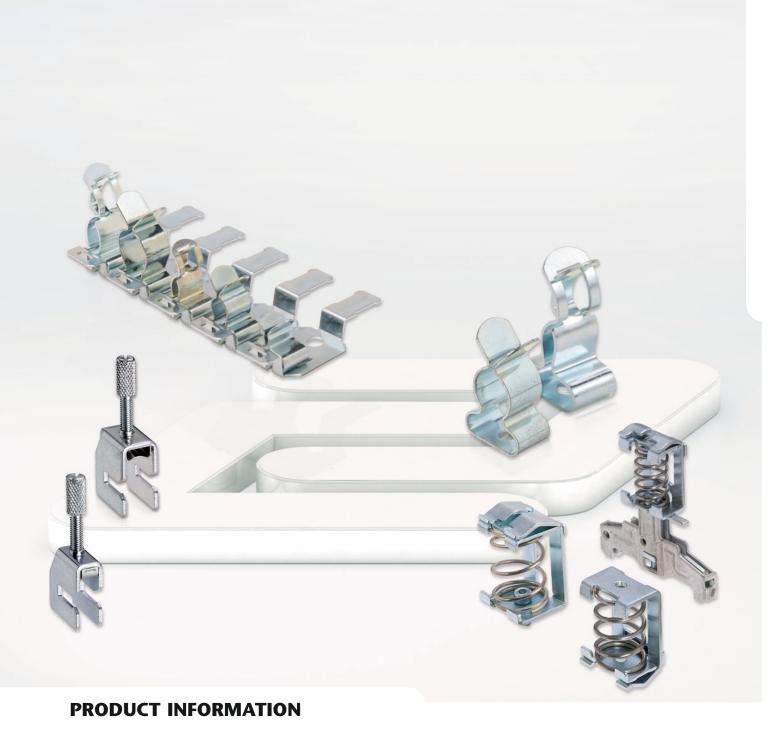


# SHIELD-CONNECTION CLIPS SAB



#### **Shield-connection clips SAB**

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In the field of industrial process engineering, a high degree of interference immunity is required of electrical equipment. This is a critical factor affecting the availability of industrial measurement and control systems.

When constructing low-interference systems, both the cable shielding and the shielded ground are very important. The juncture 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 SAB/SSAB** shielding systems represent one of the most comprehensive portfolios on the market. They offer a perfect solution for any application.

#### Description of the SABK shield-connection bracket system

#### Tool-free installation with the CONTA-CLIP SABK system

When working with **CONTA-CLIP** holders for direct, DIN rail or busbar installations, no tools are required to mount the corresponding shield-connection bracket. The shield-connection brackets are available in various sizes with a clamping range from 1.5 to 18 mm. Only a small screwdriver is required for the disassembly.

#### The advantages

- Spring exerts continuous contact force on the cable shield
- Surface coating is highly conductive
- Large-area shield contact guarantees low-ohm resistance, even at high frequencies

#### Mounting the shield connection bracket in the CONTA-CLIP system







2. Snap in

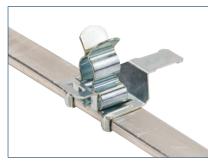


3. Removal

#### Installation steps for mounting the CONTA-CLIP SABK on 10x3 mm busbars



1. Slide on the mounting foot



2. Snap on your SABK



3. Press in the cable shield



4. Attach the cable tie for strain relief

#### The advantages

- Universally suitable for DIN rail, busbar or direct-mount installations
- Tool-free installation
- Available in various sizes of shieldconnection brackets
- Excellent flexibility
- Reduction/optimization of product types leads to reduced costs

#### **Shield-connection bracket SABK**

#### **Product description**

The stripped cable is easily pushed into the **SABK** shield-connection bracket. The spring force in the bracket then ensures that the shield has a consistently good contact. The large contact areas ensure excellent dissipation of interference current.

The **SABK** can be used with the mounting feet for various mounting platforms (e.g. on DIN rail, busbar, or for direct installation). The **SABK** for the proper shield diameter is mounted by simply clipping it on (no tools required).

