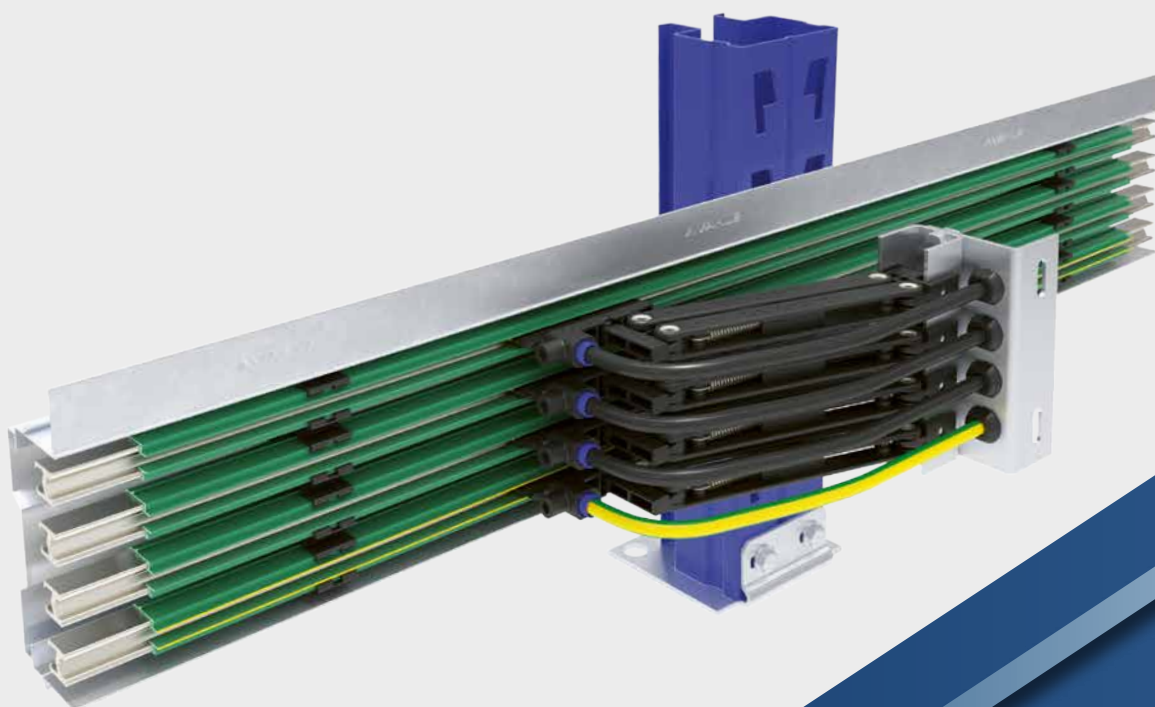




## MULTI SUPPORT PROFILE VMT





# VAHLE MULTI SUPPORT PROFILE (VMT)

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## THE VAHLE SOLUTION FOR AUTOMATION

The VAHLE Multi Support Profile VMT has been specifically designed to meet highly diverse requirements of storage and retrieval installations and transfer cars. For other applications such as crane technology, please ask us. Parallel to that, it is possible to use VAHLE positioning systems. Another plus is the large support center distance which reduces component costs and facilitates quick installation.

## SYSTEM SPECIFICATION

- Can be used with several VAHLE conductor systems
- Support center distance of up to 3.5 m (11'-6") possible
- Plug-in and clamping connection technology enables unprecedented fast installation
- Provides mechanical impact protection for conductor system
- Temperature fluctuations will not influence systems rigidity
- BG-compliant version of the Multi Support Profile
- Integration of all VAHLE positioning systems
- Attachment hangers for all commonly used rack upright profiles
- 4 to 7 poles; 60–400 A with same profile
- Touch proof as per IP 23
- Electrically safe with potential equalization
- Simple and quick exchange of profile sections or subsections

## POSSIBLE SYSTEM VARIANTS



U15 (Catalog 2c)



U25 (Catalog 2c)

