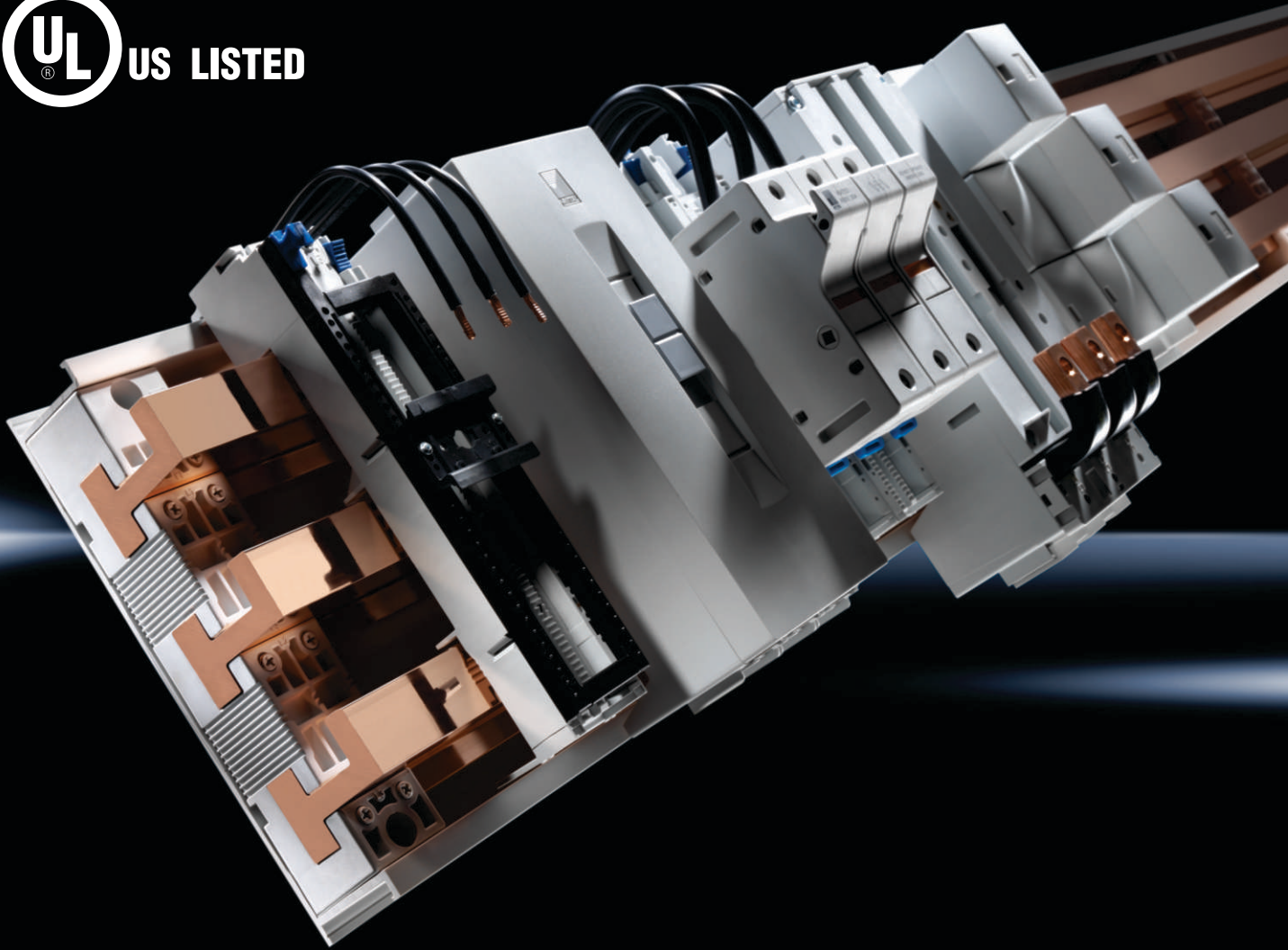


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## RiLine60



60 mm system technology  
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# RiLine60

## Busbar systems 3 and 4 pole

Support + bars + contact hazard protection

- Flat copper bar system, see page 276 in HB 33
- PLS busbar system, see page 278 in HB 33
- Accessories, see page 310 in HB 33

## Connection system 3 and 4 pole

- Busbar connection adaptor, see page 280 in HB 33
- Connection clamps, see page 316 in HB 33
- Connection block, see page 317 in HB 33
- Accessories, see page 310 in HB 33

## Component adaptors 3 and 4 pole

- OM adaptor, see page 283 in HB 33
- Circuit-breaker component adaptor, see page 287 in HB 33
- Accessories, see page 318 in HB 33

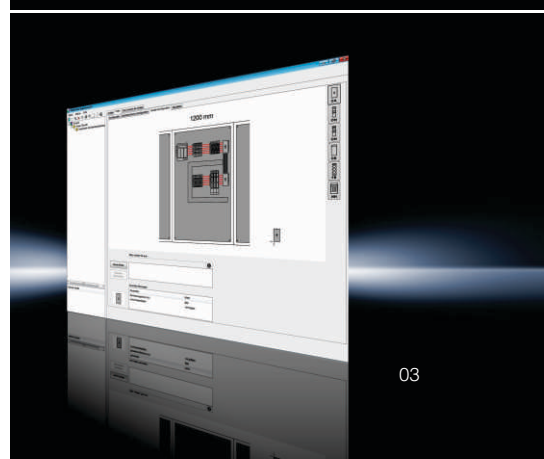
## Fuse elements 3 pole

- Bus-mounting fuse bases, see page 294 in HB 33
- NH fuse-switch disconnectors, see page 296 in HB 33
- NH slimline fuse-switch disconnectors, see page 306 in HB 33
- Accessories, see page 323 in HB 33

## Rittal Power Engineering 6.0

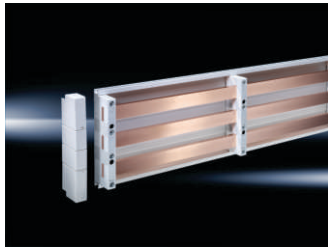
Model No. SV 3020.500,  
see page 523 in HB 33

