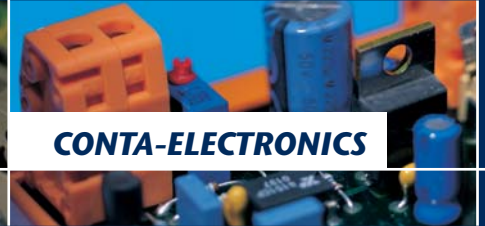


NEWS 2009

CONTA-CON



CONTA-CONNECT



CONTA-ELECTRONICS

Discover intelligent products.

Experience individual solutions.



CONTA-CON

The **PFBZ 4551/.../3.81-KD** Socket Blocks
The **PFBZ 4551/.../3.81-FKD** Socket Blocks
with Flange

CONTA-CONNECT

The **SRK | SSL** Screw Connection System
The **SSAB** Shield-Connection Clips
The **SVB** Screw-Type Distributor Blocks
The **EMS-eco** Marking Plotter
The **KSH 4/30** Cable Marker Ferrule
The **SchT 12** Marker Carrier for Terminal Blocks
The **MC GSU** Maxicard Device and Facility Markers
The **TS-PS eco** Sectional Cutter

CONTA-ELECTRONICS

The **CP V 40** CONTA-PROTECT Overvoltage
Protection
The **CMS-BS100** Multi-Function Converter Unit
The **CML-UI-UI-G** Voltage and Current Converter
Unit

NEWS 2009**Contents**

CONTA-CLIP Optimize – now more than ever!	3
CONTA-CLIP – The Company	4
CONTA-CLIP on the Internet	4
CONTA-CLIP the Service Provider	5
 CONTA-CONNECT	
The SRK SSL Screw Connection System	6 – 13
The SSAB Shield-Connection Clips	14 – 15
The SVB Screw-Type Distributor Blocks	16 – 17
The EMS-eco Marking Plotter	18
The KSH 4/30 Cable Marker Ferrule	19
The SchT 12 Marker Carrier for Terminal Blocks	19
The MC GSU Maxicard Device and Facility Markers	20 – 23
The TS-PS eco Sectional Cutter	24 – 25
 CONTA-ELECTRONICS	
The CP V 40 CONTA-PROTECT Overvoltage Protection	26 – 27
The CMS-BS100 Multi-Function Converter Unit	28 – 29
The CML-UI-UI-G Voltage and Current Converter Unit	30 – 31
 CONTA-CON	
The PFBZ 4551/.../3.81-KD Socket Blocks	32 – 33
The PFBZ 4551/.../3.81-FKD Socket Blocks with Flange	32 – 33



CONTA-CLIP

Optimize – now more than ever!

Unexpected developments are sweeping through almost every industrial sector – and these challenges must be met head on! Thanks to the functional synergy resulting from our top quality products, excellent technical expertise and dedicated motivation, **CONTA-CLIP** will meet these challenges together with you. We will put ourselves in your position and look at your tasks and processes. We can offer you comprehensive and holistic advice. We can define your quality and design down to the last detail, provide you with transparent calculations and take over specific services at your request. So you can count on us. Exactly these abilities are what customers throughout the world and throughout different industries most prize in **CONTA-CLIP**. Now you can also optimize your storage capacities, your processing times and your flexibility – and ultimately your success.

Here are four examples how you can use our products to optimize your processes:

State-of-the-art technology and first-class materials

The terminal blocks and protective-earth (PE) terminals from our new **SRK** and **SSL** line of screw-connection terminal blocks make it clear that there is still plenty of optimization potential even in established installation components. These products distinguish themselves with their compact housing shape, their exceptional stability, vibration resistance and their improved wire grip at the terminal point.

Check out all the advantages starting at page 6.

Reduced storage costs

In fitting with the new **SRK|SSL** terminal family, we have developed the new **SQI** plug-gable cross-connection system. **SQI** saves time and money by distributing potentials across terminal blocks of similar or different cross-section ranges. You can use a cutting tool to shorten the **SQI** cross-connection as needed. After the **SQI** is cut, the uninsulated side is then covered with the innovative **SQIK** insulation cap. This ensures that touch protection is fully maintained. Where once several different cross-connectors needed to be stored, you now only need one cross-connector with the end caps

Find out more starting on page 8.

Individuality matched with flexibility

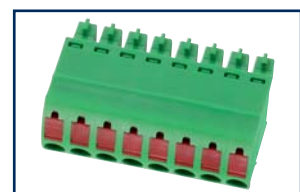
Do your customers demand clarity within the electrical cabinet? Do they expect component assemblies to be clearly labeled at a competitive price? Our Maxicard quick-marking system offers a practical solution for almost any application. The system can then be immediately custom printed with our EMS plotter.

Examples are listed starting on page 18.

The optimal wiring time achieved with a tool-free connection

The **PFBZ 4551** PCB plug-in (socket block) connector is a new addition to the **CONTA-CLIP** product line; it comes with optional screw flange. By using the tension-spring connection system, the connector can reduce the required wiring time by up to 30%.

You can find out more starting on page 32.



CONTA-CLIP

The Company

For experts in electrical and electronic engineering, the **CONTA-CLIP** name represents an accommodating partner for electrical connection systems, electronic functional modules and marking components. Especially in systems and mechanical engineering, customers trust the superior quality standards of our products and customized system solutions for control and automation technology. Quality products and services from **CONTA-CLIP** are available on all of the important global markets.

CONTA-CLIP products are tested and certified by all well-known certifying institutes around the world. They test our products to ensure conformity with international (IEC) and European standards (EN). Since the beginning of 1994, our company has been certified for compliance with DIN ISO 9001 by the DQS, an independent, German based institute for quality management system certification. In 2004 we successfully con-

verted to DIN ISO 9001/2000. In doing so, **CONTA-CLIP** has provided objective proof that it masters the technical, administrative and human factors that influence the quality of our products and services.

The **CONTA-CLIP** company philosophy is characterized by clear-cut principles. Our qualified and motivated staff is our company's most important asset in our success. The company management supports and demands self-initiative and commitment. This strong sense of individual responsibility is what enables us to recognize customer-requirements and market trends at an early stage and respond with high-quality **CONTA-CLIP** product solutions.

Technology that connects – this **CONTA-CLIP** motto is supported by a corporate culture that emphasizes dependability, fairness and loyalty as key virtues.

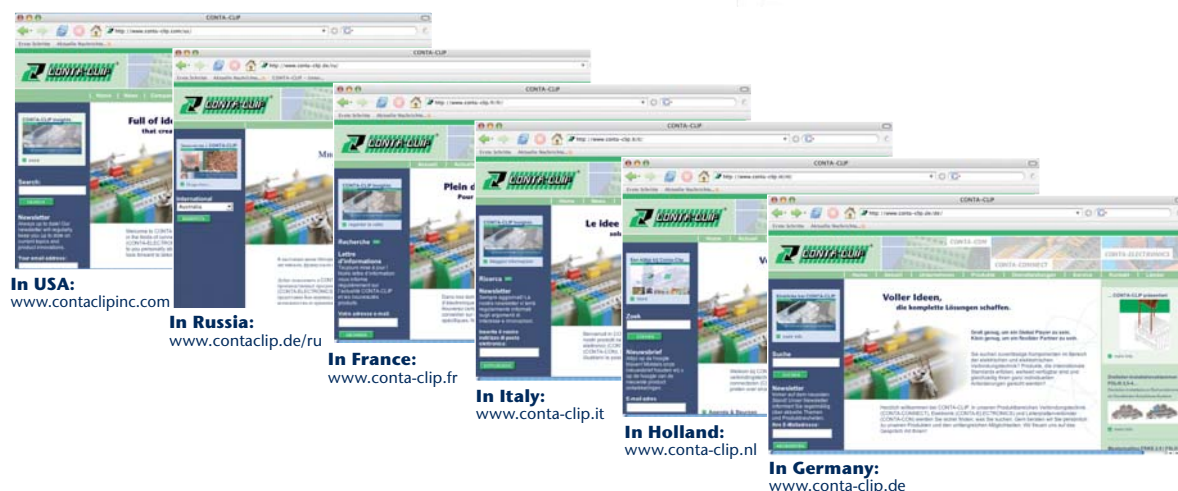
CONTA-CLIP

On the Internet

You can find out all about product innovations, trade fair appointments, press releases, and more at our official **CONTA-CLIP** web site.

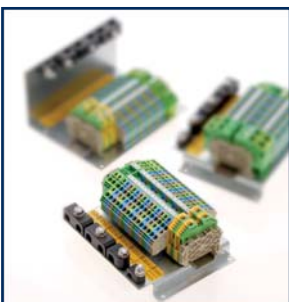
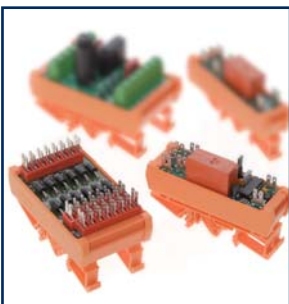
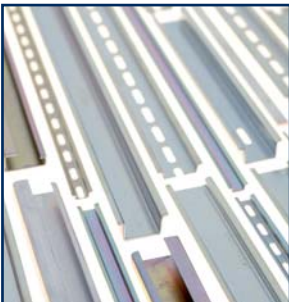
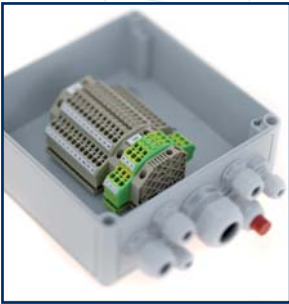
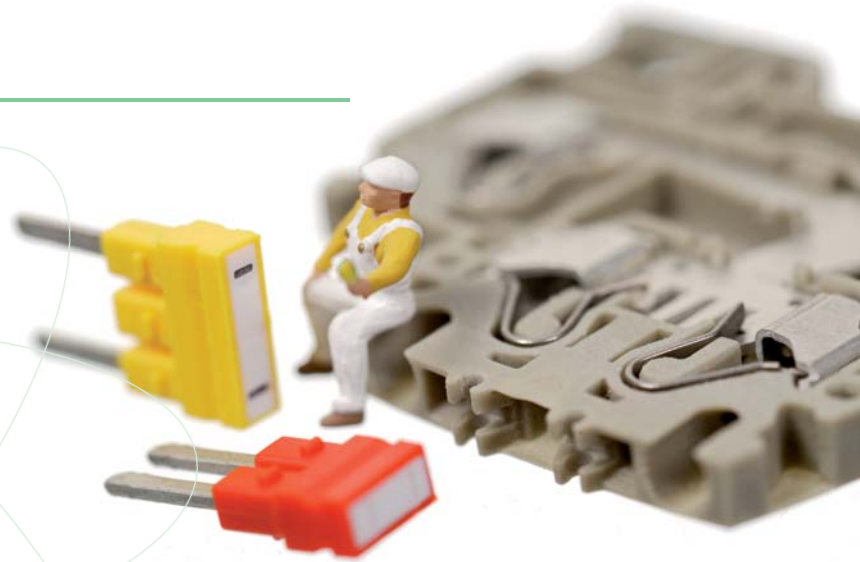
If you want to make sure you do not miss any news, subscribe with no obligation to our **CONTA-CLIP** newsletter by e-mail.

www.conta-clip.com



CONTA-CLIP

Your Service Provider



Agreeable service

*In the area of customer-specific production, **CONTA-CLIP** can fulfill individual customer wishes and market requirements. This service has been utilized for decades by customers and sales representatives around the world. We will gladly make you an offer and prepare individual solutions in a variety of sectors.*

Assembly of terminals rails

We assemble complete terminal rails onto mounting rails or system sheet plates and can assemble entire component groups (including the wiring work). We can also label according to your requirements. And we can assume responsibility for the storage of individual components and for component list administration.

Processing of housings and mounting rails

We work with mounting rails and housings according to your requirements and drawings, and we assemble these with cable glands, terminals rails and customer-specific products. In addition we can easily deliver complex component assemblies with cables, wires and plugs.

The development and production of electronic components

We develop and produce electronic modules and components according to your requirements – ranging from simple signal transmission to complex switching tasks. Customized solutions, whether in small or large batches, are part of our daily business.

Customer-specific labeling and marking

We deliver customized marking and labeling for your projects. This includes labeling for the terminal rail, conductor and wires, and marking for command and signaling devices. Our comprehensive marker program contains the solutions to your marking and labeling tasks. In addition, our specialized service delivers your custom-labeled markers throughout Germany within two work days in order to ensure that your project flow is successful.

The SRK | SSL Screw Connection System

Innovative – secure – reliable

CONTA-CLIP's SRK | SSL screw connection system enables a quick connection for solid or flexible wires with or without ferrules. On the screw terminal blocks, the rated cross-section is intended for connecting wires with ferrules.

The PE terminals have a PE foot contact on both sides. It can be snapped on to the rail with no need for screws and offers a maximum of mechanical and electrical security.

Features

- Strain-relief lifting concept
- Simple and self-explanatory usage
- Clear separation of electrical and mechanical functions
- Global standards
- Corrosion-free surface coating
- Multi-wire connection
- Compliant with RoHS
- Made of PA 6.6 UL 94-V0 plastic
- Resistant to vibration and maintenance-free

Persuasive benefits

- Feed-through and PE terminals
- Compact design
- Solid and sophisticated line of accessories
- Cross-connector can carry load under rated voltage and rated current
- Cross-connection is available from 2-10 poles and with 30 poles.
- Large wire-entry bay
- Comprehensive selection of accessories, such as test adapters, labeling materials, external cross-connections and covers.
- Wire-entry bay is positioned at the same level for cross-sections ranging from 2.5 to 10 mm²



The SRK | SSL Screw Connection System

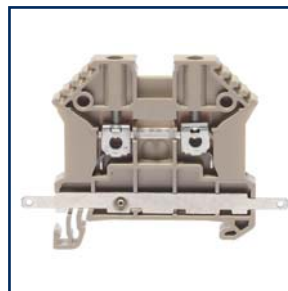
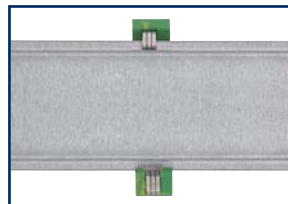
The advantages offered by the new series

The external size and shape are identical for the **SRK** feed-through terminal and the **SSL** PE terminal in the cross-sections 2.5 mm², 4 mm², 6 mm² and 10 mm². The width (pitch) for the terminal blocks is 2.5 mm² (5.1 mm), 4 mm² (6.1 mm), 6 mm² (8.1 mm) and 10 mm² (10.1 mm).

