

10

DEVICES FOR EMERGENCY POWER SUPPLY IN LOW VOLTAGE NETWORKS



#### Your Partner for Emergency Power Supply

Since 1928 the name ARCUS equals quality and reliability in cable connections and safety products. The ARCUS ELEKTROTECHNIK ALOIS SCHIFFMANN GMBH is a highly specialised industrial enterprise in which high-quality products are designed and produced for the worldwide market.

#### Our product range includes:

- · Connectors and tools for underground cables
- Overhead line clamps
- · Earthing and short circuiting devices with cables and bars
- Lance earthing devices for outdoor switchgear up to 80 kA/0.5 s and 63 kA/1 s
- High voltage detectors for nominal voltages up to 420 kV
- Detectors and phase comparators for encapsulated switchgear
- · Devices for current tapping and power supply

#### Always in the centre of our activities:

Our clients. Our top aim is their complete and long-term satisfaction!

Highly qualified and motivated employees in our company in Munich and in our sales offices are the main condition for a successful conversion of customers' requirements.

During the long history of our company we have always understood some complex requirements of our customers as a challenge to be met.

In many cases the result of technical cooperation with business partners are products with an extraordinary place on the world market.

Technical know-how and the latest production techniques insure long term quality and reliability of our products and permit to keep the place of our company in Germany.

#### Availability by phone:

For queries concerning products and delivery time, and to place an order by phone, we are available as follows:

#### +49 (0)89/436 04-0

Monday - Thursday: 8:00 a.m.-12:00 noon and 00:30 p.m.-04:00 p.m.

Friday: 8:00 a.m.-12:00 noon

#### Information concerning this catalogue:

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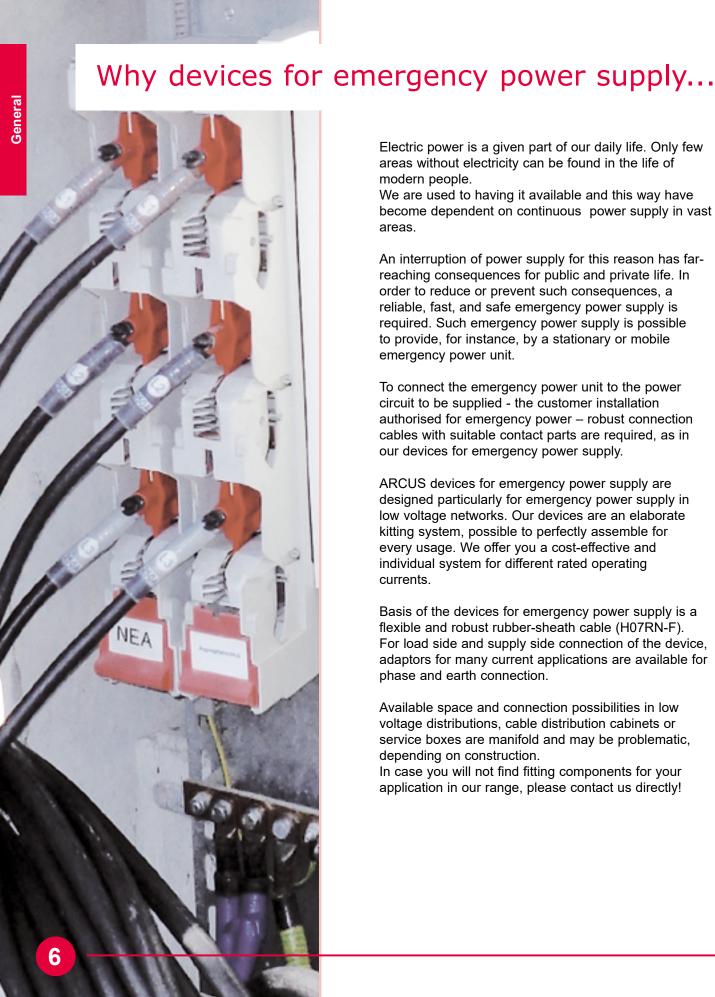
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#### **Devices for emergency Devices for emergency Devices for emergency** power supply up to 63 A power supply up to 100 A power supply up to 250 A DEVICES FOR CABLE DISTRIBUTION CABINETS → Page 12 → Page 13 ff. → Page 18 ff. Case sets, cases **Phase connections Earth connections** → Page 28 ff. → Page 26 ff. → Page 30 ff. **Handles** Release tool **Protection caps** →Page 32 **→ Page 33** → Page 33





Electric power is a given part of our daily life. Only few areas without electricity can be found in the life of modern people.

We are used to having it available and this way have become dependent on continuous power supply in vast areas.

An interruption of power supply for this reason has farreaching consequences for public and private life. In order to reduce or prevent such consequences, a reliable, fast, and safe emergency power supply is required. Such emergency power supply is possible to provide, for instance, by a stationary or mobile emergency power unit.

To connect the emergency power unit to the power circuit to be supplied - the customer installation authorised for emergency power – robust connection cables with suitable contact parts are required, as in our devices for emergency power supply.

ARCUS devices for emergency power supply are designed particularly for emergency power supply in low voltage networks. Our devices are an elaborate kitting system, possible to perfectly assemble for every usage. We offer you a cost-effective and individual system for different rated operating currents.

Basis of the devices for emergency power supply is a flexible and robust rubber-sheath cable (H07RN-F). For load side and supply side connection of the device, adaptors for many current applications are available for phase and earth connection.

Available space and connection possibilities in low voltage distributions, cable distribution cabinets or service boxes are manifold and may be problematic, depending on construction.

In case you will not find fitting components for your application in our range, please contact us directly!

#### Introduction



This catalogue gives you an overview about our programme of devices for emergency power supply and accessories. We have listed the products according to application area for better clarity.