- Configuration of RiLine60 busbar system
- Simple component selection, integral switchgear database
- Automatic calculation of rated currents and heat losses





## RiLine60 busbar system for flat copper bars (3/4-pole)



For feeder-circuits UL 508A, cUL US LISTED, file E191125

| Designation                 | Version | Bar centre distance mm | For busbars mm   | Packs of | Model No. SV                        | Cata. 33, page |
|-----------------------------|---------|------------------------|------------------|----------|-------------------------------------|----------------|
| Busbar support              | 3-pole  | 60                     | 15 x 5 – 30 x 10 | 4        | <b>9340.000*</b><br><b>9340.050</b> | 276            |
| Busbar support              | 4-pole  | 60                     | 15 x 5 – 30 x 10 | 4        | <b>9340.004</b>                     | 276            |
| Busbar support 30 x 10 PLUS | 4-pole  | 60                     | 30 x 10          | 4        | <b>9342.014</b>                     | 276            |
| <b>System components</b>    |         |                        |                  |          |                                     |                |

| Designation                     | Length mm | Packs of | Model No. SV     |                 | Cata. 33, page |
|---------------------------------|-----------|----------|------------------|-----------------|----------------|
|                                 |           |          | 3-pole           | 4-pole          |                |
| Base tray for SV 9340.050       | 500       | 2        | <b>9340.100</b>  | –               | 315            |
|                                 | 700       | 2        | <b>9340.110</b>  | –               | 315            |
|                                 | 900       | 2        | <b>9340.120</b>  | –               | 315            |
|                                 | 1100      | 2        | <b>9340.130</b>  | –               | 315            |
|                                 | 2400      | 1        | <b>9340.170*</b> | –               | 315            |
| Base tray for SV 9340.004       | 1100      | 2        | –                | <b>9340.134</b> | 315            |
| Base tray for SV 9342.014       | 1100      | 2        | –                | <b>9342.134</b> | 315            |
| Cover section                   | 700       | 2        | <b>9340.200</b>  | –               | 315            |
|                                 | 1100      | 2        | <b>9340.210</b>  | <b>9340.214</b> | 315            |
| Base tray infill                | 100       | 2        | <b>9340.140</b>  | –               | 315            |
| Support panel for cover section |           | 5        | <b>9340.220</b>  | <b>9340.224</b> | 315            |
| End covers for SV 9340.050      |           | 2        | <b>9340.070</b>  | –               | 277            |
| End covers for SV 9340.004      |           | 2        | –                | <b>9340.074</b> | 276            |
| End covers for SV 9342.014      |           | 2        | –                | <b>9342.074</b> | 276            |

**Note:**

The use of a base tray is compulsory for UL applications.

\*UL approval not available

## RiLine60 busbar system PLS 800 (3-pole)



For feeder-circuits UL 508A, cUL US LISTED, file E191125

| Designation            | Version | Bar centre distance mm | For PLS busbars <sup>1)</sup> Cross-section mm <sup>2</sup> | Packs of | Model No. SV                        | Cata. 33, page |
|------------------------|---------|------------------------|---|----------|-------------------------------------|----------------|
| Busbar support PLS 800 | 3-pole  | 60                     | 300   | 4        | <b>9341.000*</b><br><b>9341.050</b> | 279            |

**System components**

| Designation                     | Length mm | Packs of | Model No. SV     | Cata. 33, page |
|---------------------------------|-----------|----------|------------------|----------------|
| Base tray                       | 500       | 2        | <b>9341.100</b>  | 279            |
|                                 | 700       | 2        | <b>9341.110</b>  | 279            |
|                                 | 900       | 2        | <b>9341.120</b>  | 279            |
|                                 | 1100      | 2        | <b>9341.130</b>  | 279            |
|                                 | 2400      | 1        | <b>9341.170*</b> | 279            |
| Cover section                   | 700       | 2        | <b>9340.200</b>  | 279            |
|                                 | 1100      | 2        | <b>9340.210</b>  | 279            |
| Base tray infill                | 100       | 2        | <b>9341.140</b>  | 279            |
| Support panel for cover section |           | 5        | <b>9340.220</b>  | 279            |
| End covers for SV 9341.050      |           | 2        | <b>9341.070</b>  | 279            |

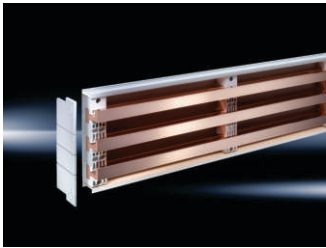
<sup>1)</sup> 5 mm bar thickness


**Note:**

The use of a base tray is compulsory for UL applications.

\*UL approval not available

## RiLine60 busbar system PLS 1600 (3/4-pole)



For feeder-circuits UL 508A, c  US LISTED, file E191125

| Designation                  | Version | Bar centre distance mm | For PLS busbars <sup>1)</sup><br>Cross-section mm <sup>2</sup> | Packs of | Model No. SV                        | Cata. 33, page |
|------------------------------|---------|------------------------|--|----------|-------------------------------------|----------------|
| Busbar support PLS 1600      | 3-pole  | 60                     | 900  | 4        | <b>9342.000*</b><br><b>9342.050</b> | 279            |
| Busbar support PLS 1600 PLUS | 4-pole  | 60                     | 900  | 4        | <b>9342.004</b>                     | 279            |