Despite their small size, the **SRK** feed-through terminals and the **SSL** PE terminals have a rated voltage range of up to 1000 V.

The insulated terminal housing with its special foot guarantees a convenient snap-on to the rail and a secure mount (TS 35 x 7.5 and TS 35 x 15 according to DIN 50 022). In addition, the screws are held captive from above by a screw brake mechanism. The PE terminals (**SSL 2.5** to **SSL 10**) have a PE foot contact on both sides. It can be snapped on to the rail (TS 35 x 7.5 and TS 35 x 15) with no need for screws and offers a maximum of mechanical and electrical security.

The feed-through terminals (**SRK 2.5** to **SRK 10**) have a rail adapter built in to the lower part of the terminal housing. This allows for the cable shielding from a control or data line, in addition to the individual wires, to be connected.



The SRK | SSL Screw Connection System

The advantages offered by the new series

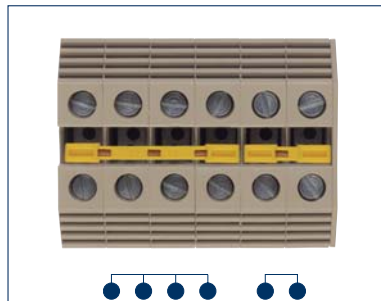
The **SQI** pluggable cross-connection system allows you to save time and money by distributing voltage potentials across terminal blocks of similar or different cross-section ranges. The pluggable design of the **SQI** offers the advantage that it can carry the rated current even while operating at the rated voltage! The **SQI** is constructed to protect against accidental touch. It is available in 2-10 poles and in 30 pole versions. Since the standard terminal blocks feature two cross-connection channels, it is possible to connect different voltage potentials in parallel with no loss of poles.



In a single cross-connection channel



Simple

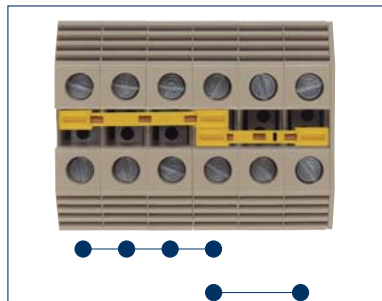


Side-by-side

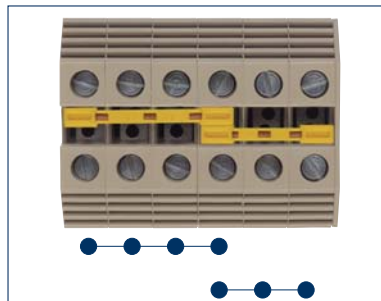


Alternating

In a single cross-connection channel



Parallel/alternating



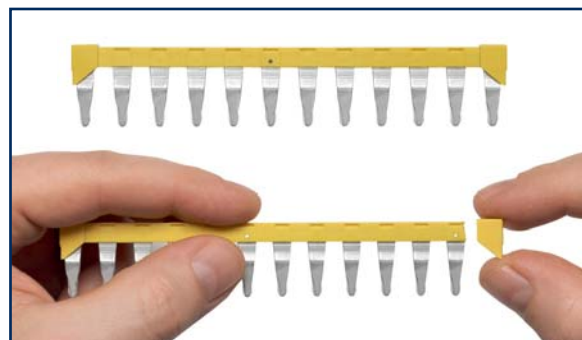
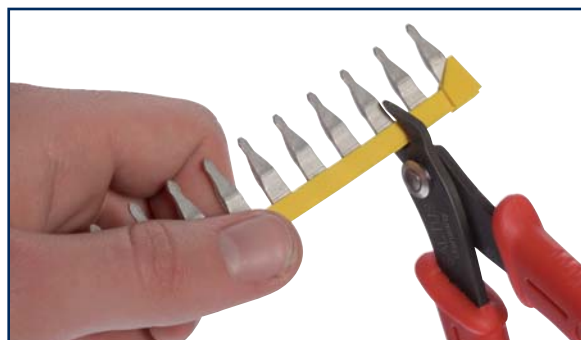
Parallel/extended



Chain linked

It is possible to shorten the **SQI** cross-connection with a cutting tool. The **SQI** system allows you to maintain

touch-protection safety by covering the cut (uninsulated) end with a **SQIK** insulation cap.



The SRK | SSL Screw Connection System

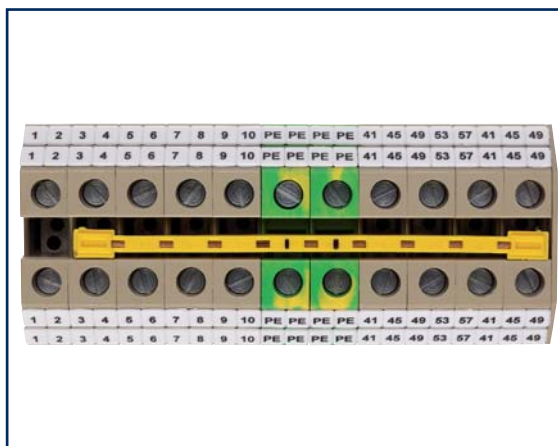
The advantages offered by the new series

The 30-pole cross-connection features a numbered scale which allows the user to easily count off the number of required poles.

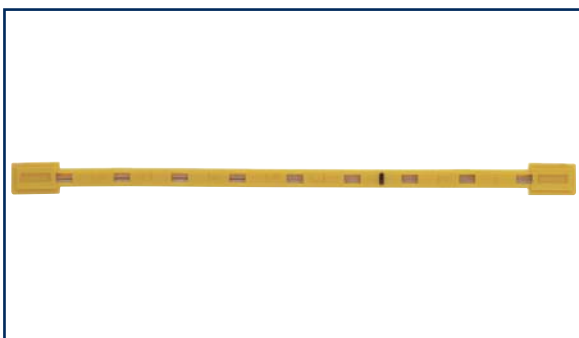


Individual cross-connection contact elements can be taken out of the cluster in order to skip over feed-through terminals (**SRK**) or PE terminals (**SSL**)!

This allows two different voltage potentials to be conducted using a single terminal rail configuration.



The disconnected contact elements can be labeled by using the plastic insulation from the cross-connection.



SRK Feed-Through Terminal | SSL Protective Earth Terminal

Screw connection system



- Foot base can be snapped on TS 35 mounting rail
- Housing made from Polyamide 6.6 V0

Connection diagram

Connection type

Size (L x W x H), mm with TS 35 x 7.5 mm

Type

Type Color

Cat. no.

Type Color

Cat. no.

Type Color

Cat. no.

Type Color

Cat. no.

Colors available

Ratings

Rated voltage, V

Rated current, A | Max. current capacity, A

Rated conductor cross-section, mm² | AWG

Rated impulse voltage, kV | Pollution degree

Plug gauge acc. to EN 60 947-1 | Flamm. class acc. to UL 94

Connection data

Single wire (solid) | stranded (flexible) mm²

Flexible | Flexible (w/ferrules acc. to DIN 46 228/1) mm²

Contact wire range, mm²

Stripping length, mm

Torque, Nm | Screw

Special connection

Features

Material of insulated housing | Temperature range

Number of cross-connection channels | Test pick-off

Accessories

End plate AP

Cat. no.

Partition plate TW

Cat. no.

Insulating cap SQIK for cross-connection

Cat. no.

Insulated cross-connection SQI

Cat. no.

Insulated cross-connection SQI

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Insulated cross-connection SQI

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Insulated cross-connection SQI

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Insulated cross-connection SQI

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Insulated cross-connection SQI

Cat. no.

Insulated cross-connection SQI

Cat. no.

End bracket ES

Cat. no.

Test adapter TA

Cat. no.

Screwdriver SDB

Cat. no.

Quick marking PMC SB

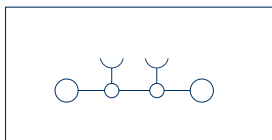
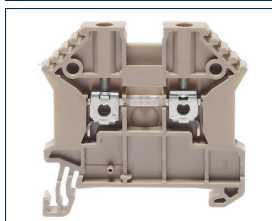
Cat. no.

You can find more accessories (marking systems, covers, end brackets, etc.) in our CONTA-CONNECT catalog in the Accessories section or on the Internet at www.conta-clip.com.

*Approval applied for!

The complete product line will be deliverable starting in the third quarter of 2009.

SRK 2.5/2A



Feed-through terminal
2 connections

Screw connection

48 x 5 x 47

SRK 2.5/2A beige

17100.2

100

SRK 2.5/2A blue

17100.5

100

SRK 2.5/2A blue

17100.5

SRK 2.5/2A blue

17100.5

SRK 2.5/2A blue

SRK 2.5/2A blue

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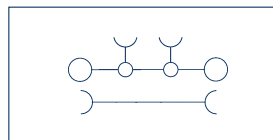
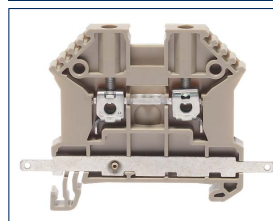
SRK 2.5/2A blue

SRK 2.5/2A blue

SRK 2.5/2A blue

SRK 2.5/2A blue

SRK 2.5/2A SAS



Feed-through terminal, 2 connections with shield connection rail

Screw connection

62.5 x 5 x 47

SRK 2.5/2A SAS beige

17119.2

100

SRK 2.5/2A SAS blue

17119.5

100

SRK 2.5/2A SAS blue

17119.5

SRK 2.5/2A SAS blue

17119.5

SRK 2.5/2A SAS blue

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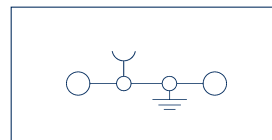
SRK 2.5/2A SAS blue

SRK 2.5/2A SAS blue

SRK 2.5/2A SAS blue

SRK 2.5/2A SAS blue

SSL 2.5/2A



PE terminal
2 connections

Screw connection

48 x 5 x 47

SSL 2.5/2A

17103.2

100

SSL 2.5/2A

17103.2

SSL 2.5/2A

17103.2

SSL 2.5/2A

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SSL 2.5/2A

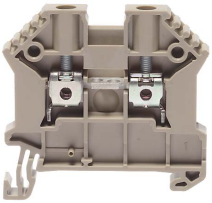
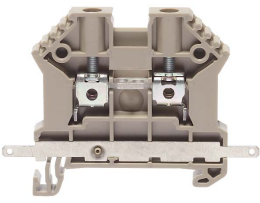

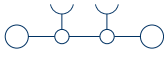


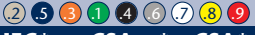
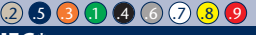
17103.2

SSL 2.5/2A

17103.2

SSL 2.5/2A

SRK Feed-Through Terminal | SSL Protective Earth Terminal

SRK 4/2A	SRK 4/2A SAS	SSL 4/2A		
				
				
Feed-through terminal 2 connections	Feed-through terminal, 2 connections with shield connection rail	PE terminal 2 connections		
Screw connection 48 x 6 x 47	Screw connection 62.5 x 6 x 47	Screw connection 48 x 6 x 47		
Qty.	Qty.	Qty.		
SRK 4/2A beige 17104.2	SRK 4/2A SAS beige 17116.2	SSL 4/2A 17107.2		
100	100	100		
SRK 4/2A blue 17104.5	SRK 4/2A SAS blue 17116.5			
100	100			
 IEC* CSAus* CSA*	 IEC* CSAus* CSA*	IEC* CSAus* CSA*		
1000 600 600	400			
32 41	32 41			
4 22-11	4 22-11	4 22-11		
8 3	8 3	8 3		
A4 V0	A4 V0	A4 V0		
0.2-6 -	0.2-6 -	0.2-6 -		
0.2-6 0.2-4	0.2-6 0.2-4	0.2-6 0.2-4		
0.2-6	0.2-6	0.2-6		
12	12	12		
0.5-1.0 Slotted M 3	0.5-1.0 Slotted M 3	0.5 - 1.0 Slotted M 3		
PA 6.6 -40 to +120°C	PA 6.6 -40 to +120°C	PA 6.6 -40 to +120°C		
2 1	2 1	1 1		
Qty.	Qty.	Qty.		
AP 2.5-10 beige 2001.2	AP 2.5-10 beige 2001.2	AP 2.5-10 beige 2001.2		
50	50	50		
TW 2.5-10 beige 2002.2	TW 2.5-10 beige 2002.2	TW 2.5-10 beige 2002.2		
50	50	50		
SQIK 2.5-10 yellow 17200.8	SQIK 2.5-10 yellow 17200.8	SQIK 2.5-10 yellow 17200.8		
20	50	50		
SQI 4/2 yellow 17211.8	SQI 4/2 yellow 17211.8	SQI 4/2 yellow 17211.8		
50	50	50		
SQI 4/3 yellow 17212.8	SQI 4/3 yellow 17212.8	SQI 4/3 yellow 17212.8		
50	20	20		
SQI 4/4 yellow 17213.8	SQI 4/4 yellow 17213.8	SQI 4/4 yellow 17213.8		
20	20	20		
SQI 4/5 yellow 17214.8	SQI 4/5 yellow 17214.8	SQI 4/5 yellow 17214.8		
20	20	20		
SQI 4/6 yellow 17215.8	SQI 4/6 yellow 17215.8	SQI 4/6 yellow 17215.8		
20	20	20		
SQI 4/7 yellow 17216.8	SQI 4/7 yellow 17216.8	SQI 4/7 yellow 17216.8		
20	10	10		
SQI 4/8 yellow 17217.8	SQI 4/8 yellow 17217.8	SQI 4/8 yellow 17217.8		
10	10	10		
SQI 4/9 yellow 17218.8	SQI 4/9 yellow 17218.8	SQI 4/9 yellow 17218.8		
10	10	10		
SQI 4/10 yellow 17219.8	SQI 4/10 yellow 17219.8	SQI 4/10 yellow 17219.8		
10	10	10		
SQI 4/30 yellow 17220.8	SQI 4/30 yellow 17220.8	SQI 4/30 yellow 17220.8		
5	5	5		
ES 35/K/ST 2828.0	ES 35/K/ST 2828.0	ES 35/K/ST 2828.0		
50	50	50		
TA 6/1-ST 2813.0	TA 6/1-ST 2813.0			
10	10			
SDB 0.6x3.5 1086.0	SDB 0.6x3.5 1086.0	SDB 0.6x3.5 1086.0		
1	1	1		
PMC SB 6/50 4702.7	PMC SB 6/50 4702.7	PMC SB 6/50 4702.7		
500	500	500		

SRK Feed-Through Terminal | SSL Protective Earth Terminal

Screw connection system



- Foot base can be snapped on TS 35 mounting rail
- Housing made from Polyamide 6.6 V0

Connection diagram

Connection type

Size (L x W x H), mm with TS 35 x 7.5 mm

Type

Type Color

Cat. no.