#### The advantages

- Spring exerts continuous contact force on the cable shield
- High conductivity
- Very good dissipation of high-frequency interference current
- No tools required: all sizes can be snapped onto the various mounting feet





#### **Shield-connection bracket**

Туре	Cat. no.	Cable diameter	Qty.	Material	
SABK 3	17970.0	1.5 – 3 mm	50	Steel	
SABK 6	17971.0	3 – 6 mm	50	Steel	
SABK 8	17972.0	6 – 8 mm	50	Steel	
SABK 11	17973.0	8 – 11 mm	50	Steel	
SABK 16	17974.0	11 – 16 mm	50	Steel	

Accessories	Cat. no.	Qty.
Mounting foot for direct installation	MF/D/Z M4	
Cat. no.	17977.0	10
Mounting foot for DIN rail installation	MF-SABK/35/Z	
Cat. no.	17978.0	10
Mounting for busbar installation	MF-SABK/SSCH/Z	
Cat. no.	17979.0	10

4

#### **Product description**

The **SABKM** Multi shield-connection bracket differs from conventional shielding brackets because of its two specially shaped bracket legs. These legs produce force on both sides so that a very large cable clamping range is attained. The stripped cable is easily pushed into the **SABK** Multi. The spring force in the bracket then ensures that the shield has a consistently good contact. The large contact surfaces ensure that any interference current is reliably dissipated.

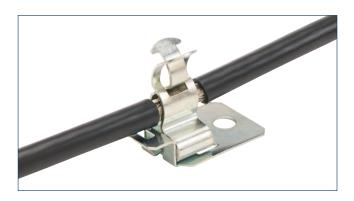
The **SABKM** Multi can be used with the mounting feet for various mounting platforms (e.g. on DIN rail, busbar, or for direct installation). The **SABKM** Multi for the proper shield diameter is mounted by simply clipping it on (no tools required).

#### The advantages

- Large clamping range: therefore less individual parts
- Spring force provides consistently good contact to the cable shield
- High conductivity
- Very good dissipation of high-frequency interference current
- No tools required: all sizes can be snapped onto the various mounting feet







#### **Shield-connection brackets Multi**

Туре	Cat. no.	Cable diameter	Qty.	Material	
SABKM 12	17975.0	3 – 12 mm	50	Steel	
SABKM 18	17976.0	7 – 18 mm	50	Steel	

Accessories	Cat. no.	Qty.
Mounting foot for direct installation	MF/D/Z M4	
Cat. no.	17977.0	10
Mounting foot for DIN rail installation	MF-SABK/35/Z	
Cat. no.	17978.0	10
Mounting for busbar installation	MF-SABK/SSCH/Z	
Cat. no.	17979.0	10

#### Mounting foot for direct installation MF/D/Z

#### **Product description**

The mounting foot for the shield-connection bracket is used as a universal holder for the **SABK** / **SABKM**, for clamping diameters from 1.5 to 18 mm. It can be installed directly (e.g. screwed directly onto a mounting plate). The properly sized shield-connection bracket is then snapped on and the cable shield is pushed in.

#### The advantages

- Direct mounting with M4 or M5 screw
- Universal holder for SABK / SABKM, with cable clamping range from 1.5 to 18 mm
- Variable assembly options leads to less product types
- Less parts in your warehouse
- Very compact construction
- Cable tie can be used for strain relief





#### Mounting foot for direct installation

Туре	Cat. no.	Qty.	Material
MF/D/Z M4	17977.0	10	Steel

## Shield-connection bracket Multi on mounting foot for direct installation SABKM.../D M4

#### **Product description**

The **Multi** shield-connection clamp can be installed directly (e.g. screwed directly onto a mounting plate). The cable shield must only be pressed into the **SABKM** in order to establish a reliable contact. The strain relief bracket can be used with a cable tie to relieve strain at the cable sheath.

