



Terminal blocks with screw connections

- ➔ Description page 702
- ➔ Feed-through terminals page 706
- ➔ Disconnecting terminals page 710
- ➔ Combined terminals page 712
- ➔ Initiator terminals page 713
- ➔ Distribution terminals page 713
- ➔ Fuse terminals page 715
- ➔ Earth conductor terminals page 717
- ➔ Pick-a-back terminals page 719
- ➔ Railless feed-through terminals page 720
- ➔ Accessories page 722

Terminal blocks with screw connections

Summary information

Schlegel terminal blocks are standard terminals for industrial applications, especially for electrical machine controls, for switching, distribution and measuring systems and for the lift and apparatus construction. The terminal blocks are suitable for high and low current, as well as for direct and alternating current. They are featuring by a short assembly time and their small dimensions. With a complete documentation of the production process according

to ISO 9001, we guarantee the highest quality standards. Precise mold construction is an important prerequisite for the production of high quality terminal blocks. That is why we are manufacturing our production tools ourselves since many years in order to retain control on one of the most important quality criteria.

Conductivity

To ensure a tight contact between conductor and metal (clamping) body with the lowest possible contact resistance, several factors are playing an important role. That includes the use of solid, drawn or bent metal (clamping) bodies and corrosion-proof materials, such as e.g. nickel-plated copper alloys, and soft surface coatings as e.g. tin in which the conductors can "embed". Even the wire protection bracket, preventing the wire from screw damage, provides a high contact pressure. The relatively large conductor cross-sections of the terminals reduce voltage drop to a minimum. Schlegel also uses zinc-plated steel for the foot of the earth terminal where a safe contact to the support rail (= earthing) is extremely important.

On screw-type terminals the quality of the screws dictates the quality of the terminal connection. Even when applying high tightening torques, the screws must not break nor melt with the female thread. For this reason, Schlegel terminal blocks are using rolled steel screws with a good galvanic surface coating with passivated zinc. The structure of rolled screws is compressed and strengthened, contrary to turned screws which have damaged fibres. The combination of steel screws and female threads made of copper alloy or steel successfully avoids melting, as can happen with brass-brass combinations.

Insulation

Insulating casings (insulating bodies) ensure the insulation from the surrounding area and the adjacent terminals. They must comply with the national and international specifications with regard to the creepage distance (transmission along the surface) and clearance distance (transmission through the air). This is achieved both by using high-quality polyamide 6.6 and by the specific construction of Schlegel terminal blocks (cavities in the casings extending the creepage distance).

The variety of approvals which Schlegel terminal blocks have

obtained worldwide are assured by utilising top-quality raw materials. The exclusive use of such materials is monitored by regular follow-up inspections carried through by the approval authorities.

The higher the quality of the insulating material, the smaller can be the creepage distance. As a matter of fact, using high-quality plastics exerts direct influence on the external dimensions of a terminal block: The better the material, the smaller the terminal!

Installation

Considering the respective connection diameter, Schlegel screw-type terminals are the smallest terminals in the market with regard to their

height, length (across the support rail) and width (in line with the rail). At the same time they have a relatively large clamping space compared to competitors' products.

Wire insertion

For screw-type terminals the conductor must be stripped before wiring. The optimal insulation stripping length must be observed as defined in the description of the relative terminals.

Basically, the Schlegel terminal blocks securely accept all wire types (solid, multiple and fine-stranded) even without wire end ferrules.

Soldering of fine-stranded conductors is prohibited, because the tin-solder tends to creep.

The grading system of the available rated cross-sections is standardised (1.5/2.5/4/6/... mm²) and defined in a way to enable the trouble-free connection of conductors with ferrules or solid conductors to the cross-section next in size without having to use the next larger terminal size (this does not apply to multiple or

fine-stranded conductors!).

The Schlegel product portfolio offers terminals for the most popular rated cross-sections. With the 4mm² screw-type terminal Schlegel offers the cheapest terminal in this most frequently demanded range. Also, it should be pointed out that Schlegel terminals for 4mm² rated cross-section accept conductors down to 0.2mm in diameter. In case of screw-type terminals with very large rated cross-sections (IK120 and IK240) the conductors are connected using cable lugs. It should be taken care to use wide partition walls between two such terminals sizes in order to insulate the blank cable lugs against each other.

Assembly

The screws of Schlegel terminals are tightened or loosened by means of a slotted-screw driver or a customary hexagonal screwdriver (for the large-sized terminals).