Type Color

Cat. no.

Type Color

Cat. no.

Type Color

Cat. no.

Colors available

Ratings

Rated voltage, V

Rated current, A | Max. current capacity, A

Rated conductor cross-section, mm² | AWG

Rated impulse voltage, kV | Pollution degree

Plug gauge acc. to EN 60 947-1 | Flamm. class acc. to UL 94

Connection data

Single wire (solid) | stranded (flexible) mm²

Flexible | Flexible (w/ferrules acc. to DIN 46 228/1) mm²

Contact wire range, mm²

Stripping length, mm

Torque, Nm | Screw

Special connection

Features

Material of insulated housing | Temperature range

Number of cross-connection channels | Test pick-off

Accessories

End plate AP

Cat. no.

Partition plate TW

Cat. no.

Insulating cap SQIK for cross-connector

Cat. no.

Insulated cross-connection SQI

Cat. no.

Insulated cross-connection SQI

Cat. no.

Insulated cross-connection SQI

Cat. no.

Insulated cross-connection SQI

Cat. no.

Insulated cross-connection SQI

Cat. no.

Insulated cross-connection SQI

Cat. no.

Insulated cross-connection SQI

Cat. no.

End bracket ES

Cat. no.

Test adapter TA

Cat. no.

Screwdriver SDB

Cat. no.

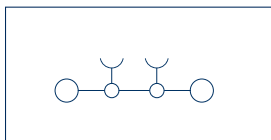
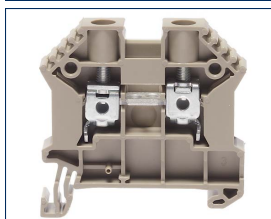
Quick marking PMC SB

Cat. no.

You can find more accessories (marking systems, covers, end brackets, etc.) in our CONTA-CONNECT catalog

in the Accessories section or on the Internet at www.conta-clip.com.

SRK 6/2A



Feed-through terminal
2 connections

Screw connection

48 x 8 x 47

	Qty.
SRK 6/2A beige 17108.2	100
SRK 6/2A blue 17108.5	100

② ⑤ ③ ① ④ ⑥ ⑦ ⑧ ⑨

IEC* CSAus* CSA*

1000 600 600

41 | 57 50 55

10 | 22-8

6 | 3

A5 | V0

0.2-10 | 0.2-10

0.2-10 | 0.2-10

0.2-10

12

1.2 - 2.0 | Slotted M 4

PA 6.6 | -40 to +120°C

2 | 1

Qty.

AP 2.5-10 beige

2001.2

50

TW 2.5-10 beige

2002.2

50

SQIK 2.5-10 yellow

17200.8

20

SQI 6/2 yellow

17221.8

50

SQI 6/3 yellow

17222.8

50

SQI 6/4 yellow

17223.8

20

SQI 6/5 yellow

17224.8

20

SQI 6/6 yellow

17225.8

20

SQI 6/7 yellow

17226.8

20

SQI 6/8 yellow

17227.8

10

SQI 6/9 yellow

17228.8

10

SQI 6/10 yellow

17229.8

10

SQI 6/30 yellow

17230.8

5

ES 35/K/ST

2828.0

50

TA 8/1-ST

2817.0

10

SDB 0.8x4.0

1087.0

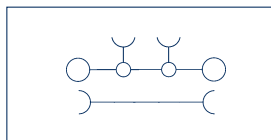
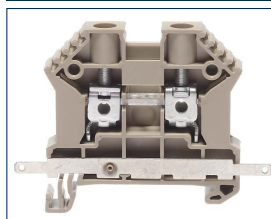
1

PMC SB 8/40

9323.7

400

SRK 6/2A SAS



Feed-through terminal, 2 connections with shield connection rail

Screw connection

62.5 x 8 x 47

	Qty.
SRK 6/2A SAS beige 17117.2	100
SRK 6/2A SAS blue 17117.5	100

② ⑤ ③ ① ④ ⑥ ⑦ ⑧ ⑨

IEC* CSAus* CSA*

320

41 | 57

10 | 22-8

6 | 3

A5 | V0

0.2-10 | 0.2-10

0.2-10 | 0.2-10

0.2-10

12

1.2 - 2.0 | Slotted M 4

PA 6.6 | -40 to +120°C

2 | 1

Qty.

AP 2.5-10 beige

2001.2

50

TW 2.5-10 beige

2002.2

50

SQIK 2.5-10 yellow

17200.8

20

SQI 6/2 yellow

17221.8

50

SQI 6/3 yellow

17222.8

50

SQI 6/4 yellow

17223.8

20

SQI 6/5 yellow

17224.8

20

SQI 6/6 yellow

17225.8

20

SQI 6/7 yellow

17226.8

20

SQI 6/8 yellow

17227.8

10

SQI 6/9 yellow

17228.8

10

SQI 6/10 yellow

17229.8

10

SQI 6/30 yellow

17230.8

5

ES 35/K/ST

2828.0

50

TA 8/1-ST

2817.0

10

SDB 0.8x4.0

1087.0

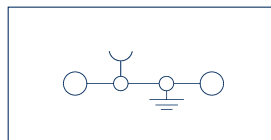
1

PMC SB 8/40

9323.7

400

SSL 6/2A



PE terminal
2 connections

Screw connection

48 x 8 x 47

	Qty.
SSL 6/2A 17111.2	100

② ⑤ ③ ① ④ ⑥ ⑦ ⑧ ⑨

IEC* CSAus* CSA*

320

41 | 57

10 | 22-8

6 | 3

A5 | V0

0.2-10 | 0.2-10

0.2-10 | 0.2-10

0.2-10

12

1.2 - 2.0 | Slotted M 4

PA 6.6 | -40 to +120°C

1 | 1

Qty.

AP 2.5-10 green

2001.2

50

TW 2.5-10 beige

2002.2

50

SQIK 2.5-10 yellow

17200.8

20

SQI 6/2 yellow

17221.8

50

SQI 6/3 yellow

17222.8

50

SQI 6/4 yellow

17223.8

20

SQI 6/5 yellow

17224.8

20

SQI 6/6 yellow

17225.8

20

SQI 6/7 yellow

17226.8

20

SQI 6/8 yellow

17227.8

10

SQI 6/9 yellow

17228.8

10

SQI 6/10 yellow

17229.8

10

SQI 6/30 yellow

17230.8

5

ES 35/K/ST

2828.0

50

SDB 0.8x4.0

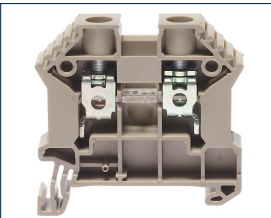
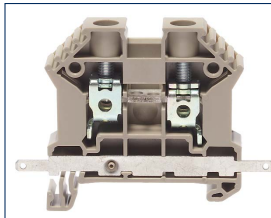
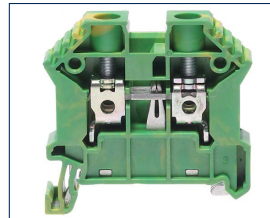
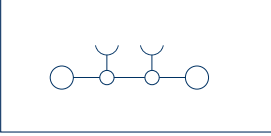
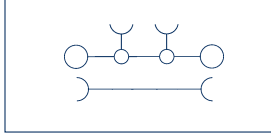
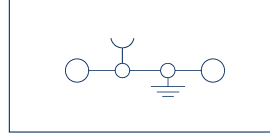


1087.0

1

PMC SB 8/40

9323.7

SRK Feed-Through Terminal | SSL Protective Earth Terminal

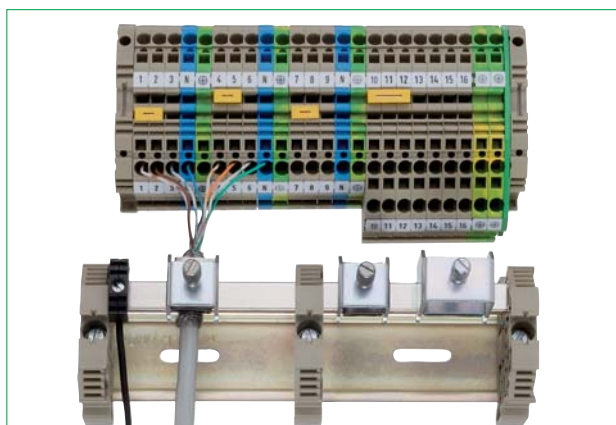
SRK 10/2A	SRK 10/2A SAS	SSL 10/2A		
				
				
Feed-through terminal 2 connections	Feed-through terminal, 2 connections with shield connection rail	PE terminal 2 connections		
Screw connection 48 x 10 x 47	Screw connection 62.5 x 10 x 47	Screw connection 48 x 10 x 47		
Qty.	Qty.	Qty.		
SRK 10/2A beige 17112.2	SRK 10/2A SAS beige 17118.2	SSL 10/2A 17115.2		
100	100	100		
SRK 10/2A blue 17112.5	SRK 10/2A SAS blue 17118.5			
100	100			
				
IEC* CSAus* CSA*	IEC*	IEC* CSAus* CSA*		
1000 600 600	250			
57 76 65 85	57 76			
16 10-6	16 10-6	16 10-6		
8 3	8 3	8 3		
B7 V2	B7 V2	B7 V2		
0.2-16 0.2-16	0.2-16 0.2-16	2.5-25 2.5-25		
0.2-16 0.2-16	0.2-16 0.2-16	2.5-16 2.5-16		
0.6-16	0.6-16	0.6-16		
15	15	15		
2.0-4.0 Slotted M 5	2.0-4.0 Slotted M 5	2.0-4.0 Slotted M 5		
PA 6.6 -40 to +120°C	PA 6.6 -40 to +120°C	PA 6.6 -40 to +120°C		
2 1	2 1	1 1		
Qty.	Qty.	Qty.		
AP 2.5-10 beige 2001.2	AP 2.5-10 beige 2001.2	AP 2.5-10 green 2001.1		
50	50	50		
TW 2.5-10 beige 2002.2	TW 2.5-10 beige 2002.2	TW 2.5-10 beige 2002.2		
50	50	50		
SQIK 2.5-10 yellow 17200.8	SQIK 2.5-10 yellow 17200.8	SQIK 2.5-10 yellow 17200.8		
20	50	50		
SQI 10/2 yellow 17231.8	SQI 10/2 yellow 17231.8	SQI 10/2 yellow 17231.8		
50	50	50		
SQI 10/3 yellow 17232.8	SQI 10/3 yellow 17232.8	SQI 10/3 yellow 17232.8		
50	20	20		
SQI 10/4 yellow 17233.8	SQI 10/4 yellow 17233.8	SQI 10/4 yellow 17233.8		
20	20	20		
SQI 10/5 yellow 17234.8	SQI 10/5 yellow 17234.8	SQI 10/5 yellow 17234.8		
20	20	20		
SQI 10/6 yellow 17235.8	SQI 10/6 yellow 17235.8	SQI 10/6 yellow 17235.8		
20	20	20		
SQI 10/7 yellow 17236.8	SQI 10/7 yellow 17236.8	SQI 10/7 yellow 17236.8		
20	10	10		
SQI 10/8 yellow 17237.8	SQI 10/8 yellow 17237.8	SQI 10/8 yellow 17237.8		
10	10	10		
SQI 10/9 yellow 17238.8	SQI 10/9 yellow 17238.8	SQI 10/9 yellow 17238.8		
10	10	10		
SQI 10/10 yellow 17239.8	SQI 10/10 yellow 17239.8	SQI 10/10 yellow 17239.8		
10	10	10		
SQI 10/30 yellow 17240.8	SQI 10/30 yellow 17240.8	SQI 10/30 yellow 17240.8		
5	5	5		
ES 35/K/ST 2828.0	ES 35/K/ST 2828.0	ES 35/K/ST 2828.0		
50	50	50		
SDB 0.8x4.0 1087.0	SDB 0.8x4.0 1087.0	SDB 0.8x4.0 1087.0		
1	1	1		
PMC SB 5/50 4600.7	PMC SB 5/50 4600.7	PMC SB 5/50 4600.7		
500	500	500		

The SSAB Shield-Connection Clip

In the field of industrial process engineering, a high degree of interference immunity is required of electrical equipment. In the fields of measurement, regulation and control engineering, this is a significant contributor to the accessibility of industrial systems. When constructing low-interference systems, both the cable shielding and the associated shielded ground are of great significance. The point where the cable shielding connects to the housing ground is a critical point. The connection should be low-ohm, and should also feature minimal inductive resistance. You should be certain that this connection can be established in a practical, simple and quick manner. **CONTA-CLIP's SSAB** clip accomplishes all this with the help of its outstanding feature set.