### System components

| Designation                     | Length mm | Packs of | Model No. SV     |                 | Cata. 33, page |
|---------------------------------|-----------|----------|------------------|-----------------|----------------|
|                                 |           |          | 3-pole           | 4-pole          |                |
| Base tray                       | 500       | 2        | <b>9342.100</b>  | –               | 279            |
|                                 | 700       | 2        | <b>9342.110</b>  | –               | 279            |
|                                 | 900       | 2        | <b>9342.120</b>  | –               | 279            |
|                                 | 1100      | 2        | <b>9342.130</b>  | <b>9342.134</b> | 279            |
|                                 | 2400      | 1        | <b>9342.170*</b> | –               | 279            |
| Cover section                   | 700       | 2        | <b>9340.200</b>  | –               | 279            |
|                                 | 1100      | 2        | <b>9340.210</b>  | <b>9340.214</b> | 279            |
| Base tray infill                | 100       | 2        | <b>9342.140</b>  | –               | 279            |
| Support panel for cover section | –         | 5        | <b>9340.220</b>  | <b>9340.224</b> | 279            |
| End covers for busbar supports  | –         | 2        | <b>9342.070</b>  | <b>9342.074</b> | 279            |

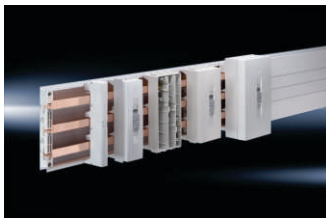
<sup>1)</sup> 10 mm bar thickness

### Note:

The use of a base tray is compulsory for UL applications.

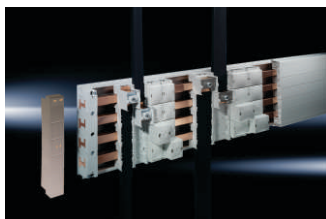
\*UL approval not available

## Busbar connection adaptor (3/4-pole)



For feeder-circuits UL 508A, c  US LISTED, file E191125

| Rated current up to | Rated operating voltage | Connection of round conductors mm² (AWG) | Clamping area for laminated copper bars mm | Packs of | Model No. SV         |               |                  | Cata.33, page |
|---------------------|-------------------------|--|--|----------|----------------------|---------------|------------------|---------------|
|                     |                         |  |  |          | Outlet at top/bottom | Outlet at top | Outlet at bottom |               |
| 3-pole              |                         |  |  |          |                      |               |                  |               |
| 60 A                | 600 V~                  | 6 – 16<br>(AWG 10 – AWG 6)               | –  | 1        | –                    | 9342.200      | 9342.210         | 281           |
| 125 A               | 600 V~                  | 16 – 35<br>(AWG 6 – AWG 2)               | 10 x 7.8                                   | 1        | 9342.220*            | 9342.230      | 9342.240         | 281           |
| 250 A               | 600 V~                  | 35 – 120<br>(AWG 2 – MCM 250)            | 18.5 x 15.5                                | 1        | 9342.250             | 9342.260      | 9342.270         | 280/281       |
| 600 A               | 600 V~                  | 95 – 300<br>(AWG 3/0 – MCM 600)          | 33 x 20                                    | 1        | 9342.280*            | 9342.290      | 9342.300         | 281           |
| 4-pole              |                         |  |  |          |                      |               |                  |               |
| 125 A               | 600 V~                  | 16 – 35<br>(AWG 6 – AWG 2)               | 10 x 7.8                                   | 1        | 9342.224             | –             | 9342.244         | 280/281       |
| 250 A               | 600 V~                  | 35 – 120<br>(AWG 2 – MCM 250)            | 18.5 x 15.5                                | 1        | 9342.254             | –             | 9342.274         | 280/281       |



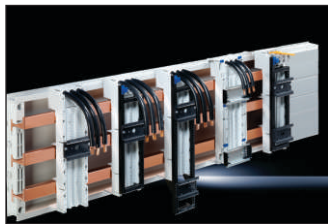
| Rated current up to | Rated operating voltage | Connection of round conductors mm² (AWG) | Clamping area for laminated copper bars mm |                         | Packs of | Model No. SV                           |  | Cata. 33, page |
|---------------------|-------------------------|--|--|-------------------------|----------|--|--|----------------|
|                     |                         |  |  |                         |          | Outlet at top/bottom                   |  |                |
|                     |                         |  | for 5 mm bar thickness                     | for 10 mm bar thickness |          | Busbar connection adaptor (3 x 1-pole) | Expansion set for 4-pole configuration |                |
| 3-/4-pole           |                         |  |  |                         |          |  |  |                |
| 800 A               | 600 V~                  | 95 – 300 (AWG 3/0 – MCM 600)             | 33 x 27                                    | 33 x 22                 | 1 set    | 9342.310                               | 9342.314 <sup>1)</sup>                 | 282            |
| 1600 A              | 600 V~                  | –  | 65 x 27                                    | 65 x 22                 | 1 set    | 9342.320                               | 9342.324 <sup>1)</sup>                 | 282            |