We distinguish mainly two usage areas:

#### Devices for emergency power supply to low voltage cable installations (AC 1000 V):

These connect the emergency power unit to the customer installation authorised for emergency power supply. For this application we offer a number of suitable connection elements for cable installations.  $(\rightarrow Page \ 8)$ 

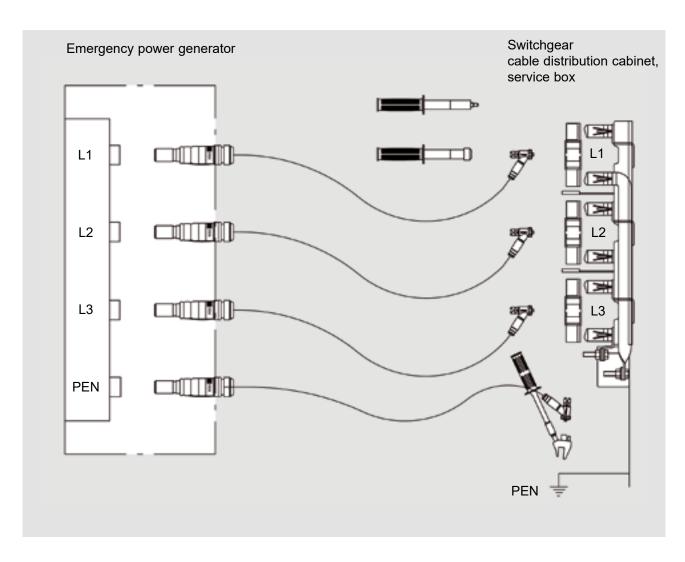
#### Devices for emergency power supply to low voltage overhead lines (AC 1000 V):

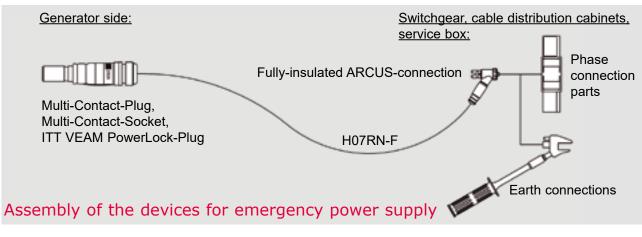
By means of devices for emergency power supply for connection to bare low voltage overhead lines, it is possible to feed current from a mobile emergency power unit into the overhead line for a longer duration and under all weather conditions. ( $\rightarrow$  Page 9)

Should you not find the suitable product on the following pages, please contact us!

#### Application 1

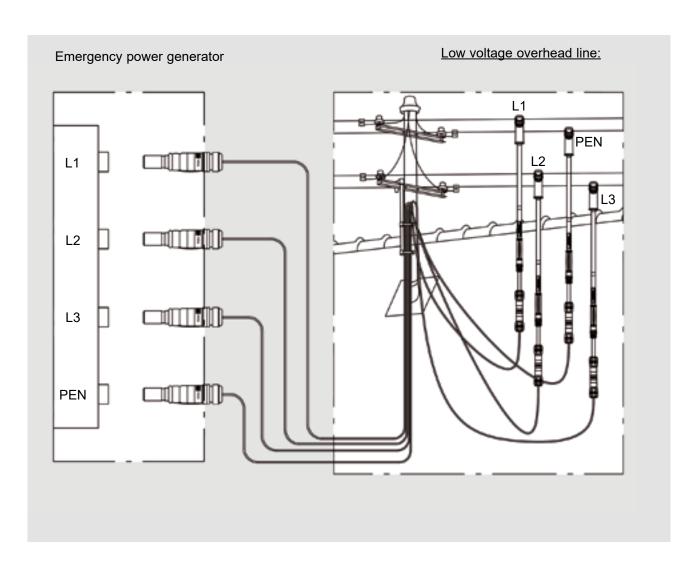
Devices for emergency power supply into low voltage cable installations:





#### **Application 2**

Devices for emergency power supply into low voltage overhead lines:





#### **Multi-Contact-Connections**

#### Reverse voltage protection on Multi-Contact-Connections:

6 different variations are available (C1-C6). These variations differ by different arrangements of guiding groove (plug) or guiding pin (socket). The code number is engraved on the plug connector beside the marking. Plugs can only be connected to sockets with identical code numbers.

The following codes are recommended by the manufacturer to secure correct matching:

Denomination	Symbol	Code Number		
Phase 1	L1	C1		
Phase 2	L2	C2		
Phase 3	L3	C3		
Neutral	N	C4		
Earth	PE	C5		
Reserve		C6		

#### Colour code on Multi-Contact-Connections:

Examples of cable core marking as per manufacturer according to DIN VDE 0283-308:

Region	Phase 1	Phase 2	Phase 3	Neutral	Earth
Europe					
USA					
China					

#### Locking ring on Multi-Contact-Connections:

With an additional locking ring for installation on connection sockets KBT10BV ( $\rightarrow$  pages 14 and 17) it is possible to lock the plug connection. Release is possible only with the release tool ( $\rightarrow$  page 33).



#### Protection class of Multi-Contact-Connections:

Unplugged: IP 2X Plugged: IP 65

#### RoHS of Multi-Contact-Connections:

Multi-Contact-Sockets and -Plugs are conform with RoHS.

#### **ITT VEAM PowerLock-Connections**

#### Colour code on VEAM PowerLock-Connections:

Examples of cable core marking as per manufacturer :

Region	Phase 1	Phase 2	Phase 3	Neutral	Earth
Europe					
North America					
Australia					

#### Protection class of ITT VEAM PowerLock-Connections:

Unplugged: IP 2X Plugged: IP 67

#### RoHS of ITT VEAM PowerLock-Connections:

ITT-Sockets and -Plugs are conform with RoHS.



#### **ARCUS-Devices for Emergency Power Supply**

ARCUS-Devices for emergency power supply are conform with RoHS.



#### Devices for Emergency Power Supply with PowerTOP® Xtra-Coupling and Fully-Insulated Connection - I<sub>e</sub> = 63 A



#### Assembly of the device:

Connection A:

PowerTOP® Xtra-Plug 63 A, 5-pole, 400 V,

screw contact, time setting: 6 h. Protection class: plugged: IP67

Connection B:

PowerTOP® Xtra-Coupling, 63 A, 5-pole, 400 V,

screw contact, time setting: 6 h. Protection class: plugged: IP67

Connection cable C:

Flexible and robust 25 mm² rubber-sheath cable

H07RN-F.

Connection D:

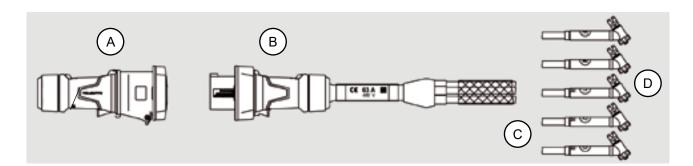
Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on

pages 28-31.