The **SSAB** screw-shield-connection clip can be mounted onto the busbar. After wiring the terminal block, the shield-connection clip is mounted by simply swiveling in and tightening the knurled thumb screw. This makes the **SSAB** screw-shield-connection clip very convenient to wire. Depending on the length of the terminal blocks, two or more **SH/SAB** busbar supports are used. These mechanically connect the front busbar with the mounting rail (support). **SH1** busbar supports are used so that the shield-connection clip can be positioned freely on the mounting plate or in the switchgear cabinet. The 10 x 3 busbars can be easily and quickly snapped on to these supports. In both cases, the contact with the earthing or ground potential can be established with a **ZB** clamping yoke.



Busbar mounting with the SSAB

Screw connection system

- Simple retrofit assembly by screwing on the clip
- Knurled thumb screw, so no tools required
- Secure contact
- Large shield surface

The **SSAB** screw-shield-connection clip is suitable for standard cable shielding. It enables EMC-compliant wiring with its large surface area. It also has low-impedance and low-ohm contact junctions. It is ideal for wires with diameters ranging from 2 to 35 mm. The contacts can be established without the need for any special tool.

Connection type

Dimensions (L x W x H), mm

Type

Cat. no.

Type

Cat. no.

Technical data

Connection in compliance with standard

Material

Connection data

Min. torque, Nm

Max. torque, Nm

Cable diameter, mm

Screw

Drill hole diameter, mm

Accessories

SH overlay block

Cat. no.

Busbar support SH/SAB

Cat. no.

Busbar Ssch/MS

Cat. no.

Busbar Ssch/CU

Cat. no.

End bracket ES

Cat. no.

Colors available

ZB without cap

Cat. no.

ZB cap, green/yellow

Cat. no.

Colors available

BS fastening screw for the SH 1

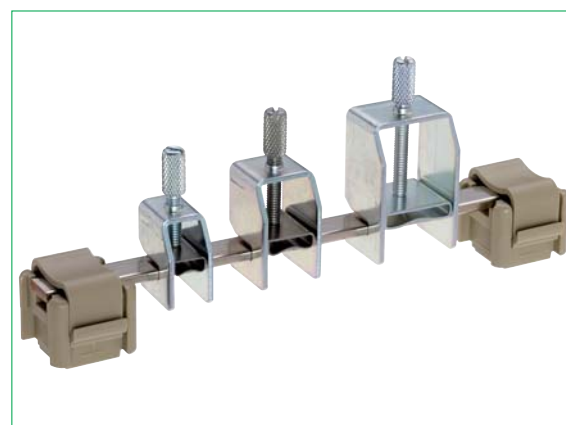
Cat. no.

BS fastening screw for 2x SH 1

Cat. no.







Additional accessories

For mounting on busbar



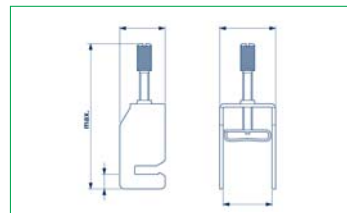
An SSAB application with the SH1

The SSAB Shield-Connection Clip

SSAB 5	SSAB 8	SSAB 14	SSAB 20	SSAB 28	SSAB 35
					
Shield-connection clip Screw connection	Shield-connection clip Screw connection	Shield-connection clip Screw connection	Shield-connection clip Screw connection	Shield-connection clip Screw connection	Shield-connection clip Screw connection
Screw connection 19.5 x 9 x 46.8	Screw connection 19.5 x 12 x 48.7	Screw connection 19.5 x 17 x 59.3	Screw connection 19.5 x 24 x 75	Screw connection 20 x 32 x 92.7	Screw connection 20 x 40 x 106.5
SSAB 5 3694.0	SSAB 8 3695.0	SSAB 14 3696.0	SSAB 20 3697.0	SSAB 28 3698.0	SSAB 35 3699.0
Qty. 10	Qty. 10	Qty. 10	Qty. 10	Qty. 10	Qty. 10

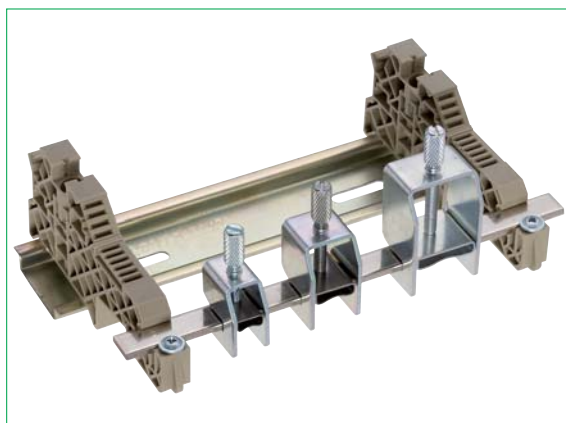
IEC/EN Steel	IEC/EN Steel	IEC/EN Steel	IEC/EN Steel	IEC/EN Steel	IEC/EN Steel
-	-	-	-	-	1.5
0.4	0.6	0.8	0.8	0.8	1.8
2 – 5	3 – 8	3 – 14	3 – 20	5 – 28	20 – 35
-	-	-	-	-	-
Qty.	Qty.	Qty.	Qty.	Qty.	Qty.
SH 1 2318.2	SH 1 2318.2	SH 1 2318.2	SH 1 2318.2	SH 1 2318.2	SH 1 2318.2
SH/SAB 1530.2	SH/SAB 1530.2	SH/SAB 1530.2	SH/SAB 1530.2	SH/SAB 1530.2	SH/SAB 1530.2
Ssch 10 x 3/MS 2128.0	Ssch 10 x 3/MS 2128.0	Ssch 10 x 3/MS 2128.0	Ssch 10 x 3/MS 2128.0	Ssch 10 x 3/MS 2128.0	Ssch 10 x 3/MS 2128.0
Ssch 10 x 3/CU 2129.0	Ssch 10 x 3/CU 2129.0	Ssch 10 x 3/CU 2129.0	Ssch 10 x 3/CU 2129.0	Ssch 10 x 3/CU 2129.0	Ssch 10 x 3/CU 2129.0
ES 35/K/ST beige 2828.0	ES 35/K/ST beige 2828.0	ES 35/K/ST beige 2828.0	ES 35/K/ST beige 2828.0	ES 35/K/ST beige 2828.0	ES 35/K/ST beige 2828.0
Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ
ZB 4 2138.0	ZB 4 2138.0	ZB 4 2138.0	ZB 4 2138.0	ZB 4 2138.0	ZB 4 2138.0
ZB 4/K, green/yellow 2483.1	ZB 4/K, green/yellow 2483.1	ZB 4/K, green/yellow 2483.1	ZB 4/K, green/yellow 2483.1	ZB 4/K, green/yellow 2483.1	ZB 4/K, green/yellow 2483.1
Ⓘ Ⓢ Ⓓ	Ⓘ Ⓢ Ⓓ	Ⓘ Ⓢ Ⓓ	Ⓘ Ⓢ Ⓓ	Ⓘ Ⓢ Ⓓ	Ⓘ Ⓢ Ⓓ
BS M 4 x 8 2262.0	BS M 4 x 8 2262.0	BS M 4 x 8 2262.0	BS M 4 x 8 2262.0	BS M 4 x 8 2262.0	BS M 4 x 8 2262.0
BS M 4 x 30 2123.0	BS M 4 x 30 2123.0	BS M 4 x 30 2123.0	BS M 4 x 30 2123.0	BS M 4 x 30 2123.0	BS M 4 x 30 2123.0

Dimensions















Type	a	b	c	d	e
SSAB 5	6.5 mm	19.5 mm	46.8 mm	9.0 mm	6.0 mm
SSAB 8	6.5 mm	19.5 mm	48.7 mm	12.0 mm	9.0 mm
SSAB 14	6.5 mm	19.5 mm	59.3 mm	17.0 mm	14.0 mm
SSAB 20	6.5 mm	19.5 mm	75.0 mm	24.0 mm	21.0 mm
SSAB 28	6.5 mm	20.0 mm	92.7 mm	32.0 mm	28.0 mm
SSAB 35	6.5 mm	20.0 mm	106.5 mm	40.0 mm	36.0 mm

Additional accessories (such as labeling systems, covers and end brackets) can be found in the Accessories section of the CONTA-CONNECT catalog or on the Internet at www.conta-clip.com.



An SSAB application with SH/SAB

The SVB Screw-Type Distributor Block

Screw connection system	SVB 80	SVB 125	SVB 175	SVB 250		
<ul style="list-style-type: none">• High short-circuit resistance rating• IP20 protection• Simple handling• Space-saving design• Foot snapped on to TS 35 mounting rail or direct mount• Modular design (single- or three-phase block)• Suitable for copper wires• Housing made from Polyamide 6.6 V0						
Dimension drawing	Drawing 1 See on the right.	Drawing 2 See on the right.	Drawing 3 See on the right.	Drawing 4 See on the right.		
The SVB screw-type distributor block makes it possible to distribute potential and power in a compact space without any additional accessories.	Current distributor block 7 connections	Current distributor block 8 connections	Current distributor block 12 connections	Current distributor block 12 connections		
You can use the distributor block to establish an electromechanical connection between a wire with a large cross-section and one or more wires with small cross-sections.						
Connection type	Screw connection	Screw connection	Screw connection	Screw connection		
Size (L x W x H) with direct mount	66 x 27 x 47	75 x 27 x 47	71 x 45 x 43	96 x 44 x 50		
Size (L x W x H) with TS 35 x 7.5 mm	66 x 27 x 50	75 x 27 x 50	71 x 45 x 46	96 x 44 x 53		
Weight	63	134	228	434		
Type	Qty.	Qty.	Qty.	Qty.		
Type	SVB 80	SVB 125	SVB 175	SVB 250		
Cat. no.	1740.0	1741.0	1742.0	1743.0		
Colors available						
Ratings	IEC	UL	cUL	IEC	UL	
Rated voltage,	690	600	600	690	600	
Rated current,	80	80	80	125	115	
Rated cross-section for input and output,	16 16 – 6	35 – 16 16	70 16	120 35–16–10		
Rated cross-section for input and output,	8 – 4 14 – 4	8 – 2 14 – 4	8 – 2 14 – 6	2 – 4 (1)		
Rated impulse voltage, kV Pollution degree	2.5 3	2.5 3	2.5 3	2.5 3		
Flammability class UL 94	V0	V0	V0	V0		
Short-circuit resistance rating						
Short-circuit current resistance IPK (peak value), kA	2.7	30	30	51		
Short-circuit current resistance ICW over 1s, kA	1.9	4.2	11	24.5		
SCCR rating kV Class series fuse required, A	100 80	100 125	-	100 250		
Connection data	A	B	C	A	B	C
Inputs	A	B	C	A	B	C
Number of connections	1	1	1	1	1	1
Clampable wire:	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16
“e” single wire H07V-U	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16
“m” stranded H07V-R	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16
“f” flexible H07V-K and ferrule DIN 46 228/1	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16
“f” flexible H07V-K and ferrule with plastic collar	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16	2.5-16
Diameter	7	10	12	7	10	12
Torque	1.5 – 3	3.5-5	6-10	1.5 – 3	3.5-5	6-10
Terminal screw	M5	M8	M10	M5	M8	M10
Blade size	PZ2	M4	M5	PZ2	M4	M5
Insulation stripping length	10 – 12	14-16	14-16	10 – 12	14-16	14-16
Outputs	A	B	C	A	B	C
Number of connections	2	4	6	2	4	6
Clampable wire:	2.5-16	2.5-6	2.5-16	2.5-16	2.5-6	2.5-16
“e” single wire H07V-U	2.5-16	2.5-6	2.5-16	2.5-16	2.5-6	2.5-16
“m” stranded H07V-R	2.5-16	2.5-6	2.5-16	2.5-16	2.5-6	2.5-16
“f” flexible H07V-K and ferrule DIN 46 228/1	2.5-16	2.5-6	2.5-16	2.5-16	2.5-6	2.5-16
“f” flexible H07V-K and ferrule with plastic collar	2.5-16	2.5-6	2.5-16	2.5-16	2.5-6	2.5-16
Diameter	7	4.5	6.5	7	4.5	6.5
Torque	1.5-3	0.8-1.5	2-3	1.5-3	0.8-1.5	2-3
Terminal screw	M5	M4	M5	M5	M4	M5
Blade size	PZ2	PZ1	PZ2	PZ2	PZ1	PZ2
Insulation stripping length	10-12	9-12	10-12	10-12	9-12	10-12
Accessories	Qty.	Qty.	Qty.	Qty.		
End bracket ES	ES 35/K/ST beige	ES 35/K/ST beige	ES 35/K/ST beige	ES 35/K/ST beige		
Cat. no.	2828.0	2828.0	2828.0	2828.0		
Colors available						
Allen key socket wrench ISKS			ISKS 5	ISKS 6		
Cat. no.			2818.0	2772.0		
Allen key socket wrench ISKS						
Cat. no.						
Screwdriver SDK	SDK 1.0 x 80			SDB 0.8 x 4.0		
Cat. no.	2289.0			1087.0		
Screwdriver SDK	SDK 1.0 x 100	SDK 1.0 x 100		SDB 1.2 x 6.5		
Cat. no.	2290.0	2290.0		1088.0		

Additional accessories (such as covers and end brackets) can be found in the Accessories section of the CONTA-CONNECT catalog or on the Internet at www.conta-clip.com.