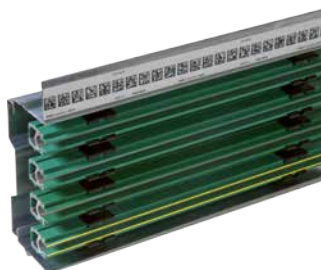


VKS4 (Catalog 3b)



VKS6 (Catalog 3b)

## ACCESSORY COMPONENTS

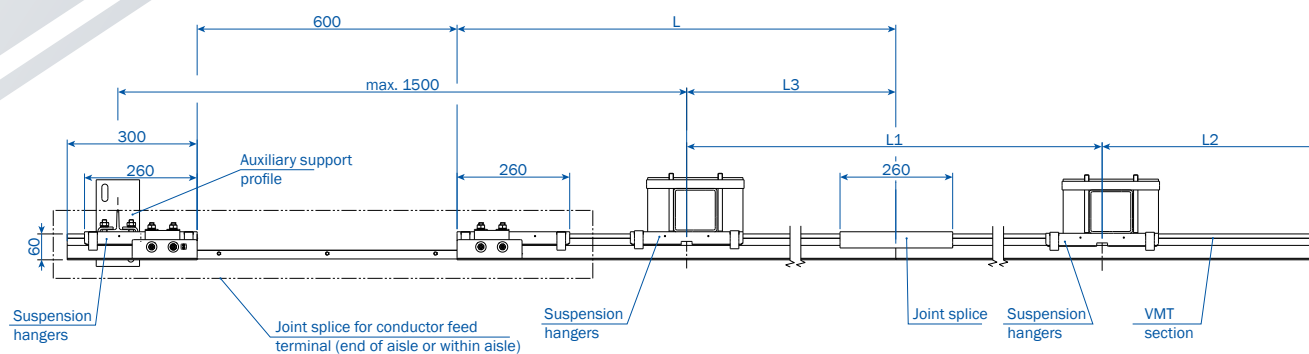


Data matrix tape



Bar code tape

## SYSTEM LAYOUT



L = Length of VMT Multi Support Profile  
L1 = Support center distance max. 3.5 m  
L2 = Overhang (max 0.5 m)  
L3 = Safety dimension for expansion min. 0.35 m