Technical data of the device:

Rated operating current: I<sub>e</sub>= 63A Temperature range: -25 °C up to +60 °C

Installation of the device:



Mennekes Connection A+B	l <sub>e</sub> [A]	Cable cross section [mm²]	Cable length C [mm]	Connection D	Colour	Additional marking	Type No.
PowerTOP® Xtra	63	25	ca. 2000	ARCUS		L1	
		25	ca. 2000	ARCUS		L2	
Coupling und		25	ca. 2000	ARCUS		L3	517 025 001 54
Plug		25	ca. 2000	ARCUS		N	
		25	ca. 2000	ARCUS		PE	

### Devices for Emergency Power Supply with MC-Socket KBT10 and Fully-Insulated Connection - $I_e = 100 \text{ A}$



#### Assembly of the device:

Connection A:

MC-Socket with protection cap, colour, and

code

Protection class:

unplugged: IP2X, plugged: IP65

Connection cable B:

Flexible and robust 25 mm² rubber-sheath cable

H07RN-F.
Connection C:

Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on

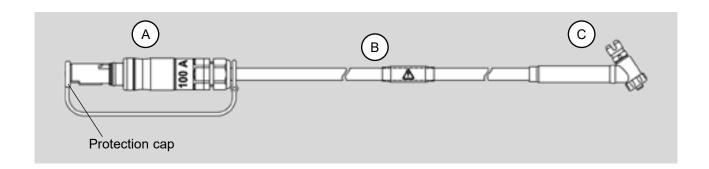
pages 28-31.

Technical data of the device:

Rated operating current :  $I_e$ = 100 A Temperature range: -25 °C up to +60 °C

Installation of the device:

Safe and simple installation with our fullyinsulated handle (Type Number 517 001 000  $\rightarrow$  Page 32).



MC	I <sub>e</sub> [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
	100		MC-Socket KBT10BV	C1	25	approx. 1500	ARCUS	517 025 001 01
	100		MC-Socket KBT10BV	C2	25	approx. 1500	ARCUS	517 025 001 02
	100		MC-Socket KBT10BV	C3	25	approx. 1500	ARCUS	517 025 001 03
	100		MC-Socket KBT10BV	C4	25	approx. 1500	ARCUS	517 025 001 04
	100		MC-Socket KBT10BV	C1	25	approx. 1500	ARCUS	517 025 001 01
KBT10	100		MC-Socket KBT10BV	C1	25	approx. 1500	ARCUS	517 025 001 06
KDIIU	100		MC-Socket KBT10BV	C1	25	approx. 1500	ARCUS	517 025 001 07
	100		MC-Socket KBT10BV	C1	25	approx. 1500	ARCUS	517 025 001 08
	100		MC-Socket KBT10BV	C1	25	approx. 2000	ARCUS	517 025 001 41
	100		MC-Socket KBT10BV	C1	25	approx. 2000	ARCUS	517 025 001 46
	100		MC-Socket KBT10BV	C1	25	approx. 2000	ARCUS	517 025 001 47
	100		MC-Socket KBT10BV	C1	25	approx. 2000	ARCUS	517 025 001 48

# Devices for Emergency Power Supply with MC-Socket KBT10 with Locking Ring and Fully-Insulated Connection - $I_e = 100 \text{ A}$



#### Assembly of the device

Connection A:

MC-Socket with protection cap, colour, code and locking ring.

Protection class:

unplugged: IP2X, plugged: IP65

Connection cable B:

Flexible and robust 25 mm² rubber-sheath cable

H07RN-F.
Connection C:

Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on

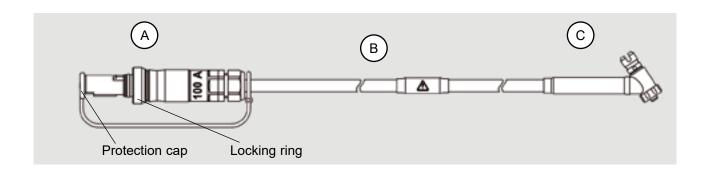
pages 28-31.

Technical data of the device:

Rated operating current: I<sub>e</sub>= 100 A
Temperature range: -25 °C up to +60 °C

Installation of the device:

Safe and simple installation with our fullyinsulated handle (Type Number 517 001 000  $\rightarrow$  Page 32).



MC	l <sub>e</sub> [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
	100		MC-Socket KBT10BV/VR	C1	25	approx. 1500	ARCUS	517 025 001 11
	100		MC-Socket KBT10BV/VR	C2	25	approx. 1500	ARCUS	517 025 001 12
	100		MC-Socket KBT10BV/VR	C3	25	approx. 1500	ARCUS	517 025 001 13
	100		MC-Socket KBT10BV/VR	C4	25	approx. 1500	ARCUS	517 025 001 14
KBT10								
	100		MC-Socket KBT10BV/VR	C1	25	approx. 2000	ARCUS	517 025 001 21
	100		MC-Socket KBT10BV/VR	C2	25	approx. 2000	ARCUS	517 025 001 22
	100		MC-Socket KBT10BV/VR	C3	25	approx. 2000	ARCUS	517 025 001 23
	100		MC-Socket KBT10BV/VR	C4	25	approx. 2000	ARCUS	517 025 001 24

With the additional locking ring for installation one can lock the plug connection. It can only be released with the release tool (type number 517 001 018) shown on page 33.

### Devices for Emergency Power Supply with MC-Plug KST10 and Fully-Insulated Connection - $I_e$ = 100 A



#### Assembly of the device

Connection A:

MC-Socket with protection cap, colour and

code

Protection class:

unplugged: IP2X, plugged: IP65

Connection cable B:

Flexible and robust 25 mm² rubber-sheath cable

H07RN-F.
Connection C:

Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on

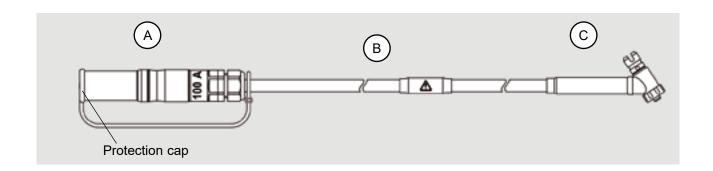
pages 28-31.

Technical data of the device:

Rated operating current: I<sub>e</sub>= 100 A
Temperature range: -25 °C up to +60 °C

Installation of the device:

Safe and simple installation with our fullyinsulated handle (Type Number 517 001 000  $\rightarrow$  Page 32).