<sup>1)</sup> Packs of = 1

### Note:

\*UL approval not available

## OM adaptor/OM support (3-pole)



For feeder-circuits UL 508A, c  US LISTED, file E191125

| Version                  | Con-<br>struction<br>width<br>mm | Rated current<br>up to | Rated<br>operating<br>voltage | Connection<br>cables <sup>1)</sup> | Connection<br>of round<br>conductors<br>mm <sup>2</sup> | Support rails |      | Packs<br>of | Model No.<br>SV              | Cata. 33,<br>page |
|--------------------------|----------------------------------|------------------------|-------------------------------|------------------------------------|---|---------------|------|-------------|------------------------------|-------------------|
|                          |                                  |                        |                               |                                    |   | Height<br>mm  | Qty. |             |                              |                   |
|                          | 45                               | 25 A                   | 600 V~                        | AWG 12                             | –   | 10            | 1    | 1           | <b>9340.310<sup>2)</sup></b> | 283               |
|                          | 45                               | 25 A                   | 600 V~                        | AWG 12                             | –   | 10            | 1    | 1           | <b>9340.340</b>              | 283               |
|                          | 45                               | 25 A                   | 600 V~                        | AWG 12                             | –   | 10            | 1    | 1           | <b>9340.370<sup>3)</sup></b> | 283               |
|                          | 45                               | 32 A                   | 600 V~                        | AWG 10                             | –   | 10            | 1    | 1           | <b>9340.350</b>              | 283               |
|                          | 45                               | 32 A                   | 600 V~                        | AWG 10                             | –   | 10            | 2    | 1           | <b>9340.380</b>              | 283               |
|                          | 45                               | 32 A                   | 690 V~                        | AWG 10                             | –   | 10            | 2    | 1           | <b>9340.390</b>              | 283               |
|                          | 55                               | 32 A                   | 600 V~                        | AWG 10                             | –   | 10            | 1    | 1           | <b>9340.460</b>              | 283               |
|                          | 55                               | 32 A                   | 600 V~                        | AWG 10                             | –   | 10            | 2    | 1           | <b>9340.470</b>              | 283               |
|                          | 75                               | 40 A                   | 600 V~                        | AWG 8                              | –   | 7.5           | 2    | 1           | <b>9340.710<sup>4)</sup></b> | 284               |
|                          | 55                               | 65 A                   | 600 V~                        | AWG 6                              | –   | 10            | 1    | 1           | <b>9340.410<sup>2)</sup></b> | 284               |
| OM<br>adaptor            | 55                               | 65 A                   | 600 V~                        | AWG 6                              | –   | 10            | 1    | 1           | <b>9340.430</b>              | 284               |
|                          | 55                               | 65 A                   | 600 V~                        | AWG 6                              | –   | 10            | 2    | 1           | <b>9340.450</b>              | 284               |
|                          | 75                               | 65 A                   | 600 V~                        | AWG 6                              | –   | 7.5           | 1    | 1           | <b>9340.700<sup>4)</sup></b> | 284               |
|                          | 55                               | 40 A                   | 690 V~                        | AWG 8                              | –   | 10            | 1    | 1           | <b>9340.720</b>              | 284               |
|                          | 55                               | 40 A                   | 690 V~                        | AWG 8                              | –   | 10            | 2    | 1           | <b>9340.730</b>              | 284               |
|                          | 45                               | 32 A                   | 690 V~                        | –                                  | 1.5 – 6   | 10            | 2    | 1           | <b>9340.560</b>              | 285               |
|                          | 45                               | 25 A                   | 600 V~                        | –                                  | 1.5 – 4   | 10            | 1    | 1           | <b>9340.900<sup>5)</sup></b> | 285               |
|                          | 45                               | 25 A                   | 600 V~                        | –                                  | 1.5 – 4   | 10            | 2    | 1           | <b>9340.910<sup>6)</sup></b> | 285               |
| OM<br>Premium<br>adaptor | 55                               | 25 A                   | 600 V~                        | –                                  | 1.5 – 4   | 10            | 2    | 1           | <b>9340.930<sup>6)</sup></b> | 285               |
|                          | 45                               | –                      | 690 V~                        | –                                  | –   | 10            | 1    | 1           | <b>9340.250</b>              | 286               |
|                          | 45                               | –                      | 690 V~                        | –                                  | –   | 10            | –    | 1           | <b>9340.260<sup>3)</sup></b> | 286               |
| OM<br>support            | 55                               | –                      | 690 V~                        | –                                  | –   | 10            | 1    | 1           | <b>9340.270</b>              | 286               |

### Accessories

|                    |    |                 |     |
|--------------------|----|-----------------|-----|
| Connection pin     | 20 | <b>9340.280</b> | 320 |
| Insert strip 10 mm | 2  | <b>9340.290</b> | 319 |

<sup>1)</sup> AWG = American Wire Gauges

AWG12 = 3.31 mm<sup>2</sup> ± 4 mm<sup>2</sup>

AWG10 = 5.26 mm<sup>2</sup> ± 6 mm<sup>2</sup>

AWG 08 = 8.37 mm<sup>2</sup> ± 10 mm<sup>2</sup>

AWG 06 = 13.3 mm<sup>2</sup> ± 16 mm<sup>2</sup>

<sup>2)</sup> Without support frame

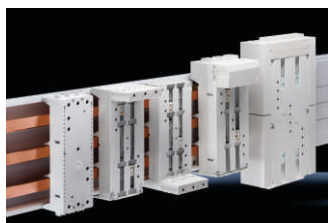
<sup>3)</sup> With pin block


<sup>4)</sup> Without support frame, with insert strips

<sup>5)</sup> With sub-unit and pin block

<sup>6)</sup> With connector outlet

## Circuit-breaker component adaptor (3-pole)



For feeder-circuits UL 508A, c  US LISTED, file E191125

| Con-<br>struction<br>width<br>mm | Rated<br>current<br>up to | Rated<br>operating<br>voltage | Connection<br>of round conductors<br>mm <sup>2</sup> (AWG) | Clamping area<br>for laminated<br>copper bars<br>mm | Packs<br>of | Model No. SV                      |                                      | Cata. 33,<br>page |
|----------------------------------|---------------------------|-------------------------------|--|---|-------------|-----------------------------------|--------------------------------------|-------------------|
|                                  |                           |                               |  |   |             | Cable outlet<br>top <sup>1)</sup> | Cable outlet<br>bottom <sup>1)</sup> |                   |
| 72                               | 100 A                     | 600 V~                        | 10 – 35<br>(AWG 6 – AWG 2)                                 | 10 x 7.8  | 1           | <b>9342.400</b>                   | <b>9342.410</b>                      | 287               |
| 90                               | 125 A                     | 600 V~                        | 35 – 120<br>(AWG 2 – MCM 250)                              | 18.5 x 15.5   | 1           | <b>9342.540</b>                   | <b>9342.550</b>                      | 287               |
| 90                               | 160 A                     | 600 V~                        | 35 – 120<br>(AWG 2 – MCM 250)                              | 18.5 x 15.5   | 1           | <b>9342.500*</b>                  | <b>9342.510*</b>                     | 287               |
| 105                              | 250 A                     | 600 V~                        | 35 – 120<br>(AWG 2 – MCM 250)                              | 18.5 x 15.5   | 1           | <b>9342.600</b>                   | <b>9342.610</b>                      | 288               |
| 140                              | 600 A                     | 600 V~                        | –  | 32 x 10 <sup>2)</sup>                               | 1           | <b>9342.700</b>                   | <b>9342.710</b>                      | 288               |