#### The advantages

- Direct mounting with M4 or M5 screw
- Very compact construction
- Reduced product types when the Multi shield-connection bracket is used
- Cable tie can be used for strain relief





#### Shield-connection bracket Multi on mounting foot for direct installation

Туре	Cat. no.	Cable diameter	Qty.	Material
SABKM 12/D M4	17984.0	3 – 12 mm	10	Steel
SARKM 18/D M4	17985.0	7 _ 18 mm	10	Steel

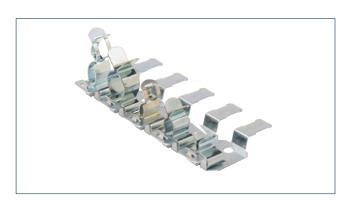
#### Row-mounted foot for direct installation RMF /D/Z M4

#### **Product description**

The row-mounted foot for direct installation is a universal holder for up to 12 shield-connection brackets, for cable clamping diameters from 1.5 to 18 mm. The row-mounted foot can be shortened to the desired length by breaking it at one of its breakage points. Either screws or rivets can be used to secure it in position.

#### The advantages

- Up to 12 cable shields can be attached to a single rowmounted foot.
- Space-saving installation on the mounting plate
- Universal holder for SABK / SABKM, with variable cable clamping range from 1.5 to 18 mm
- Breakage points permit versatile customization for your required number of cables.
- Less parts in your warehouse
- Very compact construction
- Cable tie can be used for strain relief





#### **Mounting foot for direct installation**

Туре	Cat. no.	Qty.	Material
RMF/D/Z M4	17986.0	1	Steel

#### Mounting foot for busbar installation MF-SABK

#### **Product description**

The mounting foot for installing on a busbar is used as a universal holder for the shield-connection brackets, for cable diameters from 1.5 to 18 mm.

Simply snap it onto a  $10 \times 3$  mm busbar. The properly sized shield-connection bracket is then snapped on and the cable shield is pushed in.

#### The advantages

- Tool-free mounting onto 10 x 3 mm busbars
- For shield-connection brackets with a 1.5 18 mm clamping range
- Variable assembly options leads to less product types
- Less parts in your warehouse
- Very compact construction
- Cable tie can be used for strain relief





#### Mounting for busbar installation

### Shield-connection bracket Multi on mounting foot for busbars .../SSCH/Z

#### **Product description**

The shield-connection clamp Multi (on mounting foot) can be snapped onto a  $10 \times 3$  mm busbar without using any tools. The cable shield must only be pressed into the Multi shield-connection bracket in order to establish a reliable contact. The strain relief bracket can be used with a cable tie to relieve strain.

#### The advantages

- Tool-free installation onto 10 x 3 mm busbars
- Extremely compact construction
- Cable tie can be used for strain relief





#### Shield-connection bracket Multi on mounting foot for busbars

Туре	Cat. no.	Cable diameter	Qty.	Material	
SABKM 12/SSCH/Z	17982.0	3 – 12 mm	10	Steel	
SABKM 18/SSCH/Z	17983.0	7 – 18 mm	10	Steel	

#### Mounting foot for DIN rail installation MF-SABK

#### **Product description**

The mounting foot **MF-SABK/35/Z** (for 35 mm DIN rails) is used as a universal holder for the shield-connection brackets, for cable clamping diameters from 1.5 to 18 mm. Simply snap the mounting foot on the DIN rail. The properly sized shield-connection bracket is then snapped on and the cable shield is pushed in to the shield-connection bracket. A cable tie can be used with the strain relief clamp variants to provide strain relief.

#### The advantages

- Tool-free mounting on a 35 mm DIN rail
- Universal holder for SABK / SABKM, with cable clamping range from 1.5 to 18 mm
- Variable assembly options leads to less product types
- Less parts in your warehouse
- Cable tie can be used for strain relief





#### Mounting foot for DIN rail installation

Туре	Cat. no.	Qty.	Material	
MF-SABK/35/Z	17978.0	10	Steel	

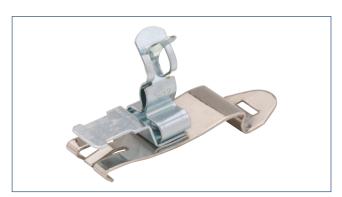
### Shield-connection bracket Multi on mounting foot for T\$35 SABKM

#### **Product description**

The shield-connection bracket Multi (on mounting foot) can be snapped onto a 35 mm DIN rail without using any tools. The cable shield must only be pressed into the Multi shield-connection bracket in order to establish a reliable contact. The strain relief clip can be used with a cable tie to relieve strain.