MC	l <sub>e</sub> [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
	100		MC-Plug KST10BV	C1	25	approx. 2000	ARCUS	517 025 001 31
	100		MC-Plug KST10BV	C2	25	approx. 2000	ARCUS	517 025 001 32
	100		MC-Plug KST10BV	C3	25	approx. 2000	ARCUS	517 025 001 33
	100		MC-Plug KST10BV	C4	25	approx. 2000	ARCUS	517 025 001 34
KST10								
	100		MC-Plug KST10BV	C1	25	approx. 2000	ARCUS	517 025 001 31
	100		MC-Plug KST10BV	C1	25	approx. 2000	ARCUS	517 025 001 36
	100		MC-Plug KST10BV	C1	25	approx. 2000	ARCUS	517 025 001 37
	100		MC-Plug KST10BV	C1	25	approx. 2000	ARCUS	517 025 001 38

# Devices for Emergency Power Supply with MC-Plug KST10 and Adaptor for Jean Müller-Fuse Socket $I_e\,=\,100\,$ A



#### Assembly of the device

Connection A:

MC-Plug with protection cap, colour and code.

Protection class:

unplugged: IP2X, plugged: IP65

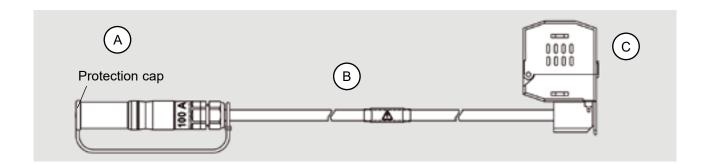
Connection cable B:

Flexible and robust 25 mm<sup>2</sup> rubber-sheath cable

H07RN-F.
Connection C:

Adaptor for Jean Müller-Fuse Socket: HP-SE/K

**Technical data of the device:**Rated operating current: I<sub>e</sub>= 100 A
Temperature range: -25 °C up to +60 °C



MC	l <sub>e</sub> [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
	100		MC-Plug KST10BV	C1	25	approx. 1500	Jean-Müller	517 025 001 51
KST10	100		MC-Plug KST10BV	C1	25	approx. 1500	Jean-Müller	517 025 001 52
	100		MC-Plug KST10BV	C1	25	approx. 1500	Jean-Müller	517 025 001 53

### Devices for Emergency Power Supply - Phase Change - with MC-Socket KBT10 and MC-Plug KST10 - I<sub>e</sub> = 100 A



#### Assembly of the device:

Connection A:

MC-Socket with protection cap, colour, code

and locking ring. Protection class:

unplugged: IP2X, plugged: IP65

Connection cable B:

Flexible and robust 25 mm² rubber-sheath cable

H07RN-F.

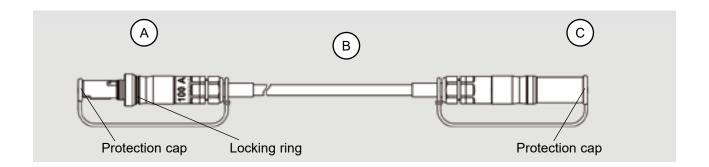
Length: 300 mm Connection C:

MC-Plug with protection cap, colour and code.

Protection class:

unplugged: IP2X, plugged: IP65 **Technical data of the device:**Rated operating current: I<sub>e</sub>= 100 A

Temperature range: -25 °C up to +60 °C



MC	l <sub>e</sub> [A]	Colour	Connection A	Code Number	Colour	Connection C	Code Number	Type No.
KBT10	100		MC-Socket KBT10BV	C3		MC-Plug KST10BV	C2	517 025 001 49
KST10	100		MC-Socket KBT10BV	C2		MC-Plug KST10BV	C3	517 025 001 50

With the additional locking ring for installation one can lock the plug connection. It can only be released with the release tool (type number 517 001 018) shown on page 33.

# Devices for Emergency Power Supply with MC-Socket KBT10 and Fully-Insulated Connection - $I_e$ = 250 A



#### Assembly of the device

Connection A:

MC-Socket with protection cap, colour and

code.

Protection class:

unplugged: IP2X, plugged: IP65

Connection cable B:

Flexible and robust 25 mm² rubber-sheath cable

H07RN-F. Connection C:

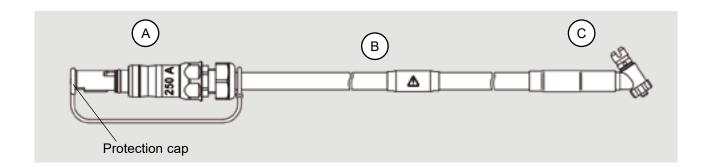
Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on

pages 28-31.

Technical data of the device:

Rated operating current: I<sub>e</sub>= 250 A Temperature range: -25 °C up to +60 °C

Installation of the device:



MC	l <sub>e</sub> [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
	250		MC-Socket KBT10BV	C1	70	approx. 1500	ARCUS	517 070 001 01
	250		MC-Socket KBT10BV	C2	70	approx 1500	ARCUS	517 070 001 02
	250		MC-Socket KBT10BV	C3	70	approx. 1500	ARCUS	517 070 001 03
	250		MC-Socket KBT10BV	C4	70	approx. 1500	ARCUS	517 070 001 04
	250		MC-Socket KBT10BV	C1	70	approx. 1500	ARCUS	517 070 001 01
KBT10	250		MC-Socket KBT10BV	C1	70	approx. 1500	ARCUS	517 070 001 06
	250		MC-Socket KBT10BV	C1	70	approx. 1500	ARCUS	517 070 001 07
	250		MC-Socket KBT10BV	C1	70	approx. 1500	ARCUS	517 070 001 08
	250		MC-Socket KBT10BV	C1	70	approx. 1500	ARCUS	517 070 001 311)
	250		MC-Socket KBT10BV	C2	70	approx. 1500	ARCUS	517 070 001 322)
	250		MC-Socket KBT10BV	C3	70	approx. 1500	ARCUS	517 070 001 33 <sup>3)</sup>

<sup>1)</sup> Additional marking: L1

<sup>2)</sup> Additional marking: L2

<sup>3)</sup>Additional marking: L3

# Devices for Emergency Power Supply with MC-Plug KST10 and Fully-Insulated Connection - $I_e$ = 250 A



#### Assembly of the device

Connection A:

MC-Plug with protection cap, colour and code

Protection class:

unplugged: IP2X, plugged: IP65

Connection cable B:

Flexible and robust 70 mm<sup>2</sup> rubber-sheath cable

H07RN-F.
Connection C:

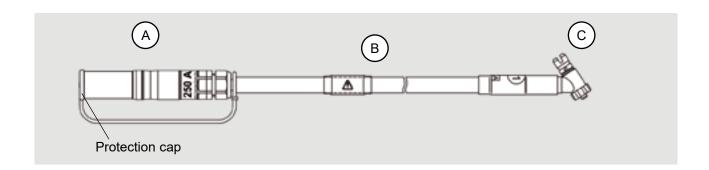
Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on

pages 28-31.