The SVB Screw-Type Distributor Block

SVB 400



Drawing 5
See on the right.

Current distributor block
12 connections

SVB 175/3



Drawing 6
See on the right.

Current distributor block
3 x 7 connections

SVB 160



Drawing 7
See on the right.

Current distributor block
7 connections with
busbar distribution

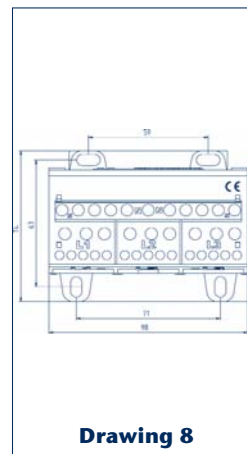
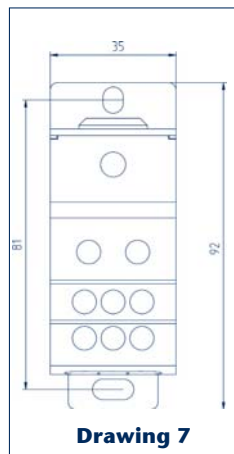
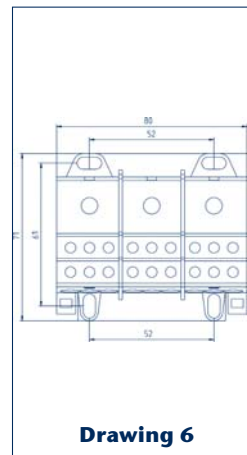
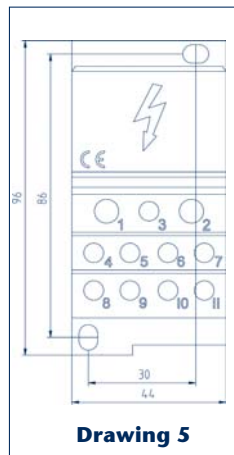
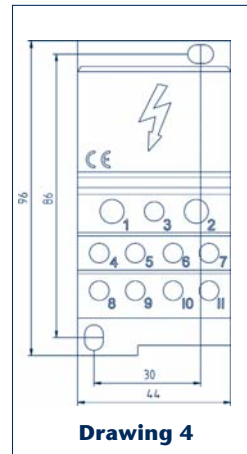
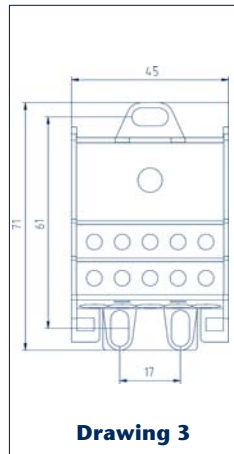
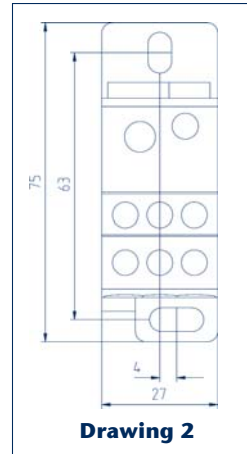
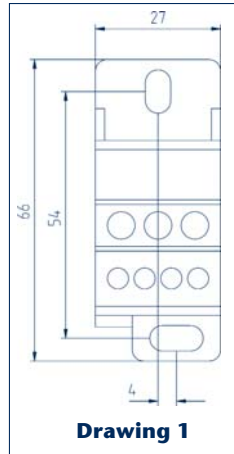
SVB 125/4



Drawing 8
See on the right.

Current distributor block
3 x 8 connections with
neutral-wire busbar

Dimension drawing



Screw connection	
96 x 44 x 50	
96 x 44 x 53	
414	

Qty.

SVB 400	
1744.0	1

IEC	UL
690	600
400	310
185 35-16-10	
3/0 - 350	
2.5 3	
V0	
51	
21	
100 350	

A	B	C
1		
95-185		
95-185		
95-185		
95-150		
95-150		
19		
25-27		
M16		
M8		
27-29		

A	B	C
2	5	4
6-35	1.5-16	1.5-10
6-35	1.5-16	1.5-10
6-35	1.5-16	1.5-10
6-25	1.5-16	1.5-10
6-25	1.5-16	1.5-10
9	6.5	6
3.5-7	2-3	2-3
M8	M6	M6
1.2 x 6.5	0.8 x 4.0	0.8 x 4.0
10-12	10-12	10-12

Qty.

ES 35/K/ST beige	
2828.0	50

ISKS 8	
2773.0	1

SDB 0.8 x 4.0	
1087.0	1
SDB 1.2 x 6.5	
1088.0	1

Screw connection	
71 x 80 x 43	
71 x 80 x 46	
386	

Qty.

SVB 175/3	
1745.0	1

IEC	UL	cUL
690	600	600
175	115	175
70 16		
8 - 2 14 - 6		
2.5 3		
V0		
30		
11		
100 175		

A	B	C
3 x 1		
16-70		
16-70		
16-70		
16-50		
16-50		
12		
6-10		
M10		
M5		
14-16		

A	B	C
3 x 6		
2.5-16		
2.5-16		
2.5-16		
2.5-10		
2.5-10		
6.5		
3-4		
M6		
M3		
10-12		

Qty.

ES 35/K/ST beige	
2828.0	50

ISKS 5	
2818.0	1
ISKS 6	
2772.0	1

Screw connection	
92 x 35 x 50	
92 x 35 x 54	
238	

Qty.

SVB 160	
1746.0	1

IEC	UL	cUL
690	600	600
160	160	160
70 126		
8 - 2/0 14 - 4		
2.5 3		
V0		
30		
11		
100 175		

A	B	C
1		
10-70		
10-70		
10-70		
10-70		
10-70		
13		
5-6		
M10		
M5		
16-18		

A	Busbar
6	16 x 5 mm max.
2.5-16	
2.5-16	
2.5-16	
2.5-16	
2.5-16	
7	
1.5-3	2-3
M5	M6
PZ2	M5
10-12	-

Qty.

ES 35/K/ST beige	
2828.0	50

ISKS 5	
2818.0	1
ISKS 6	
2772.0	1

Screw connection	
74 x 98 x 50	
74 x 98 x 53	
314	

Qty.

SVB 125/4	
1747.0	1

IEC
690
125
35 16
-
2.5 3
V0
30
11.8
-

A	B	C
3 x 1	3 x 5	3 x 2
6-35	1.5-6	4-16
6-35	1.5-6	4-16
6-35	1.5-6	4-16
6-25	1.5-6	4-10
6-25	1.5-6	4-10
9	5	7
1.5	0.8	1.5
M5	M4	M5
PZ2	PZ1	PZ2
12-18	9-12	12-18

Neutral wire	Neutral wire	Neutral wire
1	4	6
6-35	1.5-6	4-16
6-35	1.5-6	4-16
6-35	1.5-6	4-16
6-25	1.5-6	4-10
6-25	1.5-6	4-10
9	5	7
1.5	0.8	1.5
M5	M4	M5
PZ2	PZ1	PZ2
12-18	9-12	12-18

Qty.

ES 35/K/ST beige	
2828.0	50

SDK 1.0 x 80	
2289.0	1
SDK 1.0 x 100	
2290.0	1

EMS-eco Marking-System Plotter

The EMS-eco Easy-Marking-System Plotter

A system that fulfils a wide variety of labeling requirements!

The entry-level model in our EMS Easy Marking System series stands out for the impressive versatility and user-friendliness fitted into its small size.

- Loading capacity (with 2 inlays and up to 400 markers)
- Short loading times for various materials, thanks to fast and straightforward exchange of inlays and automatic inlay recognition
- The accompanying labeling software, **CONTA-Sign**, is compatible with ten languages (German, English, French, Spanish, Hungarian, Italian, Dutch, Polish, Russian, Swedish)
- Free software updates can be downloaded from our web page
- High-quality labeling is ensured by the combination of your PPE disposable pen and the double-sided plotter arm design
- Just one inlay is needed for all of the **CONTA-CLIP** Maxicards
- Automatic calibration eliminates the need for manual adjustments
- Our EMS series is fully compatible with a comprehensive and proven range of accessories (plotter pens, ink, cleaners and inlays).

Type

Type

Cat. no.

Type

Cat. no.

Technical data

Printer type

Drive

Intended use

Max. marker height

Max. plotting area

Command language

Max. plotting speed, cm/sec.

Max. printing speed, mm/sec.

Dimensions (W x H x D)

Weight, kg

Supply voltage

Interfaces

Accessories

Inlays for CONTA-CLIP markers

Cat. no.	Type
1592.0	CCI-2
1593.0	CCI-3
1600.0	CCI-4
1601.0	CCI-5
1602.0	CCI-6
1603.0	CCI-7
1604.0	CCI-8
1606.0	CCI-10
1607.0	CCI-11
88520.8	CCI-15
88520.0	CCI-17
88520.1	CCI-18
88520.2	CCI-19
88520.7	CCI-16

Inlays for markers from other manufactures can be found at www.conta-clip.com

Disposable plotter pens

Cat. no.	Type
1649.0	PPE 0.18 mm red
1650.0	PPE 0.25 mm white
1651.0	PPE 0.35 mm yellow
1652.0	PPE 0.50 mm brown
1653.0	PPE 0.70 mm blue
1654.0	PPE 1.00 mm orange

EMS-eco



The EMS-eco Easy Marking System

Plotter, power supply, cable (USB cable from plotter to PC), CONTA-Sign CS ten-language software (based on Windows 95/98/2000/ NT/XP)

1611.0

Qty.

1

The EMS-eco Starter Kit Easy Marking System

Plotter, power supply, cable (USB cable from plotter to PC), CONTA-Sign CS ten-language software (based on Windows 95/98/2000/ NT/XP) 1 x CCI-10 (1606.0), 1 x PPE 0.35 (1651.0)

1613.0

1

Flat-bed plotter

Two-phase step motor

Printing markers of various materials and sizes

10.5 mm, custom solutions up to 15 mm

DIN A4, 220 mm x 305 mm

based on HP-GL

40

80

440 x 125 x 440

approx. 6

100 - 240 V AC 50 - 60 Hz

USB Level 1.1

Short description

Short description	Qty.
Inlay for SB 8/10	1
Inlay for SB 7.5/10, AD 1/5N	1
Inlay for ADQ	1
Inlay for KBH-S4	1
Inlay for AD 1/5, AD 1/6, AD 1/8, AD 1/16N	1
Inlay for AD 1/12N	1
Inlay for paper and polyester sheets (for example, GKE, KKE, ESO GT1, ESO GT2, ESO, BST 8, GKE 17/9) as well as material for engraving GMP and GMA	1
Inlay for all Maxicards (including: MC SB, MC BSTR, MC ESS, MC GS, MC KMS, MC GST, MC GSU)	1
Inlay for SchT 9.10 and ZSchT 6	1
Inlay for KBH-S 21, 36, 57, 84 strip	1
Inlay for KBH 3/15, 3/21, 3/27 strip	1
Inlay for KBH 5/15, 5/21, 5/27 strip	1
Inlay for KBH 10/15, 10/21, 10/27, 10/36 single	1
Inlay for KBH-S 15, 21, 25, 40 single	1

The KSH 4/30 Cable Marker Ferrule and Marker Carrier for SchT 12 Terminal Blocks

KSH 4/30 | SchT 12

The **KSH 4/30** cable marker ferrule supplements the **KSH** range, enabling labeling with just one cable tie. In conjunction with the **MC ESS 30/60** marker, the **KSH 4/30** is the solution for a whole range of labeling needs. It can be securely fastened with a single cable tie to the wire or cable. It is suitable for use anywhere and meets all key market requirements. The **MC ESS 30/60** marker can be simply and conveniently labeled with the EMS plotter. | The **SchT 12** marker carrier is snapped on directly to the terminal block housing. It can be fitted quickly and simply with either four **PMC SB 5** or eight **AS 3** markers. You no longer have to deal with cumbersome paper-strip and protective-foil labeling. The screw ports and cross-connection channels are also completely covered just as with the individual (EA 1 and AD1) covers. This makes it impossible to use the terminal point while it is connected to a live voltage. All labeling options for the terminal points remain available.

KSH 4/30



SchT 12



Type	Qty.	Qty.	
Type Color	KSH 4/30 transparent	SchT 12 white	
Cat. no.	3896.0	2531.0	
Type Color			
Cat. no.			
Colors available	①	⑦	
Characteristics			
Dimensions			
Dimensions (L x W x H), mm	30 x 5.2 x 4	26.1 x 6.2 x 2.9 (3.9 incl. SB5)	
Pocket width, mm	4.2		
Wing width, mm	14.4		
Slit width for cable tie, mm	1.5 x 5.4		
Material			
Material	Soft PVC	PA 6,6	
Thermal stability	-30 to +60 °C	-40 to +105 °C	
Flammability class acc. to UL 94	V0	V2	
Resistance to liquids	Oil, gasoline	-	
Resistance to gamma and UV radiation	1 year radiant intensity, Europe	-	
Inscription			
Snap-on with markers	MC ESS ...	4x PMC SB 5/50	
Snap-on with markers		8x AS 3/10	
Application			
	Cable labeling	Grouped labeling	
	Wire labeling	Terminal labeling	
		Terminal cover	
Accessories	Qty.	Qty.	
Marker Maxicard	MC ESS 30/60 white	MC SB 5/200 white	
Cat. no.	3354.7	3300.7	1000
Marker Pocket Maxicard		PMC SB 5/50 white	500
Cat. no.		4600.7	
Marker AS 3		AS 3/10 white	500
Cat. no.		2571.0	
Cable tie KB (140-mm length)	KB 140 black		
Cat. no.	2672.0		
For terminal block		SRK 4/2A...	
		RK 2.5-4...	