#### The advantages

- Simple tool-free installation
- Spring force provides consistently good contact to the cable shield
- Very good dissipation of high-frequency interference current
- Cable tie can be used for strain relief





#### **Shield-connection bracket Multi on mounting foot for TS35**

Туре	Cat. no.	Cable diameter	Qty.	Material	
SABKM 12/MF/35/Z	17980.0	3 – 12 mm	10	Steel	
SABKM 18/MF/35/Z	17981.0	7 – 18 mm	10	Steel	

#### **Shield-connection clip SSAB**

#### **Product description**

The **SSAB** can be mounted on a busbar. After wiring the terminal block, the shield-connection clip is mounted by simply swivelling 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 should be used. These mechanically connect the front busbar with the DIN rail (support).

The **SH1** busbar supports are used where a shield-connection system must be mounted directly onto a panel rather than a DIN rail. The  $10 \times 3$  busbars can be easily and quickly snapped on to these supports. In both cases, the contact with the earth or ground potential can be established with a ZB clamping yoke.



- Screw-on clip for simple retrofitting
- Knurled thumb screw, so no tools required
- Easy to work with
- Large shield surface
- Secure contact





#### **Shield-connection clip SSAB**

Туре	Cat. no.	Cable diameter	Torque	Qty.	Material
SSAB 5	3694.0	2 – 5 mm	0.4	10	Steel
SSAB 8	3695.0	3 – 8 mm	0.6	10	Steel
SSAB 14	3696.0	3 – 14 mm	0.8	10	Steel
SSAB 20	3697.0	3 – 20 mm	0.8	10	Steel
SSAB 28	3698.0	5 – 28 mm	0.8	10	Steel
SSAB 35	3699.0	20 – 35 mm	1.8	10	Steel

#### **Product description**

The **SAB** can be mounted on a busbar. After connecting the wiring, the shield-connection clip is mounted by simply swivelling in the **SAB** clip onto the busbar. The force on the cable comes from a spring-pressure piece. This regulated pressure ensures a constant optimal contact. This makes the **SAB** shield-connection clip very convenient to wire. Depending on the length of the terminal blocks, two or more **SH/SAB** busbar supports should be used. These mechanically connect the front busbar with the DIN rail (support).

The **SH1** busbar supports are used where a shield-connection system must be mounted directly onto a panel rather than a DIN rail. The  $10 \times 3$  busbars can be easily and quickly snapped on to these supports. In both cases, the contact with the earth or ground potential can be established with a **ZB** clamping yoke.



- Quick snap-on or mounting of the shield-connection clip
- Different cable cross-sections can be accommodated by the elastic nature of the spring
- Easy to work with





#### **Shield-connection clip SAB**

Туре	Cat. no.	Cable diameter	Qty.	Material	
SAB 8	1527.0	3 – 8 mm	10	Steel	
SAB 13.5	1528.0	4 – 13.5 mm	10	Steel	
SAB 20	1529.0	10 – 20 mm	10	Steel	
SAB 32	17360.0	15 – 32 mm	10	Steel	

Accessories	Туре	Cat. no.	Qty.	
Mounting foot for direct installation	MF/D/Z M4	17977.0	10	
Mounting foot for DIN rail installation	MF-SABK/35/Z	17978.0	10	
Mounting for busbar installation	MF-SABK/SSCH/Z	17979.0	10	
Busbar support SH	SH 1 BG	2318.2	1	
Busbar support SH SAB BG	SH SAB BG	1530.2	1	
Busbar Ssch/MS	Ssch 10x3 MS	2128.0	1m	
Busbar Ssch/CU	Ssch 10x3 CU	2129.0	1m	
End stop ES	ES 35/K/ST BG	2828.0	50	
ZB without cap	ZB 4	2138.0	50	
ZB cap GNYE	ZB 4/K GNYE	2483.1	50	
Mounting screw BS, for the SH 1 BG	BS M 4x8	2262.0	20	
Mounting screw BS, for 2 x SH 1 BG	BS M 4x30	2123.0	50	
Threaded plate	GWP M4	2263.0	100	
Mounting foot	MF/35 M4	2606.0	20	

#### **Shield-connection clip SAB...D**

#### **Product description**

**The SAB...**/**D** can be mounted directly. The force on the cable comes from a spring-pressure piece. This regulated pressure ensures a constant optimal contact. The **SAB...**/**D** can be installed with an M4 screw (included in delivery) directly to the mounting plate.

