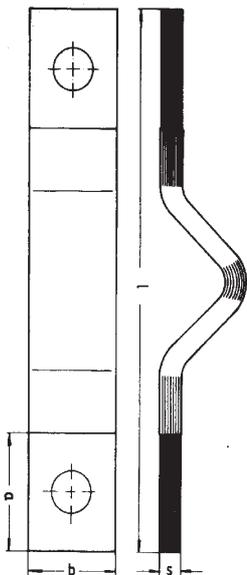
The expansion connectors are continuously made of copper foil. At the contact ends the copper foil is welded under pressure and heat to produce a compact and massive copper block.

### Material

Foils made of SE-Cu, 0.1 to 0.3 mm thick.

### Drillings

Standard design without drillings, on request drillings according to DIN 43 673 or to customer's specification.



Type GKKP - Ordering examples for frequent dimensions

Order No.	b [mm]	a [mm]	s [mm]	l [mm]	Weight [kg]
GKKP 38/5-230	38	40	5	230	ca. 0,4
GKKP 38/10-230	38	40	10	230	ca. 0,9
GKKP 48/5-280	48	50	5	280	ca. 0,7
GKKP 48/5-300	48	80	5	300	ca. 0,7
GKKP 48/10-280	48	50	10	280	ca. 1,3
GKKP 48/10-300	48	80	10	300	ca. 1,4
GKKP 58/5-280	58	60	5	280	ca. 0,8
GKKP 58/5-300	58	80	5	300	ca. 0,9
GKKP 58/10-280	58	60	10	280	ca. 1,6
GKKP 58/10-300	58	80	10	300	ca. 1,7
GKKP 78/10-300	78	80	10	300	ca. 2,3
GKKP 78/15-280	78	80	15	280	ca. 3,2
GKKP 78/15-300	78	80	15	300	ca. 3,4
GKKP 98/10-320	98	80	10	320	ca. 3,1
GKKP 98/15-320	98	80	15	320	ca. 4,6
GKKP 98/20-320	98	80	20	320	ca. 6,1
GKKP 118/20-320	118	80	20	320	ca. 7,5

## PRESSURE RIVETED COPPER EXPANSION CONNECTORS DIN 46 276 - SERIES GKKN

### Design

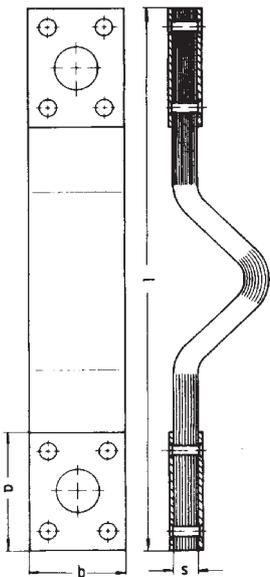
The expansion connectors are continuously made of copper foils of a high strength. At the contact ends the foils are riveted with copper sheet and pressed.

### Material

Foils made of SE-Cu, 0.1. to 0.3 mm thick. Cover bar made of E-Cu.  
The rivets are made of E-Cu, their dimensions and numbers are according to the cross-section.

### Drillings

Standard design without drillings, on request drillings according to DIN 43 673 or to customer's specification.



Type GKKN - Ordering examples for frequent dimensions

Order No.	b [mm]	a [mm]	s [mm]	l [mm]	Weight [kg]
GKKN 40/5-230	40	40	5	230	ca. 0,6
GKKN 40/10-230	40	40	10	230	ca. 1,1
GKKN 50/5-230	50	50	5	230	ca. 0,8
GKKN 50/5-280	50	50	5	280	ca. 0,9
GKKN 50/5-300	50	80	5	300	ca. 1,0
GKKN 50/10-280	50	50	10	280	ca. 1,6
GKKN 50/10-300	50	80	10	300	ca. 1,8
GKKN 60/5-280	60	60	5	280	ca. 1,1
GKKN 60/5-300	60	80	5	300	ca. 1,3
GKKN 60/10-280	60	60	10	280	ca. 2,0
GKKN 60/10-300	60	80	10	300	ca. 2,2
GKKN 80/10-300	80	80	10	300	ca. 2,9
GKKN 80/15-280	80	80	15	280	ca. 3,9
GKKN 80/15-300	80	80	15	300	ca. 4,1
GKKN 100/10-320	100	80	10	320	ca. 3,8
GKKN 100/15-320	100	80	15	320	ca. 5,4
GKKN 100/20-320	100	80	20	320	ca. 7,0
GKKN 120/20-320	120	80	20	320	ca. 8,4

## INERT-GAS WELDED COPPER EXPANSION CONNECTORS DIN 46 276 - SERIES GKKS

### Design

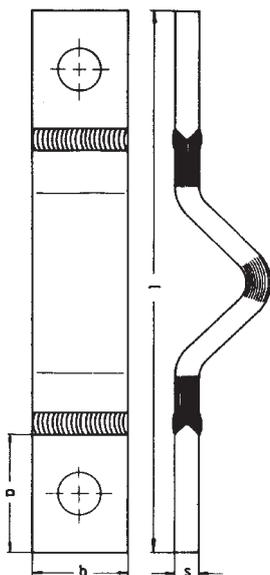
The contact ends are made of flat copper and are inert-gas welded to the connector stacking built up by copper foils.

### Material

Connector stacking: Foils made of SE-Cu, 0.1 to 0.3 mm thick.  
Contact ends: Flats made of E-Cu.

### Drillings

Standard design without drillings, on request drillings according to DIN 43 673 or to customer's specification.