The MC GSU Device and Installation Marker

MC GSU maxicard and holder

The new **MC GSU** Maxicards are used for marking devices, components and electrical cabinets. They are available in six sizes (17x15 | 27x15 | 49x15 | 60x15 | 60x30 | 85.4x54 mm), in snap-in (R) or adhesive (K) versions. The markers are snapped onto the **GSU-H** holders or attached by means of the adhesive film. The snap-on **STR MC GSU** protective strips can be used to protect the inscription. The **GSU-H** holders fit with the **MC GSU** and are also available in six sizes and a screw-on version. The **GSU-H** can also be fastened with cable ties. After the holder is fastened, the labeled marker is conveniently snapped into the holder. Our plotter system can be used to easily customize labeling on the **MC GSU**.

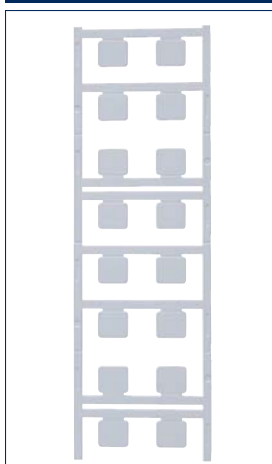
Type	
Type Color	snap-on
Cat. no.	
Type Color	snap-on
Cat. no.	
Type Color	self-adhesive
Cat. no.	
Type Color	self-adhesive
Cat. no.	
Colors available	
Characteristics	

Dimensions	
Dimensions (L x W), mm	
Number of markers per row	
Number of markers per card	
Material	
Material	
Thermal stability	
Flammability class acc. to UL 94	
Inscription	
Plotter	
Plotter inlay	
Hand marking pen	
Number of characters rows, font size 16, plotter pen 0.25: horizontal	
Number of characters rows, font size 16, plotter pen 0.25: vertical	
Application	
Assembly MC GSU...R MC GSU...K	

Accessories	
Holder GSU-H, for MC GSU	
Cat. no.	
Protective strips STR	
Cat. no.	

Technical data for the Maxicard and holder GSU-H Protective strips STR	
Material	Polyamide 6.6, halogen-free Hard PVC (STR)
Flammability class	Acc. to UL 94-V2 B1 (STR)
Colors	Refer to order information
Delivered as	Carton/bag
Minimum order quantity	1 standard pack
Thermal stability	-40 to +105 °C -30 to +60 °C (STR)

MC GSU 17x15

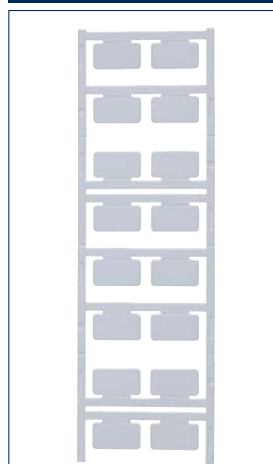


	Qty.
MC GSU 17x15 R white	
3382.7	80
MC GSU 17x15 R white, special print	
3383.7	80
MC GSU 17x15 K white	
3384.7	80
MC GSU 17x15 K white, special print	
3385.7	80
⑦ ⑧	

17 x 15	
2	
16	
PA6.6, halogen-free	
-40 to +105 °C	
V2	
EMS	
CCI-10	
BS-1	
10 5	
10 5	
Snap-on (R) All-purpose self-adhesive (K)	

	Qty.
GSU-H 17x15	
3827.4	80
STR MC GSU 17x15 R	
3860.0	80

MC GSU 27x15

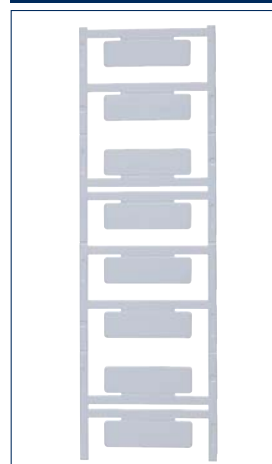


	Qty.
MC GSU 27x15 R white	
3386.7	80
MC GSU 27x15 R white, special print	
3388.7	80
MC GSU 27x15 K white	
3387.7	80
MC GSU 27x15 K white, special print	
3389.7	80
⑦ ⑧	

27 x 15	
2	
16	
PA6.6, halogen-free	
-40 to +105 °C	
V2	
EMS	
CCI-10	
BS-1	
15 5	
10 5	
Snap-on (R) All-purpose self-adhesive (K)	

	Qty.
GSU-H 27x15	
3828.4	80
STR MC GSU 27x15 R	
3861.0	80

MC GSU 49x15



	Qty.
MC GSU 49x15 R white	
3390.7	40
MC GSU 49x15 R white, special print	
3392.7	40
MC GSU 49x15 K white	
3391.7	40
MC GSU 49x15 K white, special print	
3393.7	40
⑦ ⑧	

49 x 15	
1	
8	
PA6.6, halogen-free	
-40 to +105 °C	
V2	
EMS	
CCI-10	
BS-1	
35 5	
10 5	
Snap-on (R) All-purpose self-adhesive (K)	

	Qty.
GSU-H 49x15	
3829.4	40
STR MC GSU 49x15 R	
3862.0	40


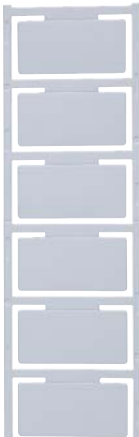
Holder for MC GSU



Application protective strips STR



The MC GSU Device and Installation Marker

MC GSU 60x15	MC GSU 60x30	MC GSU 85.4x54		
				
MC GSU 60x15 R white 3394.7 Qty. 40	MC GSU 60x30 R white 3852.7 Qty. 30	MC GSU 85.4x54 R white 3856.7 Qty. 10		
MC GSU 60x15 R white, special print 3396.7 Qty. 40	MC GSU 60x30 R white, special print 3854.7 Qty. 30	MC GSU 85.4x54 R white, special print 3858.7 Qty. 10		
MC GSU 60x15 K white 3395.7 Qty. 40	MC GSU 60x30 K white 3853.7 Qty. 30	MC GSU 85.4x54 K white 3857.7 Qty. 10		
MC GSU 60x15 K white, special print 3397.7 Qty. 40	MC GSU 60x30 K white, special print 3855.7 Qty. 30	MC GSU 85.4x54 K white, special print 3859.7 Qty. 10		
⑦ ⑧	⑦ ⑧	⑦ ⑧		
60 x 15	60 x 30	85.4 x 54		
1	1	1		
8	6	2		
PA6.6, halogen-free -40 to +105 °C	PA6.6, halogen-free -40 to +105 °C	PA6.6, halogen-free -40 to +105 °C		
V2	V2	V2		
EMS	EMS	EMS		
CCI-10	CCI-10	CCI-10		
BS-1	BS-1	BS-1		
45 5	45 5	55 5		
10 5	20 5	35 5		
Snap-on (R) All-purpose self-adhesive (K)	Snap-on (R) All-purpose self-adhesive (K)	Snap-on (R) All-purpose self-adhesive (K)		
GSU-H 60x15 3830.4 Qty. 40	GSU-H 60x30 3850.4 Qty. 30	GSU-H 85.4x54 3851.4 Qty. 10		
STR MC GSU 60x15 R 3863.0 Qty. 40	STR MC GSU 60x30 R 3864.0 Qty. 30	STR MC GSU 85.4x54 R 3865.0 Qty. 10		
Application MC GSU...K				
				

The MC GSU Device and Installation Marker

Maxicard MC GSU and holder

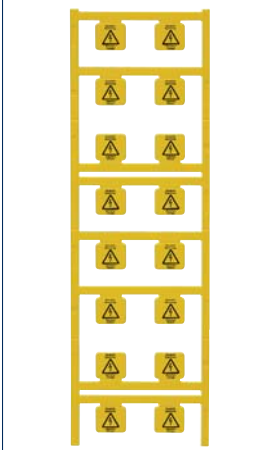
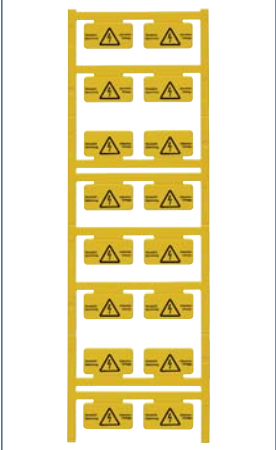
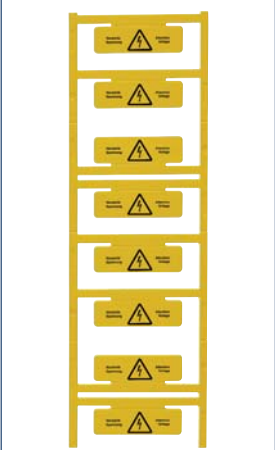
The **MC GSU** series is also available in yellow with inscription.

Two-language inscription:



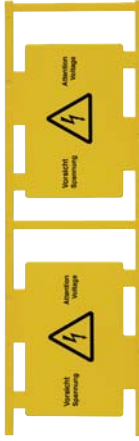
Vorsicht Spannung – Attention Voltage.

These models are also available in all six sizes, as snap-on (R) or self-adhesive (K).

Material: Polyamide 6.6, halogen-free

MC GSU 17x15 R		MC GSU 27x15 R		MC GSU 49x15 R	
					
Qty.		Qty.		Qty.	
MC GSU 17x15 R , yellow print 3872.8 80		MC GSU 27x15 R , yellow print 3874.8 80		MC GSU 49x15 R , yellow print 3876.8 40	
Type Color snap-on		Type Color self-adhesive		Type Color self-adhesive	
Cat. no. 3872.8		Cat. no. 3873.8		Cat. no. 3877.8	
Cat. no.		Cat. no.		Cat. no.	
Colors available		Colors available		Colors available	
Characteristics		Characteristics		Characteristics	
8		8		8	
Dimensions		Dimensions		Dimensions	
Dimensions (L x W), mm		17 x 15		27 x 15	
Number of markers per row		2		2	
Number of markers per card		16		16	
8		8		8	
Material		Material		Material	
PA6.6, halogen-free		PA6.6, halogen-free		PA6.6, halogen-free	
Thermal stability		-40 to +105 °C		-40 to +105 °C	
Flammability class acc. to UL 94		V2		V2	
Inscription		Inscription		Inscription	
Plotter		EMS		EMS	
Plotter inlay		CCI-10		CCI-10	
Hand marking pen		BS-1		BS-1	
Number of characters rows, font size 16, plotter pen 0.25: horizontal		-		-	
Number of characters rows, font size 16, plotter pen 0.25: vertical		-		-	
Application		Application		Application	
Assembly MC GSU...R MC GSU...K		Snap-on (R) All-purpose self-adhesive (K)		Snap-on (R) All-purpose self-adhesive (K)	
Accessories		Qty.		Qty.	
Holder GSU-H, for MC GSU		GSU-H 17x15 3827.4 80		GSU-H 27x15 3828.4 80	
Protective strips STR		STR MC GSU 17x15 R 3860.0 80		STR MC GSU 27x15 R 3861.0 80	
Cat. no.		3862.0 40		3862.0 40	
Technical data for the Maxicard and GSU-H holder Protective strips STR					
Material		Polyamide 6.6, halogen-free Hard PVC (STR)			
Flammability class		Acc. to UL 94-V2 B1 (STR)			
Colors		Refer to order information			
Delivered as		Carton/bag			
Minimum order quantity		1 standard pack			
Thermal stability		-40 to +105 °C -35 to +60 °C (STR)			

The MC GSU Device and Installation Marker

MC GSU 60x15	MC GSU 60x30	MC GSU 85.4x54		
				
Qty. MC GSU 60x15 R, yellow print 3878.8 40	Qty. MC GSU 60x30 R, yellow print 3880.8 30	Qty. MC GSU 85.4x54 R, yellow print 3882.8 10		
MC GSU 60x15 K , yellow print 3879.8 40	MC GSU 60x30 K , yellow print 3881.8 30	MC GSU 85.4x54 K , yellow print 3883.8 10		
.8	.8	.8		
60 x 15	60 x 30	85.4 x 54		
1	1	1		
8	6	2		
PA6.6, halogen-free	PA6.6, halogen-free	PA6.6, halogen-free		
-40 to +105 °C	-40 to +105 °C	-40 to +105 °C		
V2	V2	V2		
EMS	EMS	EMS		
CCI-10	CCI-10	CCI-10		
BS-1	BS-1	BS-1		
-	-	-		
Snap-on (R) All-purpose self-adhesive (K)	Snap-on (R) All-purpose self-adhesive (K)	Snap-on (R) All-purpose self-adhesive (K)		
Qty. GSU-H 60x15 3830.4 40 STR MC GSU 60x15 R 3863.0 40	Qty. GSU-H 60x30 3850.4 30 STR MC GSU 60x30 R 3864.0 30	Qty. GSU-H 85.4x54 3851.4 10 STR MC GSU 85.4x54 R 3865.0 10		

The TS-PS eco Sectional Cutter

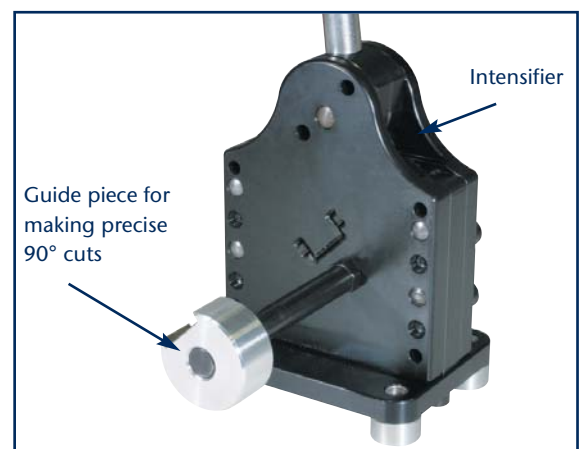
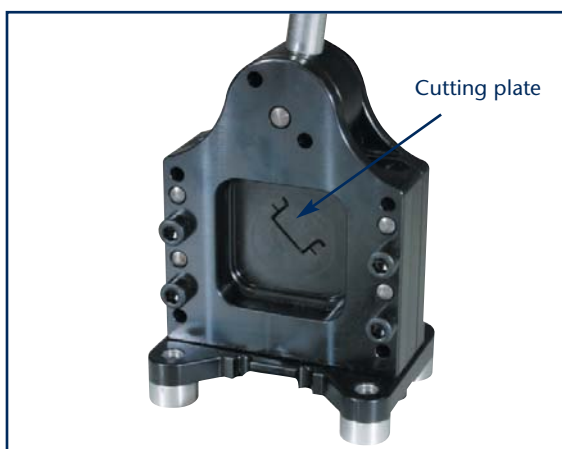
Sectional cutting tool for DIN TS-35 mounting rails

The new **TS-PS eco** sectional cutter is a manual tool developed for cutting DIN TS-35 rails into sections. The **TS-PS eco** has a quiet and quick cutting process which leaves no burrs on the rail. The result is a fine, straight cut that does not result in any bending of the rail. The tool can be attached to a work bench or mounted at a workstation. It is easy and intuitive to operate and can cut with minimal expenditure of effort. The cutting disk can be re-sharpened or easily replaced.