### Accessories

|   |                 |                 |     |
|---|-----------------|-----------------|-----|
| Insert strip 25 mm, for SV 9342.700/710 | 4 <sup>3)</sup> | <b>9342.720</b> | 288 |
|---|-----------------|-----------------|-----|

<sup>1)</sup> Switch outlet or outgoing cable

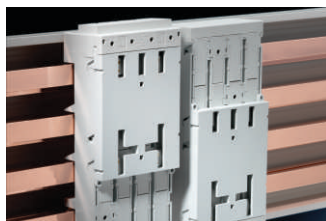
<sup>2)</sup> Via M10 screw terminal

<sup>3)</sup> ± 1 set

**Note:**

\*UL approval not available

## Circuit-breaker component adaptor (4-pole)

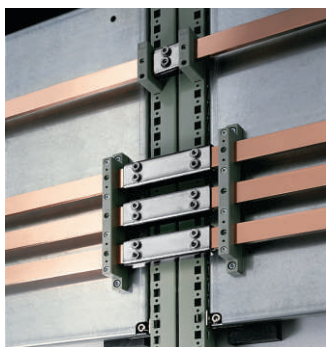


For feeder-circuits UL 508A, c  US LISTED, file E191125

| Construction width mm | Rated current up to | Rated operating voltage | Connection of round conductors mm <sup>2</sup> (AWG) | Clamping area for laminated copper bars mm | Packs of | Model No. SV                   |                                   | Cata. 33, page |
|-----------------------|---------------------|-------------------------|--|--|----------|--------------------------------|-----------------------------------|----------------|
|                       |                     |                         |  |  |          | Cable outlet top <sup>1)</sup> | Cable outlet bottom <sup>1)</sup> |                |
| 120                   | 125 A               | 600 V~                  | 35 – 120 (AWG 2 – MCM 250)                           | 18.5 x 15.5                                | 1        | <b>9342.504</b>                | <b>9342.514</b>                   | 289            |
| 140                   | 250 A               | 600 V~                  | 35 – 120 (AWG 2 – MCM 250)                           | 18.5 x 15.5                                | 1        | <b>9342.604</b>                | <b>9342.614</b>                   | 289            |

<sup>1)</sup> Switch outlet or outgoing cable

## Busbar connectors



For connecting square busbars, no drilling required.

**Material:**

**SV 9350.075**




Top part: St 37, nickel-plated surface finish

Contact plate: E-Cu, nickel-plated surface finish

**SV 9320.020/SV 9320.030**

Top part: Sheet steel, zinc-plated, passivated

Contact plate: E-Cu, silver-plated

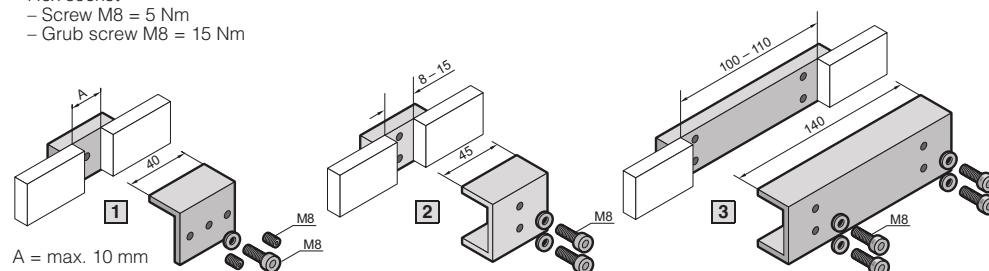
| For busbars mm   | Application       |                                | Tightening torque        | Packs of | Model No. SV  |
|------------------|-------------------|--------------------------------|--------------------------|----------|---|
|                  | Single connection | Bayed connection <sup>1)</sup> |                          |          |   |
| 12 x 5 – 15 x 10 | <b>1</b>          | –                              | 5 Nm/15 Nm <sup>2)</sup> | 3        | <b>9350.075</b>  |
| 20 x 5 – 30 x 10 | <b>2</b>          | –                              | 20 Nm                    | 3        | <b>9320.020</b>  |
|                  | –                 | <b>3</b>                       | 20 Nm                    | 3        | <b>9320.030</b>  |

<sup>1)</sup> From enclosure to enclosure

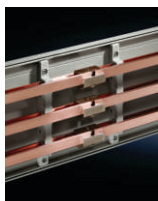
<sup>2)</sup> Hex socket

– Screw M8 = 5 Nm

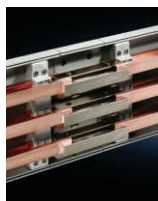
– Grub screw M8 = 15 Nm



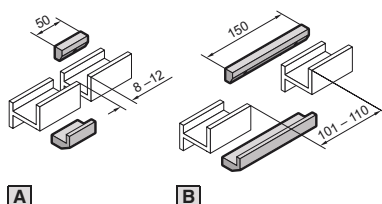
## PLS busbar connectors



**A**



**B**







**A**

**B**

For connecting the PLS special busbars; no drilling required.

**Material:** E-Cu, nickel-plated

| Application                              | Packs of | Model No. SV for system   |   |
|--|----------|---|---|
|  |          | PLS 800   | PLS 1600  |
| <b>A</b> Single connection               | 3        | <b>3504.000</b>  | <b>3514.000</b>  |
| <b>B</b> Baying connection <sup>1)</sup> | 3        | <b>3505.000</b>  | <b>3515.000</b>  |
| Tightening torque                        |          | 10 – 15 Nm  | 15 – 20 Nm  |

<sup>1)</sup> From enclosure to enclosure (TS 8)










### Busbars



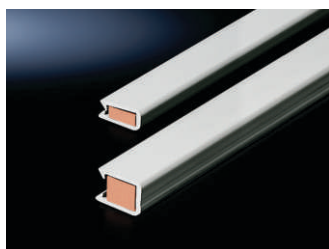
#### Busbars E-Cu

To DIN EN 13 601.  
Length: 2400 mm/bar.