The **SAB 8/D M5** shield-connection clip comes with a special feature; it is equipped with a self-cutting M5 SW3 metal screw. As a result, less time is required to mount the clip on the mounting plate, since you only need to drill one 4.2-mm hole through the plate. The hole threads will then be cut into the plate by the screw.

#### The advantages

- Quick snap-on or mounting of the shield-connection clip
- Different cable cross-sections can be accommodated by the elastic nature of the spring
- Easy to work with





#### **Shield-connection clip SAB...D**

Туре	Cat. no.	Cable diameter	Qty.	Material	
SAB 8/D	1549.0	3 – 8 mm	10	Steel	
SAB 8/D/M5	1526.0	3 – 8 mm	10	Steel	
SAB 13,5/D	1550.0	4 – 13.5 mm	10	Steel	
SAB 13.5/D/M5	17345.0	4 – 13.5 mm	10	Steel	
SAB 20/D	1551.0	10 – 20 mm	10	Steel	
SAB 20/D/M5	17346.0	10 – 20 mm	10	Steel	
SAB 32/D	17361.0	15 – 32 mm	10	Steel	
SAB 32/D/M5	17347.0	15 – 32 mm	10	Steel	

Accessories	Cat. no.	Qty.
Threaded plate	GWP M4	
Cat. no.	2263.0	100
Mounting foot	MF/35 M4	
Cat. no.	2606.0	20

### **Shield-connection clip SAB...GWP**

#### **Product description**

The **SAB../GWP** can be mounted on a C rail. The **SAB... / GWP** is attached to the threaded plate with an Allen (hex socket) screw. The force on the cable comes from a spring-pressure piece. This regulated pressure ensures a constant optimal contact with the DIN rail.

#### The advantages

- Quick snap-on or mounting of the shield-connection clip
- Different cable cross-sections can be accommodated by the elastic nature of the spring
- Easy to work with





#### **Shield-connection clip SAB...GWP**

Туре	Cat. no.	Cable diameter	Qty.	Material
SAB 8/GWP	17356.0	3 – 8 mm	10	Steel
SAB 13.5/GWP	17357.0	4 – 13.5 mm	10	Steel
SAB 20/GWP	17358.0	10 – 20 mm	10	Steel
SAB 32/GWP	17359.0	15 – 32 mm	10	Steel

#### **Shield-connection clip SAB...F**

#### **Product description**

The **SAB../F** can be mounted on a DIN rail. The force on the cable comes from a spring-pressure piece. This regulated pressure ensures a constant optimal contact. The **SAB../F** can be mounted directly to the **TS 35** rail using the clamping foot and a mounting screw.

#### The advantages

- Quick snap-on or mounting of the shield-connection clip
- Different cable cross-sections can be accommodated by the elastic nature of the spring
- Easy to work with





#### **Shield-connection clip SAB...F**

Туре	Cat. no.	Cable diameter	Qty.	Material
SAB 8/F	1571.0	3 – 8 mm	10	Steel
SAB 13,5/F	1572.0	4 – 13.5 mm	10	Steel
SAB 20/F	1573.0	10 – 20 mm	10	Steel

#### **Shield-connection clip SAB...MF**

#### **Product description**

The **SAB.../MF/35** can be installed on a DIN rail. The **SAB.../MF/35** is snapped on directly via the internal-spring **MF/35** foot without using any tools. The force on the cable comes from a spring-pressure piece. This regulated pressure ensures a constant optimal contact with the DIN rail.