## TECHNICAL DATA

VMT Multi Support Profile..... galvanized

Grid dimension compact hanger..... 100 mm

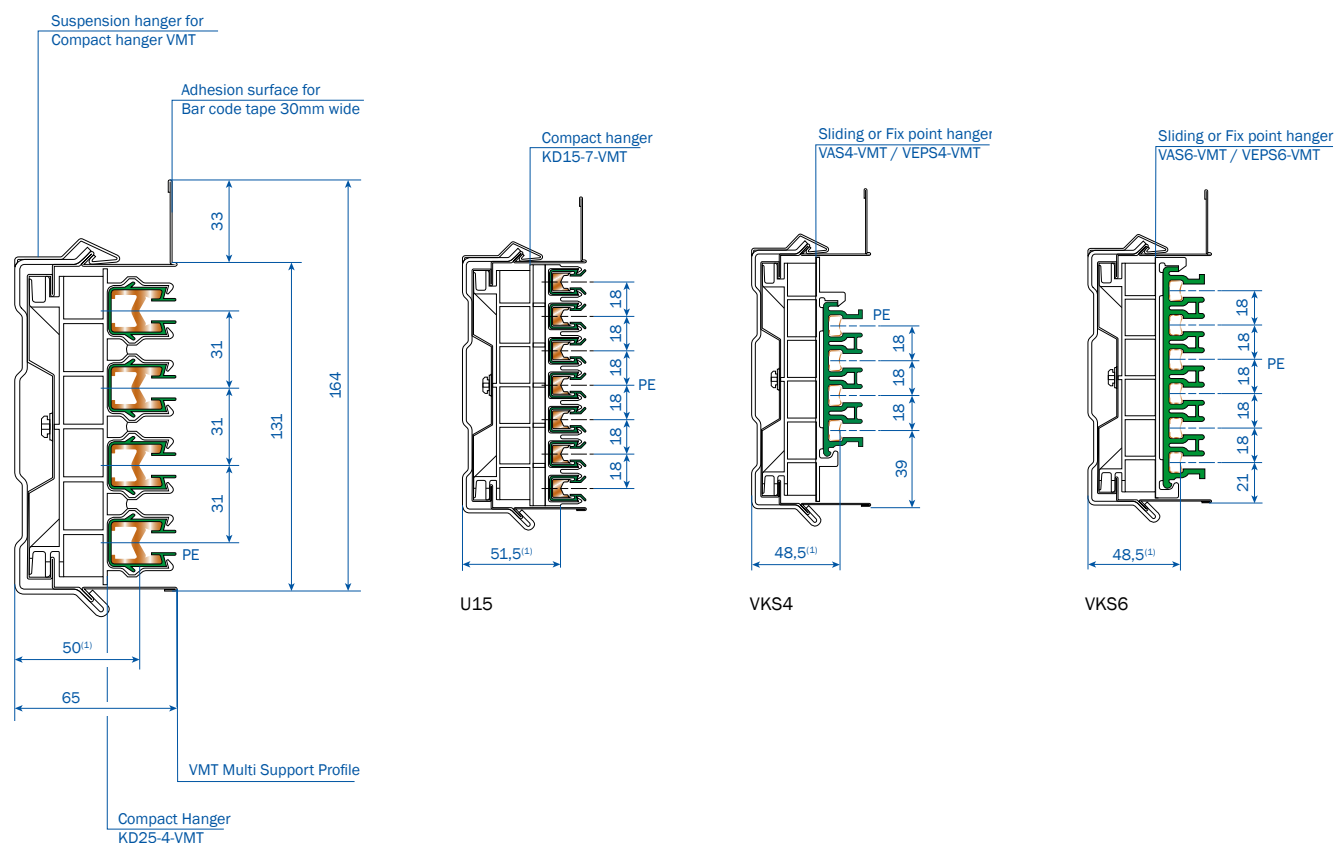
Profile length..... 6 m

Support hanger ..... Universal

Max. support center distance ..... 3.5 m (lateral arrangement)  
3.5 m (pendant arrangement)

## SYSTEM DATA

|                            |               |
|----------------------------|---------------|
| Number of poles.....       | 4-7           |
| Max. Voltage .....         | 690 V         |
| Current.....               | 60-400 A      |
| Duty cycle.....            | 100 %         |
| Approvals .....            | UL            |
| Max. operating speed ..... | 600 m/min     |
| Temperature range .....    | -30 to +85 °C |
| Application area .....     | Indoor system |



U25

(1) Dimension support base to contact surface

## VAHLE MULTI SUPPORT PROFILE



| Type     | Description                            | Weight kg | Order No. |
|----------|----------------------------------------|-----------|-----------|
| VMT-6000 | VAHLE Multi Support Profile   6 m long | 12.336    | 171546    |

## JOINT SPLICE



| Type   | Description           | Weight kg | Order No. |
|--------|-----------------------|-----------|-----------|
| KV-VMT | Clamping joint splice | 0.845     | 171536    |