Features

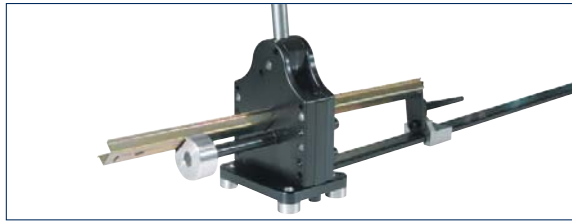
- Minimal effort
- Quick, quiet and burr-free cross-cuts
- Maintenance-free
- Versatile: with metric or inch measurement scale
- Cutting plate can be re-sharpened or easily replaced



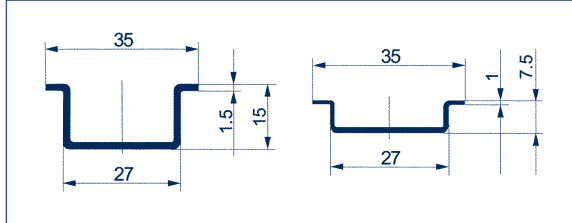
The TS-PS eco Sectional Cutter

Sectional cutting tool for DIN TS-35 mounting rails
TS 35 x 7.5 mm and TS 35 x 15 mm

TS-PS eco



Rail dimensions



Type	Qty.
Type Cat. no.	TS-PS eco 3895.0
Technical data	1
Length limit	1000 mm, metric and inch

Overview of CONTA-CLIP mounting rail products, standard TS-35 rails

TS 35	TS 35	TS 35	TS 35	TS 35	TS 35
Type TS 35x7.5 Cat. no. 2026.0 Length 2 m Unpunched steel	Type TS 35x7.5 Cat. no. 2094.0 Length 2 m Punched steel	Type TS 35x7.5 Cat. no. 2710.0 Length 2 m Unpunched aluminum	Type TS 35x7.5 Cat. no. 4562.0 Length 2 m Unpunched steel/galvanized	Type TS 35x7.5 Cat. no. 4563.0 Length 2 m Punched steel/galvanized	Type TS 35x15 Cat. no. 4564.0 Length 2 m Punched steel/galvanized
TS 35	TS 35				
Type TS 35x15 Cat. no. 2095.0 Length 2 m Punched steel	Type TS 35x15 Cat. no. 4561.0 Length 2 m Unpunched steel/galvanized				



Rails / protective earth / busbars according to DIN VDE 0611, part 3

Type	Material	Cat. no.	Short-circuit resistance mm²	Max. short-circuit current, kA	Max. allowed thermal rated current, with PEN function
TS 35 x 7.5	Steel	2026.0	16	1.92	*
TS 35 x 7.5, punched	Steel	2094.0	16	1.92	*
TS 35 x 7.5	Galv. steel	4562.0	16	1.92	*
TS 35 x 7.5, punched	Galv. steel	4563.0	16	1.92	*
TS 35 x 7.5	Aluminum	2710.0	35	4.2	105



Type	Material	Cat. no.	Short-circuit resistance mm²	Max. short-circuit current, kA	Max. allowed thermal rated current, with PEN function
TS 35 x 15	Steel	2027.0	25	3.0	*
TS 35 x 15	Galv. steel	4561.0	25	3.0	*
TS 35 x 15, punched	Galv. steel	564.0	25	3.0	*
TS 35 x 15/2.3	Steel	2038.0	50	6.0	*
TS 35 x 15/2.3, punched	Steel	2039.0	50	6.0	*

*Use of protective earth steel busbars is not permitted for PEN functionality!

CONTA-PROTECT Overtoltage Protection

Overvoltage arresters, type 2 (C)	CP V 40-1	CP VH 40-1	CP VH 40-2
<ul style="list-style-type: none"> Mount on TS 35 Screw connection Overvoltage arrester, type 2 (class C) Discharge current: I_N: 20 kA/I_{max}: 40 kA Pluggable protective elements Remote signaling (CP VH 40) Complies with IEC 61643-1 and EN61643-11 standards 			
V: high-power varistor Ft: thermal fuse C: remote signaling contact t°: thermal separator Mi: disconnect display			
Connection type	Screw connection	Screw connection	Screw connection
Size (L x W x H) with TS 35 x 7.5 mm	90 x 18 x 70	100.6 x 18 x 70	100.6 x 36 x 70
Weight g	100	108	182
Type	Qty.	Qty.	Qty.
Type Color	CP V 40-1	CP VH 40-1	CP VH 40-2
Cat. no.	16002.2	16003.2	16004.2
Arrester Class	1	1	1
Technical data	Type 2 class C	Type 2 class C	Type 2 class C
Rated voltage U_N V AC	230/400	230/400	230/400
Max. continuous voltage (U_C) V AC	280	280	280
Rated frequency (f_N) Hz	50-60	50-60	50-60
Rated discharge current (8/20) μ s (I_N) kA	20	20	40
Max. discharge current (8/20) μ s (I_{max}) kA	40	40	80
Protection level (U_p) kV	< 1.25	< 1.25	< 1.25
Residual voltage (U_{res}) kV	< 0.5	< 0.5	< 0.5
Operating current (I_C) mA	< 1	< 1	< 1
Follow-on current (I_f) kA	none	none	none
Follow-on current suppression capability (I_{ff}) kA	infinite	infinite	infinite
Response time (t_A) ns	< 25	< 25	< 25
TOV voltage L-N (U_T) V/5 sec	340	340	340
TOV voltage N-PE (U_T) V/200 ms/300 A	-	-	-
Short-circuit resistance (I_p) kA	25	25	25
Max. series fuse (g_I/g_G) A	125	125	125
Malfunction display	Mechanical, red	Mechanical, red	Mechanical, red
Temperature range	-40 to +85 °C	-40 to +85 °C	-40 to +85 °C
Connection cross-section, mm²	4-25	4-25	4-25
Protection	IP20	IP20	IP20
Rail assembly	TS 35	TS 35	TS 35
Installation dimensions, TE	1	1	1
Housing material	Thermoplastic PEI UL-94-5VA	Thermoplastic PEI UL-94-5VA	Thermoplastic PEI UL-94-5VA
Testing standards			
DIN EN 61643-11, Germany	Type 2	Type 2	Type 2
IEC 61643-1, International	SPD Class II	SPD Class II	SPD Class II
EN 61643-11, Europe	SPD Class II	SPD Class II	SPD Class II
UL1449 ed.2, USA	TVSS	TVSS	TVSS
Type of network			
	TNC, TNS, TT	TNC, TNS, TT	For TN systems (2+0)
Remote signaling			
Remote signaling	-	Potential-free CO contact	Potential-free CO contact
Switching capacity	-	250 V / 0.5 A (AC) 30 V / 2 A (DC)	250 V / 0.5 A (AC) 30 V / 2 A (DC)
Connection cross-section	-	Max. 1.5 mm²	Max. 1.5 mm²
Accessories	Qty.	Qty.	Qty.
Replacement plug, L-N	CP V 40-S	CP V 40-S	CP V 40-S
Cat. no.	16007.2	16007.2	16007.2
Replacement plug, N-PE	1	1	1
Cat. no.			
Earth bridges, CP E	CP E-2		
Cat. no.	6865.0		
Earth bridges, CP E	CP E-3		
Cat. no.	6866.0		
Earth bridges, CP E	CP E-4		
Cat. no.	6867.0		

CONTA-PROTECT Overtoltage Protection

CP VH 40-4-TN	CP VH 40-4-TT			
				
Screw connection 100.6 x 72 x 70 323	Screw connection 100.6 x 72 x 70 323			
Qty.	Qty.			
CP VH 40-4-TN 16005.2 1	CP VH 40-4-TT 16006.2 1			
Type 2 class C	Type 2 class C			
230/400	230/400			
280	280			
50-60	50-60			
80	80			
160	150			
< 1.25	< 1.25			
< 0.5	< 0.5			
< 1	< 1			
none	none			
infinite	infinite			
< 25	< 25			
340	340			
-	1200			
25	25			
125	125			
Mechanical, red	Mechanical, red			
-40 to +85 °C	-40 to +85 °C			
4-25	4-25			
IP20	IP20			
TS 35	TS 35			
1	1			
Thermoplastic PEI UL-94-5VA	Thermoplastic PEI UL-94-5VA			
Type 2	Type 2			
SPD Class II	SPD Class II			
SPD Class II	SPD Class II			
TVSS	TVSS			
For TN-S systems (4+0)	For TT systems (3+1)			
Potential-free CO contact	Potential-free CO contact			
250 V / 0.5 A (AC) 30 V / 2 A (DC)	250 V / 0.5 A (AC) 30 V / 2 A (DC)			
Max. 1.5 mm²	Max. 1.5 mm²			
Qty.	Qty.			
CP V 40-S 16007.2 1	CP V 40-S 16007.2 1			
	CP V 40-S-N-PE 16008.2 1			

The CMS-BS100 Multi-function Converter Units

The CMS-BS100 is a multi-function signal conversion unit featuring multiple inputs and outputs. It can convert analog voltage, current, RTD and digital signals into analog or digital outputs. Several of the most helpful functions are already programmed into the standard unit.

The CMS-BS 100 can also be programmed for customer-specific conversion tasks at any time. Thanks to the variety of inputs and outputs, a variety of different functions can be programmed. The measurement inputs as well as the analog and digital outputs can be combined in any way needed.

The analog and digital inputs and outputs can be linked as required within the following ranges:

Input

U = 0 to 60 V
I = 0 to 1 A

Output

U = 0 to 11 V
I = 0 to 22 mA

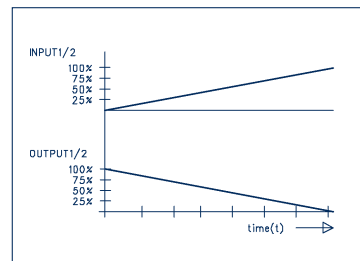
Programmed standard functions for the CMS-BS100:

Analog functions

for 2 similar signals, voltages 0-1 V, 0-10 V or currents 0(4)-20 mA

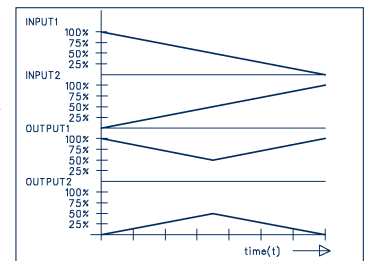
• Analog inverter

The output delivers the inverted input signal.



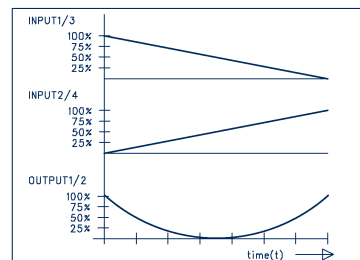
• Highest or lowest input

The output always takes the value of the highest or lowest input.



• Differentiator

The absolute difference between the inputs



• Signal duplication

Input signal on two separate outputs

• RTD (Ni1000, PT1000) set-point transmitter

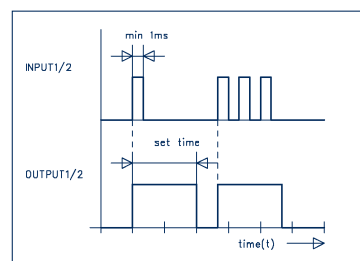
• 4 potentiometer on analog output signals

minimal resistance Rpot with 1 potentiometer 1 kOhm with 2 potentiometers 2 kOhm

Analog/digital functionality

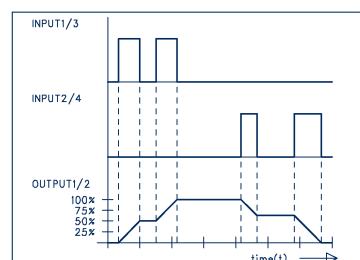
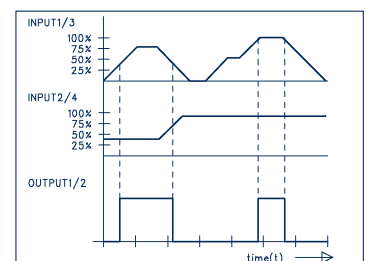
• Pulse extension

Output pulse
1s / 2s / 3s / 4s
selectable



• Threshold value for analog to digital

Output 1/2 is switched when input 1>2 and 3>4



• Up / Down dimmer

As soon as input 1 is switched (24 V DC), the output voltage increases to a maximum value of 10 V DC. As soon as input 2 is switched (24 V DC), the output voltage decreases to a minimum value of 0 V. If no input is switched (0 V DC), the output voltage remains stable. The rise and fall of the output voltage takes place after a pre-set linear rate, ranging from 5 seconds to 30 minutes. Inputs 3/4 and output 3 have the same functionality.