#### The advantages

- Quick snap-on or mounting of the shield-connection clip
- Different cable cross-sections can be accommodated by the elastic nature of the spring
- Easy to work with
- /S version can be rotated and fixed in position using the fastening screw





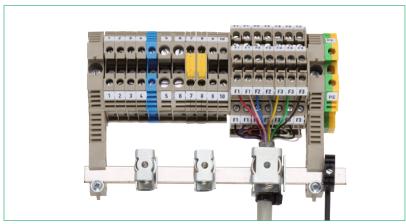
#### **Shield-connection clip SAB...MF**

Туре	Cat. no.	Cable diameter	Qty.	Material	Connection of clip to foot
SAB 8/MF/35	17038.0	3 – 8 mm	10	Steel	Rivet
SAB 8/MF/35/S	17340.0	3 – 8 mm	10	Steel	Screw
SAB 13.5/MF/35	17039.0	4 – 13,5 mm	10	Steel	Rivet
SAB 13.5/MF/35/S	17341.0	4 – 13,5 mm	10	Steel	Screw
SAB 20/MF/35	17040.0	10 – 20 mm	10	Steel	Rivet
SAB 20/MF/35/S	17342.0	10 – 20 mm	10	Steel	Screw
SAB 32/MF/35	17363.0	15 – 32 mm	10	Steel	Rivet
SAB 32/MF/35/S	17343.0	15 – 32 mm	10	Steel	Screw

#### **Busbar support**

#### SH 1 SH SAB ES 35/K/ST **Busbar support** • Busbar support • Housing made from polyamide 6.6 UL 94 V-2 **Busbar support Busbar support** Busbar support Size 24 x 24 x 23.7 50 x 9.5 x 98 50 x 9.5 x 44 Size (L x W x H), mm Type Qty. Qty. Qty. SH 1 BG SH SAB BG ES 35/K/ST BG Type/colour Cat. no. 2318.2 20 1530.2 10 2828.0 50 Type/colour Cat. no. Type/colour Cat. no. Type/colour Cat. no. Colour variants Technical data Material of cap/holder PA 6.6 V-2 PA 6.6 V-2 PA 6.6 V-2 Accessories Qty. Qty. Qty. Mounting screw BS **Cat. no.** BS M 4x8 2262.0 Ssch 10 x 3 CU **2129.0** Ssch 10 x 3 CU 2129.0 Ssch 10 x 3 CU **2129.0** Busbar Ssch Copper 1m Cat. no. 1m 1m Busbar Ssch Cat. no. Ssch 10 x 3 Ms **2128.0** Ssch 10 x 3 Ms **2128.0** Ssch 10 x 3 Ms 2128.0 Brass 1m 1m

#### **Busbar mounting SH SAB**



#### Shield-connection clip SAB...MF



#### No-screw end stop SES 35

The screwless **SES 35** has the same shape as the **SRK/SSL** and **RK/SL** screw terminals when used with wire cross-sections up to 10 mm<sup>2</sup>. Larger terminals can also be securely fastened to the DIN rail between two **SES 35**s. You can snap on a group marker to the end stop as well.

The **SES 35** attaches to a variety of different **TS 35** DIN rails, for a secure form-fit connection. This strong mechanical grip is ensured by four stainless steel springs in the foot, so that the end stop can be quickly attached using no screws. This also provides an extremely strong connection for various types of terminal blocks and components to the DIN rail.

#### **End stop SHES 35**

The **SHES 35** end stop provides even larger terminal blocks and stud terminals (for wire cross-sections up to 300 mm<sup>2</sup>) with improved mechanical stability. This end stop is made of a hardened metal core which is covered by a plastic housing. The housing has several labelling options.

The **SHES 35** attaches to a variety of different **TS 35** DIN rails, for a secure form-fit connection. It encloses the DIN rail on both sides to achieve the necessary mechanical retention.





This brochure contains supplemental information describing our connection system products.

For our entire product range, please refer to our main CONTA-CON, or check our web page at www.conta-clip.com.

**CONTA-CONNECT**[Connection Systems]

CONTA-ELECTRONICS

[Electronics]

**CONTA-CON**[PCB Connectors]