## SUSPENSION HANGERS

### SUSPENSION HANGERS WITH AUXILIARY SUPPORT

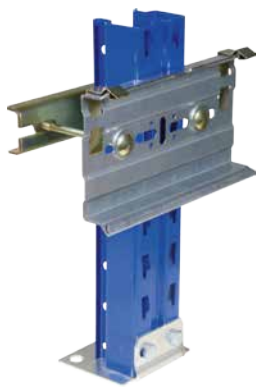


AH-VMT-HS

### CLAMPING SUSPENSION HANGERS



AH-VMT-SPW

AH-VMT 100-125<sup>(1)</sup>

### BOLTED SUSPENSION HANGERS



AH-VMT-BS

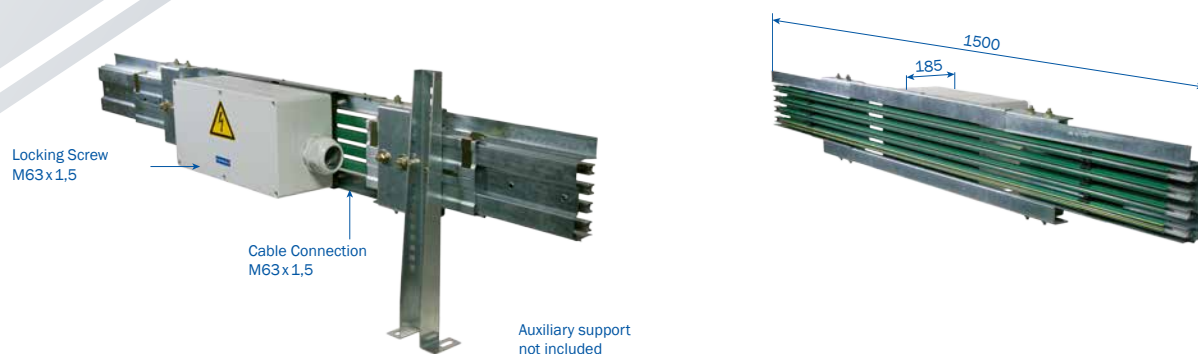


AH-VMT-S

| Type           | Weight kg | Clamping range mm | Order No. |
|----------------|-----------|-------------------|-----------|
| AH-VMT-HS-500  | 2.783     | -                 | 171583    |
| AH-VMT -SPW    | 0.985     | max. 6 mm         | 171539    |
| AH-VMT 100-115 | 1.603     | 100-1151          | 171537    |
| AH-VMT 110-125 | 1.615     | 110-1251          | 171538    |
| AH-VMT-BS      | 0.850     | -                 | 171540    |
| AH-VMT-S       | 0.909     | -                 | 171547    |

(1) Additional clamping dimensions available per request

## FEEDING MODULE MEU25-VMT



The power feed of the module MEU25, developed for the conductor system U25 in VAHLE Multi Support Profile, is an ex works completely pre-assembled unit including a pre-fitted terminal box with a cable gland M63 x 1.5 for 4-pole connecting cables with a maximum cable diameter of 45 mm (also both sided connection possible). Two versions allow the connecting of conductor systems made of copper or aluminum steel.

The mounting of the power feed can be carried out in the aisle or at the end of the aisle. The power feed module also serves as a fixed point of the bus bars.

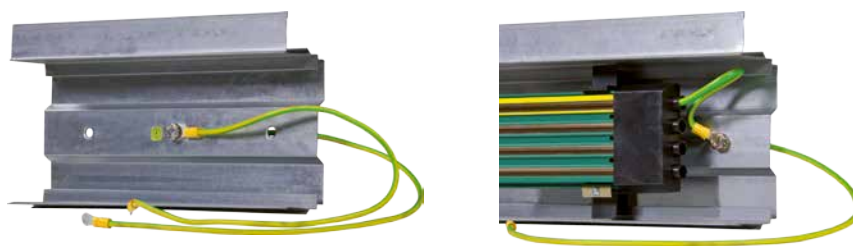
| Type            | Description                | Weight kg | Order No. |
|-----------------|----------------------------|-----------|-----------|
| MEU25/125AE-VMT | Feeding module U25AE 320 A | 20.205    | 171585    |
| MEU25/125C-VMT  | Feeding module U25C 450 A  | 25.000    | 171584    |

## JOINT SPLICE BCB



| Type         | Description                | Weight kg | Order No. |
|--------------|----------------------------|-----------|-----------|
| VMTB900-ESST | Connection within aisle    | 10.517    | 171548    |
| VMTB900-ESAE | Connection at end of aisle | 11.120    | 171549    |