Technical data of the device:

Rated operating current: I<sub>e</sub>= 250 A Temperature range: -25 °C up to +60 °C

Installation of the device:



MC	le [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
	250		MC-Plug KST10BV	C1	70	approx. 1500	ARCUS	517 070 001 41
KST10	250		MC-Plug KST10BV	C2	70	approx. 1500	ARCUS	517 070 001 42
KSTIU	250		MC-Plug KST10BV	C3	70	approx. 1500	ARCUS	517 070 001 43
	250		MC-Plug KST10BV	C4	70	approx. 1500	ARCUS	517 070 001 44

# Devices for Emergency Power Supply with MC-Socket KBT16 and Fully-Insulated Connection - $I_e$ = 250 A



#### Assembly of the device

Connection A:

MC-Socket and colour.

Protection class:

unplugged: IP2X, plugged: IP65

Connection cable B:

Flexible and robust 70 mm² rubber-sheath cable

H07RN-F.
Connection C:

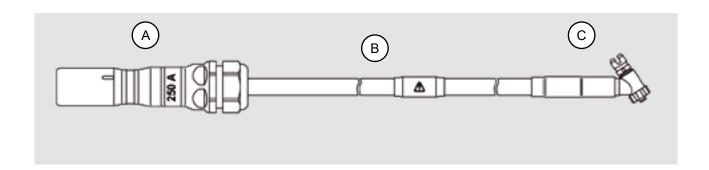
Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on

pages 28-31.

Technical data of the device:

Rated operating current: I<sub>e</sub>= 250 A
Temperature range: -25 °C up to +60 °C

Installation of the device:



MC	le [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
	250		MC-Socket KBT16BV		70	approx. 2000	ARCUS	517 070 001 11
KBT16	250		MC-Socket KBT16BV		70	approx. 2000	ARCUS	517 070 001 12
KDIIO	250		MC-Socket KBT16BV		70	approx. 2000	ARCUS	517 070 001 13
	250		MC-Socket KBT16BV		70	approx. 2000	ARCUS	517 070 001 14

# Devices for Emergency Power Supply with MC-Plug KST16 and Fully-Insulated Connection - $I_e$ = 250 A



#### Assembly of the device

Connection A:

MC-Plug and colour.

Protection class:

unplugged: IP2X, plugged: IP65

Connection cable B:

Flexible and robust 70 mm<sup>2</sup> rubber-sheath cable

H07RN-F.
Connection C:

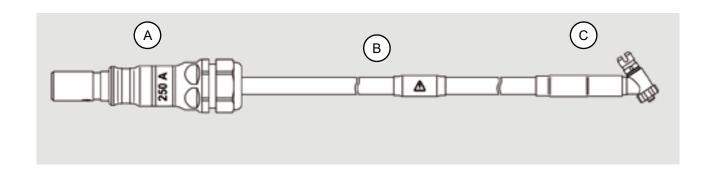
Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on

pages 28-31.

Technical data of the device:

Rated operating current: I<sub>e</sub>= 250 A
Temperature range: -25 °C up to +60 °C

Installation of the device:



MC	le [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
	250		MC-Plug KST16BV		70	approx. 2000	ARCUS	517 070 001 21
KST16	250		MC-Plug KST16BV		70	approx. 2000	ARCUS	517 070 001 22
K3110	250		MC-Plug KST16BV		70	approx. 2000	ARCUS	517 070 001 23
	250		MC-Plug KST16BV		70	approx. 2000	ARCUS	517 070 001 24

# Devices for Emergency Power Supply with MC-Plug KST10 and MC-Socket KBT16 - $I_e = 250 \text{ A}$



#### Assembly of the device

Connection A:

MC-Plug with protection cap, colour and code.

Protection class:

unplugged: IP2X, plugged: IP65

Connection cable B:

Flexible and robust 70 mm<sup>2</sup> rubber-sheath cable

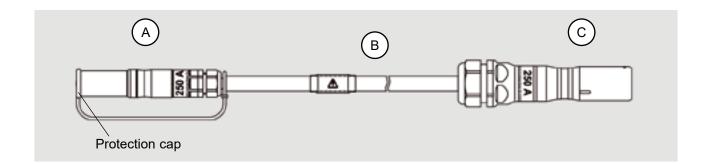
H07RN-F.
Connection C:

MC-Socket and colour.

Protection class:

unplugged: IP2X, plugged: IP65 **Technical data of the device:**Rated operating current: I<sub>e</sub>= 250 A

Temperature range: -25 °C up to +60 °C



MC	l <sub>e</sub> [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
	250		MC-Plug KST10BV	C1	70	approx. 2000	MC-Socket KBT16BV	517 001 054
KST10	250		MC-Plug KST10BV	C1	70	approx. 2000	MC-Socket KBT16BV	517 001 055
KBT16	250		MC-Plug KST10BV	C1	70	approx. 2000	MC-Socket KBT16BV	517 001 056
	250		MC-Plug KST10BV	C1	70	approx. 2000	MC-Socket KBT16BV	517 001 057

# Devices for Emergency Power Supply with Fully-Insulated Connections on Both Ends - $I_e = 250 \text{ A}$



#### Assembly of the device:

#### Connection A:

Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on pages 28-31.

#### Connection cable B:

Flexible and robust 70 mm² rubber-sheath cable H07RN-F.

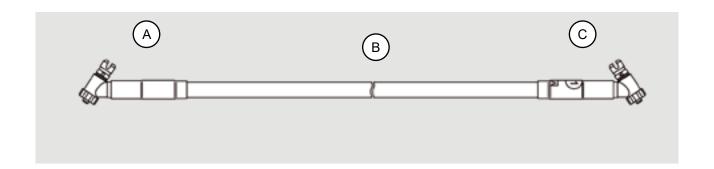
#### Connection C:

Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on pages 28-31.