**Technical information:**  
Available on the Internet.

| Dimensions<br>mm                          | Rated current <sup>1)</sup><br>up to | Rated current<br>for UL 508 applications | Packs of | Model No. SV  | Page |
|---|--------------------------------------|--|----------|---|------|
| <b>E-Cu</b>                               |                                      |  |          |   |      |
| 12 x 5                                    | 210 A                                | X  | 1        | <b>3580.000</b>  | 277  |
| 15 x 5                                    | 340 A                                | 175 A                                    | 1        | <b>3581.000</b>  | 277  |
| 20 x 5                                    | 260 A                                | 230 A                                    | 1        | <b>3582.000</b>  | 277  |
| 25 x 5                                    | 360 A                                | 290 A                                    | 1        | <b>3583.000</b>  | 277  |
| 30 x 5                                    | 319 A                                | 350 A                                    | 1        | <b>3584.000</b>  | 277  |
| 12 x 10                                   | 497 A                                | X  | 1        | <b>3580.100</b>  | 277  |
| 15 x 10                                   | 384 A                                | 350 A                                    | 1        | <b>3581.100</b>  | 277  |
| 20 x 10                                   | 447 A                                | 465 A                                    | 1        | <b>3585.000</b>  | 277  |
| 30 x 10                                   | 800 A                                | 700 A                                    | 1        | <b>3586.000</b>  | 277  |
| 40 x 10                                   | –                                    | 920 A                                    | 1        | <b>3587.000</b>   | 311  |
| 50 x 10                                   | –                                    | 1100 A                                   | 1        | <b>3588.000</b>   | 311  |
| 60 x 10                                   | –                                    | 1270 A                                   | 1        | <b>3589.000</b>   | 311  |
| 80 x 10                                   | –                                    | 1600 A                                   | 1        | <b>3590.000</b>   | 311  |
| 100 x 10                                  | –                                    | 1900 A                                   | 1        | <b>3590.010</b>   | 311  |
| <b>E-Cu tin-plated<sup>1)</sup></b>       |                                      |  |          |   |      |
| 30 x 5                                    |                                      | Yes                                      | 6        | <b>3584.200</b>   | 311  |
| 30 x 10                                   |                                      | Yes                                      | 6        | <b>3586.200</b>   | 311  |
| <b>Accessories</b>                        |                                      |  |          |   |      |
| Busbar connectors<br>for busbars<br>mm    | 12 x 5 – 15 x 10 (single connection) |  | 3        | 9350.075  | 313  |
|   | 20 x 5 – 30 x 10 (single connection) |  | 3        | 9320.020  | 313  |
|   | 20 x 5 – 30 x 10 (bayed connection)  |  | 3        | 9320.030  | 313  |
| Busbar cover section<br>for busbars<br>mm | 12/15 x 5                            |  | 4        | 9350.010  | 311  |
|   | 12/15 x 10                           |  | 4        | 9350.060  | 311  |
|   | 12 x 5 – 30 x 10                     |  | 10       | 3092.000  | 311  |
|   | 40 – 60 x 10                         |  | 10       | 3085.000  | 311  |

<sup>1)</sup> Extended delivery times.



#### Busbar cover sections

Contact hazard protection via covering of the busbars. May be cut to required length.  
Length: 1000 mm/section.

##### Material:

Thermally modified hard PVC.  
Fire protection corresponding to UL 94-V0

##### Colour:

RAL 7035

##### Note:

Contact hazard protection, for more solutions see page 315.

##### Detailed drawings:

Available on the Internet.



| For busbars<br>mm | Approvals   | Packs of | Model No. SV    |
|-------------------|---|----------|-----------------|
| 12/15 x 5         | –   | 4        | <b>9350.010</b> |
| 12/15 x 10        | –   | 4        | <b>9350.060</b> |
| 12 x 5 – 30 x 10  |  | 10       | <b>3092.000</b> |
| 40 – 60 x 10      | –   | 10       | <b>3085.000</b> |



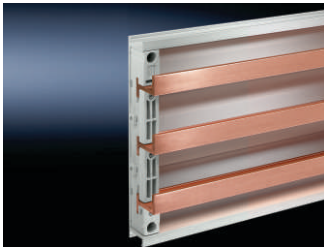
#### Inserted screw nuts M12

Self-holding nuts with knurled ring for busbars E-Cu.  
Hole diameter: 14.5 mm.

| Packs of | Model No. SV    |
|----------|-----------------|
| 30       | <b>3591.060</b> |



### Busbars



#### PLS special busbars E-Cu

**Technical information:**  
Available on the Internet.

| For system PLS 800, bar thickness 5 mm, bar cross-section 300 mm <sup>2</sup> |           |                               |           |          |                 |      |
|---|-----------|-------------------------------|-----------|----------|-----------------|------|
| For enclosure width mm  | Length mm | E-Cu tin-plated <sup>1)</sup> | Approvals | Packs of | Model No. SV    | Page |
| 600   | 495       | –                             |           | 1        | <b>3524.000</b> | 312  |
| 600   | 495       | Yes                           | –         | 1        | <b>3524.200</b> | 312  |
| 800   | 695       | –                             |           | 1        | <b>3525.000</b> | 312  |
| 800   | 695       | Yes                           | –         | 1        | <b>3525.200</b> | 312  |
| 1000  | 895       | –                             |           | 1        | <b>3525.010</b> | 312  |
| 1000  | 895       | Yes                           | –         | 1        | <b>3525.210</b> | 312  |
| 1200  | 1095      | –                             |           | 1        | <b>3526.000</b> | 312  |
| 1200  | 1095      | Yes                           | –         | 1        | <b>3526.200</b> | 312  |
| variable  | 2400      | –                             |           | 1        | <b>3509.000</b> | 312  |
| variable  | 2400      | Yes                           | –         | 1        | <b>3509.200</b> | 312  |

#### Accessories

|  |   |          |     |
|--|---|----------|-----|
| PLS busbar connector (single connection) | 3 | 3504.000 | 313 |
| PLS busbar connector (bayed connection)  | 3 | 3505.000 | 313 |
| PLS expansion connectors                 | 3 | 9320.060 | 313 |

<sup>1)</sup> Extended delivery times.