## POTENTIAL EQUALIZATION FOR VMT



| Type                  | Description                             | Weight kg | Order No. |
|-----------------------|-----------------------------------------|-----------|-----------|
| VSPA-VMT-600          | Connection set U15   U25                | 0.300     | 171563    |
| VSPA-VMT-200-VKS4-R   | Connection set VKS4 (right side)        | 0.443     | 171564    |
| VSPA-VMT-200-VKS4-L   | Connection set VKS4 (left. side)        | 0.443     | 171566    |
| VSPA-VMT-200-VKS5+6-R | Connection set VKS5   VKS6 (right side) | 0.457     | 171565    |
| VSPA-VMT-200-VKS5+6-L | Connection set VKS5   VKS6 (left side)  | 0.457     | 171567    |

## INSTALLATION TOOLS



Cutting guide

Installation pliers

| Type    | Description                           | Weight kg | Order No. |
|---------|---------------------------------------|-----------|-----------|
| SVU-VMT | Cutting guide for sub-sections        | 2.570     | 171561    |
| MZ-VMT  | Installation pliers for joint splices | 0.700     | 171533    |

# VAHLE CONDUCTOR SYSTEMS FOR VMT

## INSULATED CONDUCTORS U15C

| Type              | Description      | Weight kg | Order No. |
|-------------------|------------------|-----------|-----------|
| U15/25C-6000PH-BA | 6m section phase | 1.800     | 162136    |
| U15/25C-6000PE-AA | 6m section PE    | 1.800     | 162196    |
| VM-UV15-K4        | Joint splice     | 0.040     | 160102    |
| ES-UE15-K4        | Feed terminal    | 0.040     | 160107    |
| ES-UEG15-K4       | Feed terminal    | 0.060     | 160216    |
| KD15-7-VMT        | Compact hanger   | 0.048     | 171524    |
| FP-USK15-K4       | Locating clamp   | 0.030     | 160106    |
| EK-UK15-L         | End cap          | 0.010     | 160109    |

## INSULATED CONDUCTORS U25C

| Type               | Description      | Weight kg | Order No. |
|--------------------|------------------|-----------|-----------|
| U25/100C-6000PH-BA | 6m section phase | 6.110     | 171046    |
| U25/100C-6000PE-AA | 6m section PE    | 6.110     | 171146    |
| VM-UV25            | Joint splice     | 0.190     | 170595    |
| KD25-4-VMT         | Compact hanger   | 0.044     | 171523    |
| FP-USK25-K4        | Locating clamp   | 0.026     | 170010    |
| ES-UE25-L-B        | Feed terminal    | 0.190     | 170599    |
| ES-UEG25-L-B       | Feed terminal    | 0.560     | 170597    |
| EK-UK25-L          | End cap          | 0.005     | 170013    |

## INSULATED CONDUCTORS U25AE

| Type                | Description                                          | Weight kg | Order No. |
|---------------------|------------------------------------------------------|-----------|-----------|
| U25/90AE-6000PH-BA  | 6m section phase   90 mm <sup>2</sup> cross section  | 2.630     | 171246    |
| U25/90AE-6000PE-AA  | 6m section PE   90 mm <sup>2</sup> cross section     | 2.630     | 171256    |
| U25/125AE-6000PH-BA | 6m section phase   125 mm <sup>2</sup> cross section | 3.290     | 171286    |
| U25/125AE-6000PE-AA | 6m section PE   125 mm <sup>2</sup> cross section    | 3.290     | 171296    |
| VM-UV25AE-B         | Joint splice                                         | 0.150     | 170960    |
| KD25-4-VMT          | Compact hanger                                       | 0.044     | 171523    |
| FP-USK25-K4         | Locating clamp                                       | 0.026     | 170010    |
| ES-UE25AE-L-B       | Feed terminal                                        | 0.150     | 171158    |
| ES-UEG25AE-L-B      | Feed terminal                                        | 0.460     | 170962    |
| EK-UK25-L           | End cap                                              | 0.005     | 170013    |