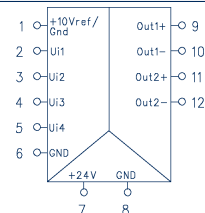
The CMS-BS100 Multi-function Converter Units

- Mount on TS 35
- Compact design, width: 17.5 mm
- Pluggable screw connection
- 4 multi-function analog/digital inputs
- 2 multi-function analog/digital outputs
- Many standard functions are pre-programmed
- Input and output ranges are adjustable via DIP switch
- Particularly well suited for customized applications
- 24 V DC power supply

CMS-BS100



Circuit diagram



Type Cat. no.	CMS-BS100 15963.2	Qty. 1
Size (L x W x H) with TS 35 x 7.5 mm	99 x 17.5 x 114.5	
Weight g	120	
General information		
EMC specifications	EN 55011 / EN 61326-1	
Electromagnetic properties	In compliance with the EMC Directive 2001/108/EC	
Protection class	IP 20	
Operating temperature	-20 to +55 °C	
Connection type	Pluggable Screw connection	
Connection cross-section, mm ²	0.2-2.5	
Screw connection	AWG 22-14	
Stripping length, mm	7	
Power supply, V DC	24 (±20%)	
Current consumption, mA	approx. 25	
Conversion errors	< 0.5% full scale range	
Linearity errors	< 0.5% full scale range	
Reaction time, ms	100	
Temperature coefficient	< 0.02% / K	
Input data		
4 multi-function analog/dig. inputs	0..1 V / 0..10 V / 0(4)..20 mA / RTD / 24 V DC (10..30 V)	
Input resistance, (U) kOhm	200	
Input resistance, (I) Ohm	200	
Resolution (U/I) bit	10 (10 mV / 20 µA)	
Configuration resistance (PT/Ni1000)	Type: plug-in(Rt) 18K2-0.1% (non included), Temperature range: -20 to +140 °C	
Resolution (PT1000 / Ni1000) bit	8 (0.6 °C / 0.5 °C)	
Reference output voltage for RTD, V	10	
Output data		
2 multi-function analog/dig. outputs	Output type can be selected with jumper	
Analog outputs	0..10 V DC or 0(4)..20 mA, short-circuit and overvoltage (24 V AC/DC) protected	
Load resistance U / I	U: > 1 kOhm I: < 500 Ohm	
Offset U / I	< 10 mV / 20 µA	
Digital outputs	Opto-coupler transistor outputs	
Max. output current mA	100	
Output voltage V DC	5..40	

The CML-UI-UI-G Voltage and Current Converter Unit

With galvanic isolation

CONTA-CLIP has expanded its **CML** 6.2-mm series with the new **CML-UI-UI-G** unit. This voltage and current converter unit is designed for standard signals and features three-way electrical isolation between the input, output and supply voltage. The various combinations between the input and output ranges can be set using the DIP switches on the housing. After this, no external calibration of the unit is required. The three-way galvanic isolation – separating the input, output and supply voltage – enables this unit to be used both locally with measuring devices and also with large, complex control systems (in systems engineering).

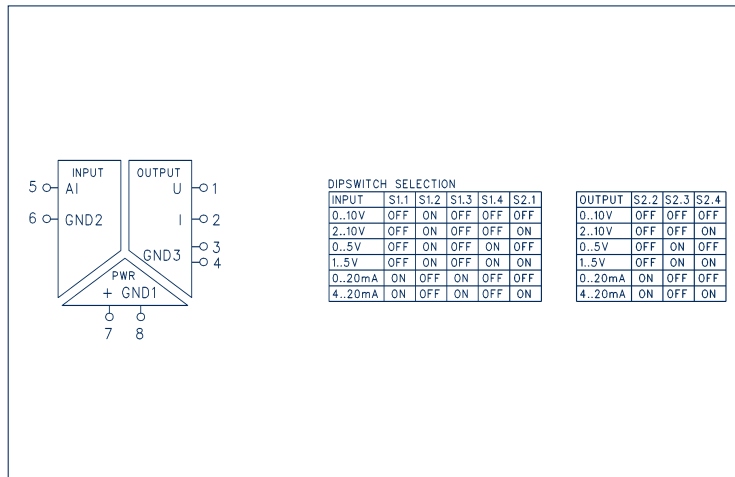


Table of functions for the CML-UI-UI-G

Input I	Output U				I	
	0...5 V	1...5 V	0...10 V	2...10 V	0-20 mA	4-20 mA
U	x	x	x	x	x	x
0...5 V	x	x	x	x	x	x
1...5 V	x	x	x	x	x	x
0...10 V	x	x	x	x	x	x
1...10 V	x	x	x	x	x	x
I						
0-20 mA	x	x	x	x	x	x
4-20 mA	x	x	x	x	x	x

The CML-UI-UI-G Voltage and Current Converter Unit

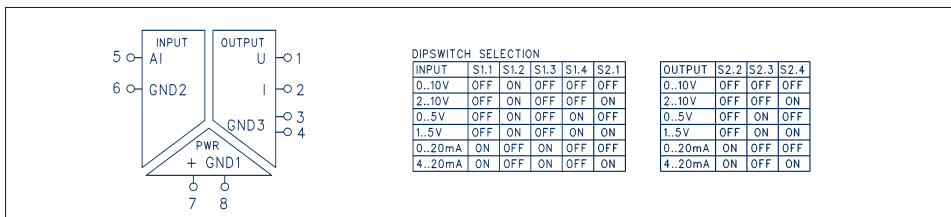
With galvanic isolation

- Mounts on TS 35
- Compact design, width: 6.2 mm
- Screw connection
- Three-way galvanic isolation between the input, output and supply voltage
- Input: 0..10 V, 2..10 V, 0..5 V, 1..5 V
0..20 mA, 4..20 mA
- Output: 0..10 V, 2..10 V, 0..5 V, 1..5 V
0..20 mA, 4..20 mA
- Input and output signals are adjustable via DIP switch
- No external calibration required
- Other designs available upon request

CML-UI-UI-G



Circuit diagram



Type Cat. no.	CML-UI-UI-G 15903.2	Qty. 1
Size (L x W x H) with TS 35 x 7.5 mm	93.1 x 6.2 x 102.5	
Weight, g	66	
General information		
EMC specifications	EN 55011 / EN 61326-1	
Electromagnetic properties	In compliance with the EMC Directive 2001/108/EC	
Protection class	IP 20	
Operating temperature	-20 to +55 °C	
Connection type	Screw connection	
Connection cross-section, mm ²	0.2-2.5	
Screw connection	AWG 22-14	
Stripping length, mm	12	
Power supply, V DC	24 (±10%)	
Current consumption, mA	45 @ no load	
Transmission errors	< 0.2% of end value	
Conversion errors	< 0.2% of end value	
Temperature coefficient	< 0.02% / K	
Insulation voltage (power supply / signal)	1 kV, 50 Hz, 1 min	
Insulation voltage (input / output)	1 kV, 50 Hz, 1 min	
Frequency limit (-3dB) Hz	10	
Input data		
Input signals (adjustable via DIP switch)	0(2) to 10 V / 0(1) to 5 V / 0(4) to 20 mA (default setting: 0 to 10 V)	
Max. input signal	20 V, 20 V, 40 mA	
Input resistance	>50 kOhm/ >50 kOhm / 50 Ohm	
Output data		
Voltage output signal (adjustable via DIP switch)	0(2) to 10 V / 0(1) to 5 V (default setting: 0 to 10 V)	
Max. voltage output signal, V	approx. 10.5	
Load resistance, kOhm	> 1	
Max. offset, U mV	20	
Current outputs (adjustable via DIP switch), mA	0 to 20 or 4 to 20	
Max. output current, mA	approx. 21	
Load resistance, kOhm	< 500	
Max. offset, µA	40	

The PFBZ PCB Plug-In Connector with Pressure-Spring Connection System

In 3.81-mm pitch

The **CONTA-CON** connector system line from **CONTA-CLIP** offers a wide-ranging line of pluggable connectors for your PCB applications. Thanks to the diverse range of different models, the **CONTA-CON** line of connectors comes with many possible connection methods.

The **CONTA-CON** connector system consists mainly of two parts: a terminal (male pin header) fixed to the PCB and a pluggable female socket block. The following connection methods are available for the socket block: wire-protection, strain-relief clamp, tension spring, leg spring, and eccentric-top. Plug-in connectors from **CONTA-CON** cover an extensive range of products and offer a wide variety of combination possibilities. The socket blocks are plug-compatible with all terminals of the same pitch. This product line features outstanding ease of use as well as

adjacent alignment and coding without loss of poles. The terminals are available with open or closed side walls, as single-level or double level, with a horizontal or vertical connection angle, and with or without screw flange. Accessories include coding rings, individual terminal-point covers, sealing plugs per terminal contact and labeling systems. Additional information can be found in our new **CONTA-CON** PCB Connectors Catalog, now available in German, English, Italian, French and Russian.

Detailed Characteristics

PFBZ 4551/.../3.81-(F)KD

Our new products include the **PFBZ 4551** PCB plug-in connector in 3.81-mm pitch, featuring a direct-insert connection method with a modern, innovative design. The connector is plug compatible with all terminal pin headers in the **STL 1550**, **STL1570** and **STL1590** series. An integrated push-blade makes connecting and disconnecting wires easy and quick.

The additional per-contact test point allows you to test the connection safely. The **PFBZ 4551** is available in 2-16-pole versions and also in flanged versions.

Our benefits

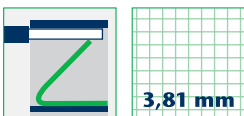
- A design which is modern, innovative and functional
- Versions ranging from 2 to 16 poles
- Direct-insert connection method saves time
- Push-blade feature allows wires to be disconnected without problems
- Easy-to-reach test point
- Compatible with the **STL 1550**, **STL1570** and **STL1590** terminal pin header lines
- Also available as flanged version
- Available on request as a **PFBZ 4561**, with 180°-rotated mating profile



Application areas

- Control systems
- Household systems and home automation
- Housing control technology
- Locking technology
- Telecommunications
- Bus technology

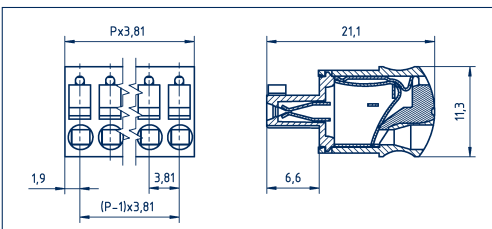
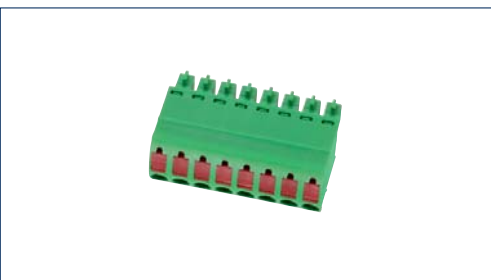
PCB plug-in connectors Female socket block



Standard version is also available on request as a **PFBZ 4561**, with 180°-rotated mating profile

Drawings

PFBZ 4551/.../3.81-KD



Leg spring

3.81

7

—

1.5

1

1



300

160

10

10 (T60)

26-14

1.5

26-16

1.5

2.5

—

3

Connection type

Dimensions

Pitch, mm

Stripping length, mm

Drill hole diameter, mm

Cross-section

Single wire (solid), mm²

Flexible, mm²

Flexible (with ferrule), mm²

Ratings

Rated voltage, V

Rated current, A

Wire size, solid, AWG/mm²

Wire size, flexible, AWG/mm²

Rated surge voltage, kV

Torque / screw size

Contamination degree

Material

Insulation material / Flamm. class

Temperature range

Clamping element

Clamping cage / cam

Contact pin

Spring

Wire protection

Soldering lug

Contact spring

Order information

Standard color(s)

(Other colors on request)

PA 6.6 V0 / UL 94 V0

-30 to +105 °C

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Stainless steel

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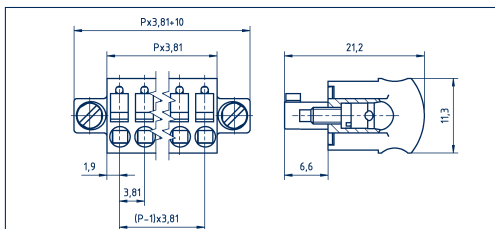
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PFBZ 4551/.../3.81-FKD



Leg spring

3.81

7

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1.5

1

1



300

160

10

10 (T60)

26-14

1.5

26-16

1.5

2.5

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3

PA 6.6 V0 / UL 94 V0

-30 to +105 °C

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Stainless steel

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No. of poles	Cat. No.	Qty.
	green	
	(Ral 6018)	
2	14000.1	50
3	14001.1	50
4	14002.1	50
5	14003.1	50
6	14004.1	50
7	14005.1	50
8	14006.1	50
9	14007.1	50
10	14008.1	50
11	14009.1	50
12	14010.1	50
13	14011.1	50
14	14012.1	50
15	14013.1	50
16	14014.1	50

No. of poles	Cat. No.	Qty.
	green	
	(Ral 6018)	
2	14015.1	50
3	14016.1	50
4	14017.1	50
5	14018.1	50
6	14019.1	50
7	14020.1	50
8	14021.1	50
9	14022.1	50
10	14023.1	50
11	14024.1	50
12	14025.1	50
13	14026.1	50
14	14027.1	50
15	14028.1	50
16	14029.1	50

Notes

Notes