Type GKKS - Ordering examples for frequent dimensions

Order No.	b [mm]	a [mm]	s [mm]	l [mm]	Weight [kg]
GKKS 40/5-230	40	40	5	230	ca. 0,5
GKKS 40/10-230	40	40	10	230	ca. 0,9
GKKS 50/5-280	50	50	5	280	ca. 0,7
GKKS 50/5-300	50	80	5	300	ca. 0,7
GKKS 50/10-280	50	50	10	280	ca. 1,4
GKKS 50/10-300	50	80	10	300	ca. 1,5
GKKS 60/5-300	60	80	5	300	ca. 0,9
GKKS 60/10-280	60	60	10	280	ca. 1,7
GKKS 60/10-300	60	80	10	300	ca. 1,8
GKKS 80/10-300	80	80	10	300	ca. 2,4
GKKS 80/15-300	80	80	15	300	ca. 3,5
GKKS 100/10-320	100	80	10	320	ca. 3,1
GKKS 100/15-320	100	80	15	320	ca. 4,7
GKKS 100/20-320	100	80	20	320	ca. 6,2
GKKS 120/20-320	120	80	20	320	ca. 7,5

## INERT-GAS WELDED ALUMINIUM EXPANSION CONNECTORS DIN 46 276 – SERIES GKAS

### Design

The contact ends are made of flat aluminium and are inert-gas welded to the connector stacking built up by aluminium foils.

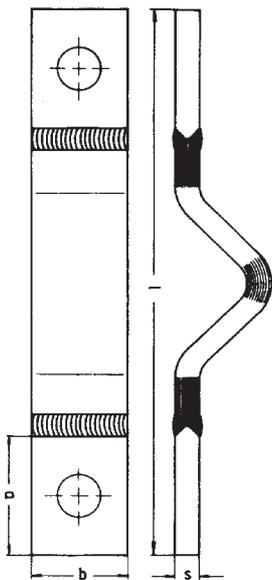
### Material

Connector stacking: Foils made of E-Al, 0.3 to 0.5 mm thick.

Contact ends: Flats made of E-Al or high-conductivity pantal.

### Drillings

Standard design without drillings, on request drillings according to DIN 43 673 or to customer's specification.



Type GKAS – Ordering examples for frequent dimensions

Order No.	b [mm]	a [mm]	s [mm]	l [mm]	Weight [kg]
GKAS 40/5-230	40	40	5	230	ca. 0,1
GKAS 40/10-230	40	40	10	230	ca. 0,3
GKAS 50/5-280	50	50	5	280	ca. 0,2
GKAS 50/5-300	50	80	5	300	ca. 0,2
GKAS 50/10-280	50	50	10	280	ca. 0,4
GKAS 50/10-300	50	80	10	300	ca. 0,5
GKAS 60/5-300	60	80	5	300	ca. 0,3
GKAS 60/10-280	60	60	10	280	ca. 0,5
GKAS 60/10-300	60	80	10	300	ca. 0,5
GKAS 80/10-300	80	80	10	300	ca. 0,7
GKAS 80/15-300	80	80	15	300	ca. 1,1
GKAS 100/10-320	100	80	10	320	ca. 1,0
GKAS 100/15-320	100	80	15	320	ca. 1,4
GKAS 100/20-320	100	80	20	320	ca. 1,9
GKAS 120/20-320	120	80	20	320	ca. 2,3

## HIGH-FLEXIBLE COPPER BRAIDS DIN 46 276 – SERIES GKKH

### Design

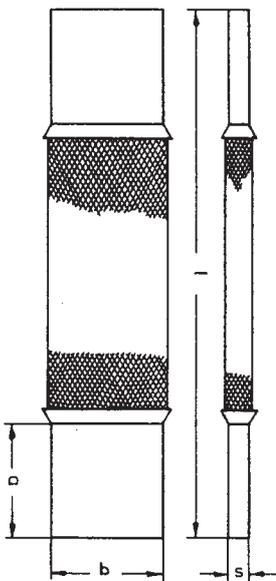
The expansion connectors are made of copper braid, the terminal ends being pressed under exactly defined pressure to a copper tube.

### Material

High-flexible bare or tinned copper braid; diameter of wire preferably 0.1 mm or 0.2 mm. Tubes or pipes for the contact ends made of copper.

### Drillings

Standard design without drillings, on request drillings according to DIN 43 673 or to customer's specification.



Type GKKH – Ordering examples for frequent dimensions

Order No.	Steady Current	Cross-Section [mm <sup>2</sup> ]	Dimensions [mm]		Weight [kg]
	[A]		b	l	
GKKH 20/100	100	16	20	140	0,1
GKKH 25/150	150	25	25	150	0,1
GKKH 30/200	200	35	30	160	0,2
GKKH 30/250	250	50	30	160	0,2
GKKH 40/250	250	50	40	180	0,2
GKKH 30/300	300	70	30	160	0,3
GKKH 40/300	300	70	40	180	0,3
GKKH 50/300	300	70	50	200	0,3
GKKH 30/350	350	100	30	160	0,3
GKKH 40/350	350	100	40	180	0,4
GKKH 50/350	350	100	50	200	0,5
GKKH 40/400	400	120	40	180	0,4
GKKH 50/400	400	120	50	200	0,5
GKKH 50/600	600	200	50	200	0,8
GKKH 60/600	600	200	60	270	1,1
GKKH 50/750	750	280	50	250	1,1
GKKH 60/750	750	280	60	270	1,4
GKKH 50/850	850	350	50	250	1,4
GKKH 60/850	850	350	60	270	1,7

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