#### For system PLS 1600, bar thickness 10 mm, bar cross-section 900 mm<sup>2</sup>

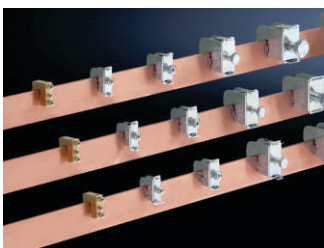
| For enclosure width mm | Length mm | E-Cu tin-plated <sup>1)</sup> | Approvals | Packs of | Model No. SV    | Page |
|------------------------|-----------|-------------------------------|-----------|----------|-----------------|------|
| 600                    | 495       | –                             |           | 1        | <b>3527.000</b> | 312  |
| 600                    | 495       | Yes                           | –         | 1        | <b>3527.200</b> | 312  |
| 800                    | 695       | –                             |           | 1        | <b>3528.000</b> | 312  |
| 800                    | 695       | Yes                           | –         | 1        | <b>3528.200</b> | 312  |
| 1000                   | 895       | –                             |           | 1        | <b>3528.010</b> | 312  |
| 1000                   | 895       | Yes                           | –         | 1        | <b>3528.210</b> | 312  |
| 1200                   | 1095      | –                             |           | 1        | <b>3529.000</b> | 312  |
| 1200                   | 1095      | Yes                           | –         | 1        | <b>3529.200</b> | 312  |
| variable               | 2400      | –                             |           | 1        | <b>3516.000</b> | 312  |
| variable               | 2400      | Yes                           | –         | 1        | <b>3516.200</b> | 312  |

#### Accessories

|  |   |          |     |
|--|---|----------|-----|
| PLS busbar connector (single connection) | 3 | 3514.000 | 313 |
| PLS busbar connector (bayed connection)  | 3 | 3515.000 | 313 |
| PLS expansion connectors                 | 3 | 9320.070 | 313 |

<sup>1)</sup> Extended delivery times.

### Connection system



#### Conductor connection clamps

##### Material:

Sheet steel, zinc-plated, passivated  
(SV 3450.500 – SV 3459.500)  
Brass  
(SV 3550.000/SV 3555.000)



##### Accessories:

Laminated copper bars,  
see page 314.

**Technical information:**  
Available on the Internet.

**Detailed drawings:**  
Available on the Internet.

| For bar thickness mm | Connection of round conductors <sup>1)</sup> mm <sup>2</sup> | Clamping area for laminated copper bars W x H mm | Approvals | Packs of | Model No. SV    |
|----------------------|--|--|-----------|----------|-----------------|
| 3 – 5                | 1 – 4  | –  |           | 15       | <b>3550.000</b> |
| 5                    | 1 – 4  | –  |           | 15       | <b>3450.500</b> |
| 5                    | 2.5 – 16   | 8 x 8  |           | 15       | <b>3451.500</b> |
| 5                    | 16 – 50  | 10.5 x 11  |           | 15       | <b>3452.500</b> |
| 5                    | 35 – 70  | 16.5 x 15  |           | 15       | <b>3453.500</b> |
| 5                    | 70 – 185   | 22.5 x 20  |           | 15       | <b>3454.500</b> |
| 6 – 10               | 1 – 4  | –  |           | 15       | <b>3555.000</b> |
| 10                   | 1 – 4  | –  |           | 15       | <b>3455.500</b> |
| 10                   | 2.5 – 16   | 8 x 8  |           | 15       | <b>3456.500</b> |
| 10                   | 16 – 50  | 10.5 x 11  |           | 15       | <b>3457.500</b> |
| 10                   | 35 – 70  | 16.5 x 15  |           | 15       | <b>3458.500</b> |
| 10                   | 70 – 185   | 22.5 x 20  |           | 15       | <b>3459.500</b> |

### Busbar supports/base isolators



#### Busbar supports 1- and 2-pole

**Material:**  
Polyamide (PA 6.6).  
Fire protection corresponding to UL 94-V0

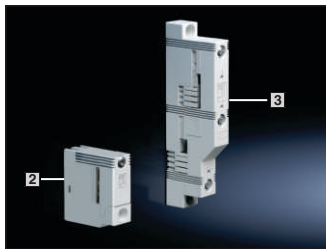
**Colour:**  
RAL 7035

**Supply includes:**  
**SV 9342.030**  
Including raised section for stepped configuration of the PLS busbars.

**Note:**  
**SV 9340.030/SV 9342.030**  
The busbar supports may be bayed with 60 mm bar centre distance for the configuration of multi-pole systems.

**Technical information:**  
Available on the Internet.

**Detailed drawings:**  
Available on the Internet.



| Design                        | Packs of | <b>1</b>        | <b>2</b>   | <b>3</b>            |     |
|-------------------------------|----------|-----------------|--|---------------------|-----|
| Number of poles               |          | 1-pole          | 1-pole   | 2-pole              |     |
| Bar centre distance mm        |          | –               | –  | 60                  |     |
| For busbars E-Cu              |          | PLS 1600        | –  | –                   | 312 |
|                               |          | –               | 12 x 5/10 <sup>1)</sup> ,<br>15 x 5 – 30 x 10 mm | 12 x 5 – 30 x 10 mm | 311 |
| PEN/N/PE support              |          |                 |  |                     |     |
| N/PE support                  |          | –               | –  |                     |     |
| <b>Model No. SV</b>           | 4        | <b>9342.030</b> | <b>9340.030</b>                                  | <b>9340.040</b>     |     |
| <b>Accessories</b>            |          |                 |  |                     |     |
| Spacers                       | 12       | –               | 9340.090   | –                   | 310 |
| Captive nuts M5 <sup>2)</sup> | 50       | –               | 4166.000   | 4166.000            | 665 |

<sup>1)</sup> If 12 x 5/10 mm busbars are used, the spacer SV 9340.090 is additionally required.

<sup>2)</sup> For attaching the busbar support to the TS frame section and punched sections with mounting flanges with rectangular system punchings 12.5 x 10.5 mm.