#### Technical data of the device:

Rated operating current: I<sub>e</sub>= 250 A
Temperature range: -25 °C up to +60 °C

#### Installation of the device:



ARCUS	l <sub>e</sub> [A]	Colour	Connection A	Code Number	Cable cross section [mm²]	Cable length B [mm]	Connection C	Type No.
fully	250		ARCUS		70	approx. 1500	ARCUS	517 001 051 <sup>1)</sup>
fully-	250		ARCUS		70	approx. 1500	ARCUS	517 001 052 <sup>2)</sup>
insulated	250		ARCUS		70	approx. 1500	ARCUS	517 001 053 <sup>3)</sup>

<sup>1)</sup> Additional marking: L1

<sup>2)</sup> Additional marking: L2

<sup>3)</sup> Additional marking: L3

# Devices for Emergency Power Supply with ITT VEAM PowerLock-Plug and Fully-Insulated Connection - $I_e = 250 \text{ A}$



#### Assembly of the device:

Connection A:

ITT VEAM PowerLock-Plug and colour.

Protection class:

unplugged: IP2X, plugged: IP67

Connection cable B:

Flexible and robust 70 mm<sup>2</sup> rubber-sheath cable

H07RN-F.
Connection C:

Fully-insulated ARCUS-coupling. Suitable

components for phase and earth connection on

pages 28-31.

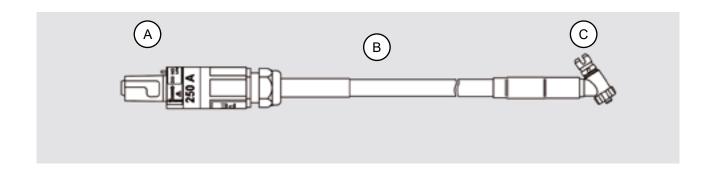
Technical data of the device:

Rated operating current: I<sub>e</sub>= 250 A

Temperature range: -25 °C up to +60 °C

Installation of the device:

Safe and simple installation with our fullyinsulated handle (Type Number 517 001 000  $\rightarrow$  Page 32).



ITT	l <sub>e</sub> [A]	Colour	Connection A	Cable cross section [mm²]	Cable length B [mm]	Connection C	Colour	Type No.
	250		PowerLock-Plug	70	approx. 1500	ARCUS		597 703 05 <sup>1)</sup>
	250		PowerLock-Plug	70	approx. 1500	ARCUS		597 703 10 <sup>2)</sup>
	250		PowerLock-Plug	70	approx. 1500	ARCUS		597 703 073)
	250		PowerLock-Plug	70	approx. 1500	ARCUS		597 703 11 <sup>4)</sup>
VEAM	250		PowerLock-Plug	70	approx. 1500	ARCUS		597 703 09 <sup>5)</sup>
	250		PowerLock-Plug	70	approx. 2000	ARCUS		597 703 12 <sup>2)</sup>
	250		PowerLock-Plug	70	approx. 2000	ARCUS		597 703 13 <sup>3)</sup>
	250		PowerLock-Plug	70	approx. 2000	ARCUS		597 703 14 <sup>4)</sup>
	250		PowerLock-Plug	70	approx. 2000	ARCUS		597 703 15 <sup>5)</sup>

1) Additional marking: PE

4) Additional marking: L3

2) Additional marking: L1

5) Additional marking: N

3) Additional marking: L2

Further variations of cable length and colour on request.

# Devices for Emergency Power Supply with ITT VEAM PowerLock-Plug and Fully-Insulated Connection - $I_e = 250 \text{ A}$

#### Suitable for phase change



#### Assembly of the device:

Connection A:

ITT VEAM PowerLock-Plug an colour.

Protection class:

unplugged: IP2X, plugged: IP67

Connection cable B:

Flexible and robust 70 mm<sup>2</sup> rubber-sheath cable

H07RN-F.
Connection C:

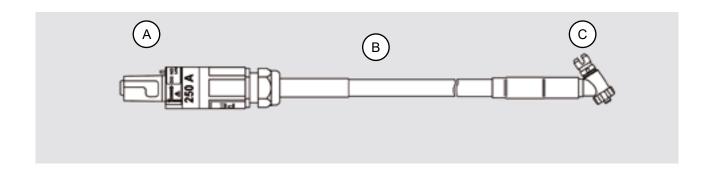
Fully-insulated ARCUS-coupling. Suitable components for phase and earth connection on

pages 28-31.

Technical data of the device:

Rated operating current: I<sub>e</sub>= 250 A
Temperature range: -25 °C up to +60 °C

Installation of the device:



ITT	l <sub>e</sub> [A]	Colour	Connection A	Cable cross section [mm²]	Cable length B [mm]	Connection C	Colour	Type No.
VEAM	250	1)	PowerLock-Plug	70	approx. 1500	ARCUS	2)	597 703 06
VEAW	250	1)	PowerLock-Plug	70	approx. 1500	ARCUS	3)	597 703 08

<sup>1)</sup> Additional marking: L2

<sup>2)</sup> Additional marking L1

<sup>3)</sup> Additional marking: L3

#### Sets for Cable Distribution Cabinets

# 517 001 005

#### Kit for 100 A, 25 mm² with MC-Sockets KBT10BV:

1x Device for emergency power supply, yellow

1x Device for emergency power supply, green	Type No. 517 025 001 22
1x Device for emergency power supply, violet	Type No. 517 025 001 23
1x Device for emergency power supply, green/yellow	Type No. 517 025 001 24
1x Device for emergency power supply, phase change, green to violet	Type No. 517 025 001 50
1x Device for emergency power supply, phase change, violet to green	Type No. 517 025 001 49
3x Cartridge NH 00	Type No. 508 141
3x Cartridge NH 0-3	Type No. 508 142
3x Threaded fuse inserts E27	Type No. 597 066
3x Threaded fuse inserts E33	Type No. 597 065
1x Earth connection clamp	Type No. 502 001 000
1x Earth connection clamp	Type No. 502 065
1x Earth connection clamp 1x Earth connection clamp	Type No. 502 065 Type No. 502 064

Type No. 517 025 001 21

Type No. 517 001 000

Type No. 517 001 004

Type No. 517 001 018

Type No. 615 117

Type No. 770 216



#### Kit for 250 A 70 mm<sup>2</sup> with MC-Pluge KST16B\/-

1x Handle for emergency power supply 1x Handle for emergency power supply

1x Release tool for locking ring

1x Plastic case

1x Instruction for use

Kit for 250 A, 70 mm² with MC-Plugs KS I 16BV:	
1x Device for emergency power supply, yellow	Type No. 517 070 001 21
1x Device for emergency power supply, green	Type No. 517 070 001 22
1x Device for emergency power supply, violet	Type No. 517 070 001 23
1x Device for emergency power supply, green/yellow	Type No. 517 070 001 24
3x Cartridge NH 00	Type No. 508 141
3x Cartridge NH 0-3	Type No. 508 142
3x Cartridge NH 4A	Type No. 508 143
1x Earth connection clamp	Type No. 515 229
1x Earth connection clamp	Type No. 502 064
1x Earth connection clamp	Type No. 597 352
1x Earth connection clamp	Type No. 597 307
1x Handle for emergency power supply	Type No. 517 001 000
1x Handle for emergency power supply	Type No. 517 001 004
1x Plastic case	Type No. 615 117
1x Instruction for use	Type No. 770 216