# VAHLE CONDUCTOR SYSTEMS FOR VMT

## ENCLOSED COMPACT CONDUCTORS VKS4

| Type             | Description                                | Weight kg | Order No. |
|------------------|--------------------------------------------|-----------|-----------|
| VKS4/60-6000HSA  | 6 m section HS   60 A                      | 8.880     | 153996    |
| VKS4/100-6000HSA | 6 m section HS   100 A                     | 10.248    | 154006    |
| VKS4/120-6000HSA | 6 m section HS   120 A                     | 11.094    | 154016    |
| VKS4/140-6000HSA | 6 m section HS   140 A                     | 11.904    | 154316    |
| VM-SVN4/10-100   | Joint splice material up to 100 A          | 0.142     | 156535    |
| VM-SVN4/120-140  | Joint splice material up to 120 A          | 0.136     | 156536    |
| ES-VNS4/60-140   | Line feed with terminal box                | 1.984     | 157146    |
| ES-VLS4/60       | Line feed with single cables   10 - 60 A   | 0.061     | 156947    |
| ES-VLS4/100-120  | Line feed with single cables   100 - 120 A | 0.179     | 156943    |
| ES-VLS4/140      | Line feed with single cables   140 A       | 0.239     | 156957    |
| VAS4-VMT         | Sliding hangers                            | 0.036     | 171526    |
| VEPS4-VMT        | Fix point hangers                          | 0.042     | 171527    |
| EK-VES4-L        | End cap, lose                              | 0.040     | 150140    |
| VEKS4/10-120L    | End feed 10–120 A                          | 1.230     | 156421    |

## ENCLOSED COMPACT CONDUCTORS VKS5

| Type             | Description                              | Weight kg | Order No. |
|------------------|------------------------------------------|-----------|-----------|
| VKS5/60-6000HSA  | 6 m section HS   60 A                    | 12.348    | 154096    |
| VKS5/100-6000HSA | 6 m section HS   100 A                   | 13.752    | 154106    |
| VKS5/120-6000HSA | 6 m section HS   120 A                   | 14.628    | 154116    |
| VKS5/140-6000HSA | 6 m section HS   140 A                   | 15.438    | 154876    |
| VM-SVN5/10-100   | Joint splice material up to 100 A        | 0.180     | 156537    |
| VM-SVN5/120-140  | Joint splice material up to 120 A        | 0.188     | 156538    |
| ES-VNS5/60-140   | Line feed with terminal box              | 2.133     | 157145    |
| ES-VLS5/60       | Line feed with single cables   10–60 A   | 0.145     | 156946    |
| ES-VLS5/100-120  | Line feed with single cables   100–120 A | 0.119     | 156942    |
| ES-VLS5/140      | Line feed with single cables   140 A     | 0.129     | 156956    |
| VAS6-VMT         | Sliding hangers                          | 0.036     | 171525    |
| VEPS6-VMT        | Fix point hangers                        | 0.042     | 171528    |
| EK-VES6-L        | End cap, loose                           | 0.050     | 152140    |
| VEKS5/10-120L    | End feed 10–120 A                        | 1.380     | 156420    |

# VAHLE CONDUCTOR SYSTEMS FOR VMT

## ENCLOSED COMPACT CONDUCTORS VKS6

| Type             | Description                              | Weight kg | Order No. |
|------------------|------------------------------------------|-----------|-----------|
| VKS6/60-6000HSA  | 6 m section PH   60 A                    | 13.278    | 154196    |
| VKS6/100-6000HSA | 6 m section PH   100 A                   | 14.616    | 154206    |
| VKS6/120-6000HSA | 6 m section PH   120 A                   | 15.460    | 154216    |
| VKS6/140-6000HSA | 6 m section PH   140 A                   | 16.158    | 152606    |
| VM-SVN6/10-100   | Joint splice material up to 100 A        | 0.194     | 156539    |
| VM-SVN6/120-140  | Joint splice material up to 120 A        | 0.194     | 156540    |
| ES-VNS6/60-140   | Line feed with terminal box              | 2.266     | 157144    |
| ES-VLS6/60       | Line feed with single cables   10–60 A   | 0.123     | 156945    |
| ES-VLS6/100-120  | Line feed with single cables   100–120 A | 0.255     | 156941    |
| ES-VLS6/140      | Line feed with single cables   140 A     | 0.359     | 156955    |
| VAS6-VMT         | Sliding hangers                          | 0.036     | 171525    |
| VEPS6-VMT        | Fix point hangers                        | 0.042     | 171528    |
| EK-VES6-L        | End cap, loose                           | 0.050     | 152140    |
| VEKS6/10-120L    | End feed 10–120 A                        | 1.460     | 156419    |