#### Base isolators

For configuring busbar systems with any given bar centre distances and for assembling insulated PE or PEN bars.

**Material:**  
Duroplastic polyester (UP resin)

**Technical information:**  
Available on the Internet.

**Detailed drawings:**  
Available on the Internet.

|                         |                 |                 |
|-------------------------|-----------------|-----------------|
| Rated operating voltage | 1 kV            | 1 kV            |
| Tensile strength        | 12 kN           | 13 kN           |
| Torsional strength      | 75 Nm           | 90 Nm           |
| Bending strength        | 6 kN            | 6 kN            |
| Height mm               | 40              | 50              |
| Thread                  | M10             | M10             |
| Packs of                | 6               | 6               |
| <b>Model No. SV</b>     | <b>3031.000</b> | <b>3032.000</b> |



#### Spacers

**for RiLine60 busbar supports (flat busbar system)**

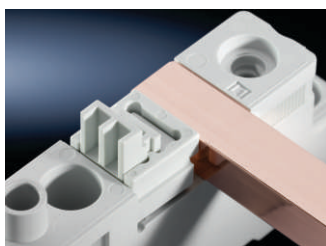
For adapting 12 x 5 and 12 x 10 mm size busbars.

- For busbar supports
- SV 9340.030 (1-pole), see page 310.
  - SV 9340.000/.010 (3-pole), see page 276.
  - SV 9340.004 (4-pole), see page 276.

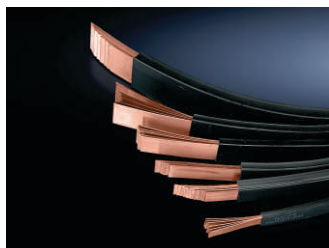
**Material:**  
Polyamide (PA 6.6).  
Fire protection corresponding to UL 94-V0

**Colour:**  
RAL 7035

| Packs of | <b>Model No. SV</b> |
|----------|---------------------|
| 12       | <b>9340.090</b>     |



### Laminated copper bars



#### Laminated copper bars

Length: 2000 mm/bar.

##### Material:

##### Cu lamina

High-purity electrolyte copper F20

##### Insulation

High-strength vinyl compound

Expansion 370%

Temperature range: -30°C to +105°C

Fire protection corresponding to UL 94-V0

Dielectric strength: 20 kV/mm

##### Short-circuit resistance diagram:

Available on the Internet.

##### Technical information:

Available on the Internet.

| Configuration <sup>1)</sup> mm | I <sub>n</sub> for 70 K <sup>2)</sup> | I <sub>n</sub> for 50 K <sup>2)</sup> | I <sub>n</sub> for 30 K <sup>2)</sup> | Packs of | Model No. SV    |
|--------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|----------|-----------------|
| 8 x 6 x 0.5                    | 195 A                                 | 165 A                                 | 125 A                                 | 1        | <b>3565.015</b> |
| 6 x 9 x 0.8                    | 285 A                                 | 240 A                                 | 180 A                                 | 1        | <b>3565.005</b> |
| 4 x 15.5 x 0.8                 | 330 A                                 | 275 A                                 | 210 A                                 | 1        | <b>3567.005</b> |
| 6 x 15.5 x 0.8                 | 415 A                                 | 350 A                                 | 265 A                                 | 1        | <b>3568.005</b> |
| 10 x 15.5 x 0.8                | 575 A                                 | 480 A                                 | 365 A                                 | 1        | <b>3569.005</b> |
| 5 x 20 x 1                     | 525 A                                 | 435 A                                 | 330 A                                 | 1        | <b>3570.005</b> |
| 5 x 24 x 1                     | 605 A                                 | 510 A                                 | 385 A                                 | 1        | <b>3571.005</b> |
| 10 x 24 x 1                    | 920 A                                 | 770 A                                 | 585 A                                 | 1        | <b>3572.005</b> |
| 5 x 32 x 1                     | 770 A                                 | 645 A                                 | 485 A                                 | 1        | <b>3573.005</b> |
| 10 x 32 x 1                    | 1155 A                                | 965 A                                 | 730 A                                 | 1        | <b>3574.005</b> |
| 5 x 40 x 1                     | 930 A                                 | 780 A                                 | 590 A                                 | 1        | <b>3575.005</b> |
| 10 x 40 x 1                    | 1370 A                                | 1145 A                                | 865 A                                 | 1        | <b>3576.005</b> |
| 5 x 50 x 1                     | 1125 A                                | 940 A                                 | 710 A                                 | 1        | <b>3577.005</b> |
| 10 x 50 x 1                    | 1635 A                                | 1365 A                                | 1030 A                                | 1        | <b>3578.005</b> |
| 10 x 63 x 1                    | 1950 A                                | 1610 A                                | 1230 A                                | 1        | <b>3579.005</b> |

<sup>1)</sup> Number of lamina x lamina width x lamina thickness

<sup>2)</sup> The conductor temperature of the laminated copper bar is derived from the sum total of the ambient temperature and the temperature increase.

##### Example:

SV 3565.000 carrying 220 A, i.e. the temperature increases by 30 K. At an ambient temperature of 35°C, this produces a resultant conductor temperature of 35°C + 30 K = 65°C.



#### Universal support

For the attachment of laminated copper bars from 5 x 20 x 1 to 10 x 63 x 1 mm.

##### Material:

Fibreglass-reinforced, thermoplastic polyester (PBT)

Fire protection corresponding to UL 94-V0

##### Colour:

RAL 7035

##### Supply includes:

Screws and "U" nuts for mounting on PS punched rails.

| Packs of | Model No. SV    |
|----------|-----------------|
| 3        | <b>3079.000</b> |



##### Accessories:

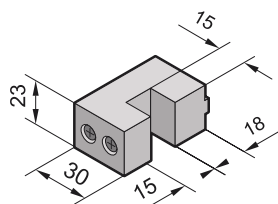
PS punched rails, see page 651.

##### Short-circuit resistance diagram:

Available on the Internet.

##### Detailed drawings:

Available on the Internet.



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