#### Kit for 250 A 70 mm<sup>2</sup> with VEAM PowerLock-Plugs:

<u>igs:</u>
Type No. 597 703 06
Type No. 597 703 07
Type No. 597 703 08
Type No. 597 703 05
Type No. 508 141
Type No. 508 142
Type No. 508 143
Type No. 502 065
Type No. 508 147
Type No. 517 001 000
Type No. 517 001 004
Type No. 615 117
Type No. 770 216

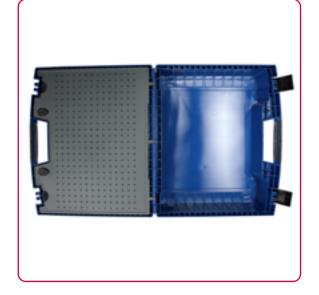
Further models available upon request.

#### Carrying Case for Free Kitting



#### Transport case for devices for emergency power supply

- Dimensions WxDxH [mm]: 500x420x175
- Robust plastic case with foamed inlay
- Colour: dark blue
- Rubberised handle for convenient handling
- Toggle levers
- Shaped and stable feet for a firm stand
- Stacking feet for safe and slide-free stacking
- Divider plate for use of complete case interior





#### **Accessories - Phase Connections**



#### Cartridge for insertion into fuse bases

#### Material:

Contact parts: Copper alloy (tin-plated) or Aluminium alloy (tin-plated)

Insulation on cartridge for one-sided supply: Polyamid (heat-resistant, impact-proof and shock-resistant)

#### **Connection:**

Threaded connection for fully-insulated devices for emergency power supply with ARCUS-coupling.

#### Installation:

Safe and simple installation with our fully-insulated handle

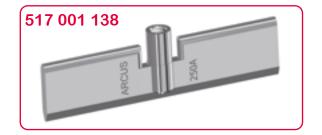
(Type Number 517 001 004 → Page 32).



#### Cartridge for one-sided supply

Size	Type No.
NH 00	508 141
NH 0-3	508 142
NH 4a <sup>1)</sup>	508 143

1) Overall length: 190 mm



#### Cartridge for double-sided supply

Size	Type No.
NH 1	517 001 138
NH 2+3	517 001 151

#### **Accessories - Phase Connections**



#### Fuse inserts with pin (incoming current)

- with connection for fully-insulated devices for emergency power supply
- with connection for handle (Type Number 517 001 004 → Page 32)

Size	Type No.
E27	597 064
E33	597 063
E40	508 001 012



#### Fuse inserts with ring (outgoing current)

- with connection for fully-insulated devices for emergency power supply
- with connection for handle
   (Type Number 517 001 004 → Page 32)

Size	Type No.
E27	597 066
E33	597 065



#### Insulated cable end sleeve for current feed of disconnected cable loops

- With anti-twist connection for fully-insulated devices for emergency power supply.
- Conductor cross sections [mm²]: 25-150 SM-185 RM,SM(r) 16-50 RE-150 SE, 185 SE (90°)
- Contact screw: Grub screw SW 6

### Accessories - Earth Connection Clamps with Handle

#### Earth connection clamps with handle

#### Material:

Clamp head: Copper alloy (tin-plated)

Handle: Threaded spindle with hardened conical tip or circular groove, clamp head and handle are insulated.

#### Installation:

The handle is flexible and bendable for use in confined space, e.g. in closed distribution cabinets. The width of the clamp head of approx. 20 mm requires little space to clamp it to the ground bar



Earth connection clamp for flat bars: 3-10 mm with anti-twist connection for devices for emergency power supply					
Total length [mm]	Total length [mm] Type No.				
290	502 064				
410	597 106				



Earth connection clamp for flat bars: 3-10 mm with anti-twist connection for devices for emergency power supply			
Total length [mm]	Type No.		
310	502 065		
410	597 317		



Earth connection clamp with circular groove on spindle end for flat bars: 3-10 mm with anti-twist connection for devices for emergency power supply				
Total length [mm] Type No.				
290 597 307				

Further models available upon request.

### Accessories - Earth Connection Clamps without Handle



#### Earthing clamp

- · · for flat bars: 3-8 mm
- · with connection for cable lug with
- Ø 9 mm palm hole
- with connection for handle
  (Type Number 517 001 000 → Page 32)



#### Earth connection clamp

- for flat bars 9-18 mm
- for round conductors: up to Ø 18 mm
- for hexagonal: SW17 and SW19
- With anti-twist connection for fullyinsulated devices for emergency power supply
- With connection for handles (Type Number 517 001 000 → Page 32)
- up to 100 A



#### Earth connection clamp

- for flat bars: 2-12 mm, clamping width: 30 mm
- with anti-twist connection for fullyinsulated devices for emergency power supply
- with connection for handle (Type Number 517 001 048 → Page 32)



#### Handle for installation of connection elements and connection cable

Length: 250 mm

Insulated up to 1000 V, to IEC 60900



#### Torque handle for installation of connection clamp Type Number 515 236

Length: 282 mm Torque: 5 Nm

Insulated up to 1000 V, to IEC 60900



#### Handle for installation of connection elements

Length: 269 mm

Connection for phase connection elements Insulated up to 1000 V, to IEC 60900

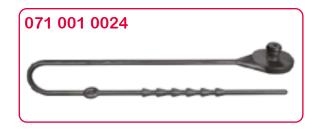
### Accessories - Release Tool for Locking Ring on MC-Sockets and Protection Cap for MC-Adaptor



Release tool for locking ring of Multi-Contact-Sockets of devices for emergency power supply on pages 14 and 17.



Protection cap suitable for MC-Plug KST10BV.



Protection cap suitable for MC-Socket KBT10BV.

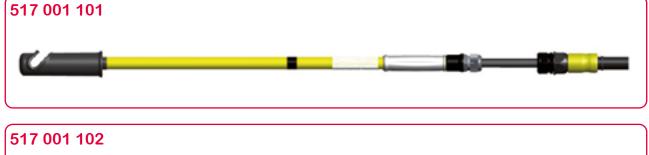


Protection cap suitable for MC-Plug KST16BV.