## COMPACT CURRENT COLLECTORS

### COMPACT CURRENT COLLECTOR SA-KEH 100 FOR U25

Contact pressure: approx. 12 N per brush

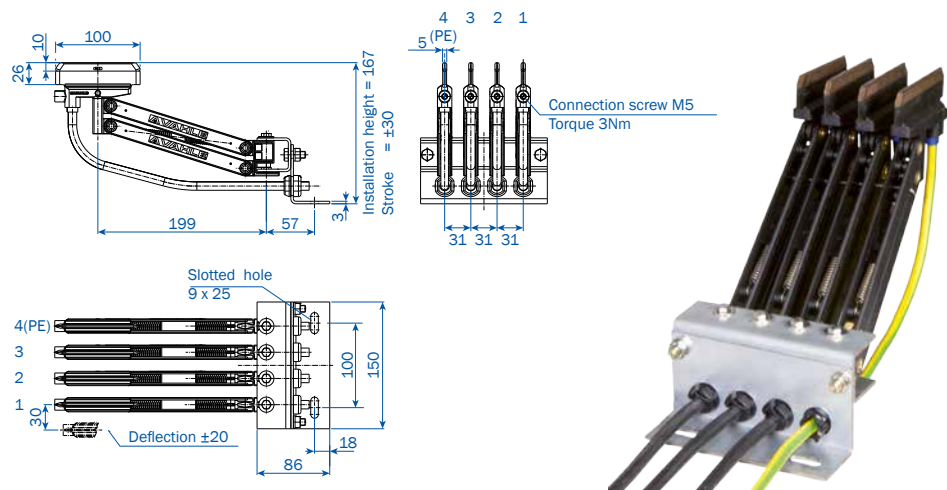
Number of poles: 4

Connecting cable: 16 mm<sup>2</sup>, 2 m long

Max. current: 100 A

Stroke: ±30 mm

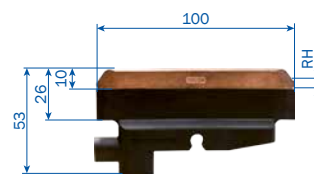
Swivel: ±20 mm



| Type                         | Weight kg | Number of poles | Base plate  | Order No.    |
|------------------------------|-----------|-----------------|-------------|--------------|
| SA-KEH100-4-31HSAD-2,0-04-04 | 3.100     | 4               | PE on No. 4 | 171529/00-D2 |
| SA-KEH100-4-31HSAD-2,0-01-04 | 3.100     | 4               | PE on No. 1 | 171530/00-A2 |

(1) lateral Deflection ±20 mm

# COMPACT CURRENT COLLECTORS



## COLLECTOR BRUSHES

| Type             | Weight kg | Thickness of brush mm | RH mm | for collector | Order No. |
|------------------|-----------|-----------------------|-------|---------------|-----------|
| SK-KMK100/KEH-04 | 0.077     | 4                     | 1.50  | KEH 100       | 10000053  |

## COMPACT CURRENT COLLECTORS SA-KESR FOR U15 AND VKS

Contact pressure: approx. 7 N per brush

Number of poles: 4–7

Connecting cable: 2.5–10 mm<sup>2</sup>

Max. current: 32–63 A

Deflection: ±15 mm



Standard



with adapter



with adapter and cable terminals

## COMPACT CURRENT COLLECTORS SA-KESL FOR U15 AND VKS

Contact pressure: approx. 7 N per brush

Number of poles: 4–7

Connecting cable: 2.5–10 mm<sup>2</sup>

Max. current: 32–63 A

Deflection: ±30 mm



Standard



with adapter



with adapter and cable terminals

For additional information see catalogs VKS (3b) and U15 (2c).



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