Protection cap suitable for MC-Socket KBT16BV.

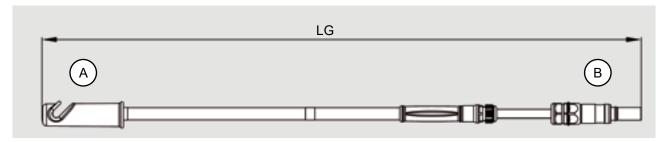
# Devices for Emergency Power Supply for Overhead Lines with MC-Socket KBT10 - $I_e$ = 165 A











MC	l <sub>e</sub> [A]	Colour	Connection A Aluminium- and Copper Conductor	Connection B	Code Number	LG [mm]	Type No.
	165		Ø 5-15 mm resp. 16 RE-120 RM mm²	MC-Socket KBT10BV	C1	1200	517 001 101
	165		Ø 5-15 mm resp 16 RE-120 RM mm²	MC-Socket KBT10BV	C2	1200	517 001 102
	165		Ø 5-15 mm resp. 16 RE-120 RM mm²	MC-Socket KBT10BV	C3	1200	517 001 103
	165		Ø 5-15 mm resp. 16 RE-120 RM mm²	MC-Socket KBT10BV	C4	1200	517 001 104
KBT10							
	165		Ø 5-15 mm resp. 16 RE-120 RM mm²	MC-Socket KBT10BV	C1	1200	517 001 101
	165	Ø 5-15 mm resp. 16 RE-120 RM mm²		MC-Socket KBT10BV	C1	1200	517 001 105
	165	165 Ø 5-15 mm resp. 16 RE-120 RM mm²		MC-Socket KBT10BV	C1	1200	517 001 106
	165		Ø 5-15 mm resp. 16 RE-120 RM mm²	MC-Socket KBT10BV	C1	1200	517 001 107

Further variations of colour and code on request.

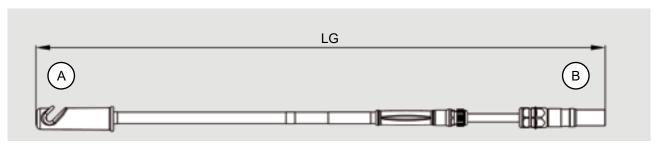
## Devices for Emergency Power Supply for Overhead Lines with MC-Plug KST10 - $I_e = 165 \text{ A}$











MC	l <sub>e</sub> [A]	Colour	Connection A Aluminium- and Copper Conductors	Connection B	Code Number	LG [mm]	Type No.
	165		Ø 5-15 mm resp. 16 RE-120 RM mm²	MC-Plug KST10BV	C1	1200	517 001 131
KST10	165		Ø 5-15 mm resp 16 RE-120 RM mm²	MC-Plug KST10BV	C1	1200	517 001 132
KSTIU	165		Ø 5-15 mm resp. 16 RE-120 RM mm²	MC-Plug KST10BV	C1	1200	517 001 133
	165		Ø 5-15 mm resp. 16 RE-120 RM mm²	MC-Plug KST10BV	C1	1200	517 001 134

#### Sets for Overhead Lines



Kit for 165 A, with MC-Sockets KBT10BV:	Type No. 517 001 110
1x Device for emergency power supply, yellow, code C1	Type No. 517 001 101
1x Device for emergency power supply, green, code C2	Type No. 517 001 102
1x Device for emergency power supply, violet, code C3	Type No. 517 001 103
1x Device for emergency power supply, green/yellow, code C4	Type No. 517 001 104
1x Plastic case, black with nap foam	Type No. 075 8793

Kit for 165 A, with MC-Sockets KBT10BV:	Type No. 517 001 120
1x Device for emergency power supply, yellow, code C1	Type No. 517 001 101
1x Device for emergency power supply, green, code C1	Type No. 517 001 105
1x Device for emergency power supply, violet, code C1	Type No. 517 001 106
1x Device for emergency power supply, green/yellow, code C1	Type No. 517 001 107
1x Plastic case, black with nap foam	Type No. 075 8793

Kit for 165 A, with MC-Plugs KST10BV:	Type No. 517 001 130
1x Device for emergency power supply, yellow, code C1	Type No. 517 001 131
1x Device for emergency power supply, green, code C1	Type No. 517 001 132
1x Device for emergency power supply, violet, code C1	Type No. 517 001 133
1x Device for emergency power supply, green/yellow, code C1	Type No. 517 001 134
1x Plastic case, black with nap foam	Type No. 075 8793

Further models available upon request.

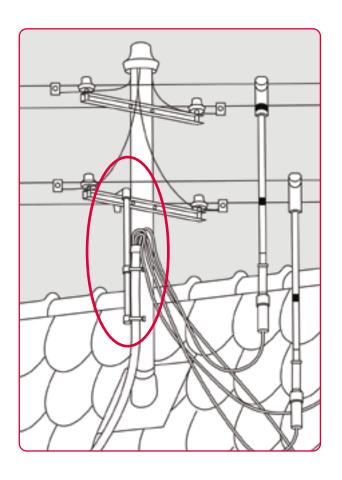
#### Carrying Case for Free Kitting



#### Transport case for devices for emergency power supply • Dimensions WxDxH [mm]: 1200x230x100

Robust plastic case with nap foam

Colour: black



#### Strain relief sleeve for connection lines on devices for emergency power supply

#### Strain relief sleeve for:

 Construction site connections from overhead lines according to the Bulletin of the VBEW (Association of Bavarian Energy and Water Industry) for equipment with temporary connection.

#### Construction of the strain relief sleeve:

- Very robust and fully-insulated construction made of high-quality and UV-resistant synthetic material.
- · Robust cable guidance with two clamps.
- Fastening hook for attachment to crossbars (e.g. angular or U-shaped bars or hooks).
- · Maximum tensile load 1000 N.
- Additional possibility to tie the bracket to the lateral side of the pole by means of a belt strap with buckle fastener.



Cable Diameter [mm]	Type No.
32-36	517 045
36-44	517 036



**Phone** General +49 (0) 89 / 4 36 04 - 0

Fax General +49 (0) 89 / 4 31 68 88

Fax Sales Department +49 (0) 89 / 4 36 04 - 73

Internet www.ARCUS-Schiffmann.com info@ARCUS-Schiffmann.com

Seat of the Company Truderinger Str. 199 D-81673 Munich