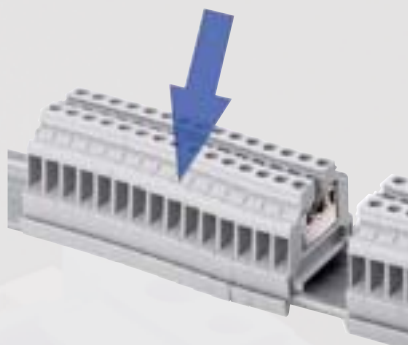
The interlocking insulating bodies of the Schlegel terminals facilitate the assembly work.

Due to this interlocking feature it is also possible to snap on the terminals as pre-assembled blocks. Another advantage of this interlocking system is the straight alignment of all terminals, even in case of different tractive forces of the wires or a slightly bent support

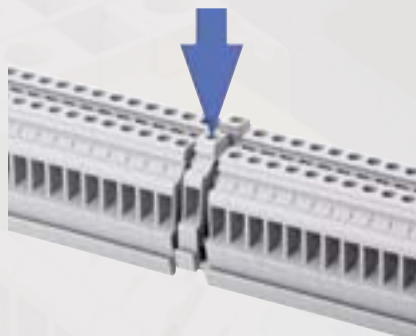
rail. Moreover, once snapped onto the rail, the terminal feet are relieved from stress which prevents material fatigue. However, if individual terminals have to be exchanged, the end clamp bracket must be loosened and the adjacent terminals must be shifted slightly. But this disadvantage takes only effect on the small number of exchanged terminals whereas the specified advantages become effective in general.



1. Slide-fitting of pre-assembled terminal blocks



2. Snap fitting of pre-assembled terminal blocks Important: Once the terminals are mounted onto the rail, the snap-fit terminal feet are relieved from stress preventing the plastics from material fatigue.



3. Snap or slide fitting of individual terminals



4. Replacement of individual terminals: Once the terminal to be replaced has been set free by slightly shifting the adjacent terminals aside (each by approx. 3mm), it can be easily levered out by applying a screwdriver to the terminal foot.

Mounting on support rail N35

Schlegel terminal blocks have feet that simply snap onto the terminal rail from both sides and can be easily levered out with a screwdriver. Also, the terminals can be easily slid on the mounting rail from the side.

Rail-less mounting

The terminals FK5 (for a rated cross-section of 4mm²) and FK16 (for a rated cross-section of 16mm²) are directly mounted e.g. on a switch cabinet. Since the terminals interlock securely into one another, only every 10th terminal has to be tightened by a screw. Attention should be paid to the fact that the FK5 and FK16 have different interlocking pins. Therefore, they cannot be mixed up when mounted.

PCB-mounting

The 1.5mm² terminals with screw connection (type ref.: GKL3) are directly soldered onto a PCB. Two soldering pins keep the terminals in place even when tightening the screw strongly (protection of the solder connections). Moreover, the wire inserts of the terminals face upwards inclining by 30° from the horizontal in order to facilitate wire insertion. The galvanic tin-plating on a nickel diffusion barrier ensures excellent solderability.

“OSK - original Schlegel clamping system”

On the screw-type terminals with wire protection bracket the conductors are pressed onto the basis of the conductive clamping body by the lower foot of the wire protection bracket which is fastened by a screw. This system is called the “OSK” system

(original Schlegel clamping system), because it is unique in the terminal market. This construction ensures the so-called “Six securities” :



Secure wire insertion due to:

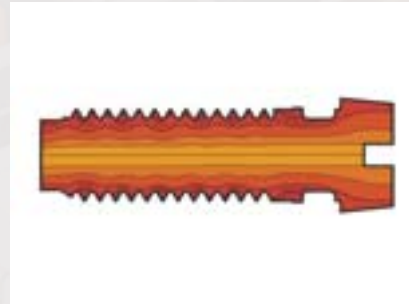
1. insulating walls next to wire insertion opening of the metal body,
2. reliable opening of the clamp when loosening the screws (because wire protection bracket snap-fits below screw head) and
3. limitation of clamping space by the lower arm of the wire protection bracket, thus no slipping of single wires or strands.



Security against screw loosening under vibration by the resilient wire protection bracket that presses against the screw head (this makes the screws captive).



Direct clamping pressure transmission onto the wire at full bearing of the screw and protection of the wire (no damaging or piercing by the screw)



High tightening torque:

The Schlegel terminals have rolled screws which, contrary to turned screws, feature a high-compressed structure with unbroken fibres in the thread area. The very high mechanical strength properties are achieved by thread rolling and assure high tightening torques



Security against tilting of the clamp (the solid metal clamping body prevents the connection "cages" from tilting when using thin wires)



Security against wire loosening thanks to resilient wire protection brackets and elastic deformation properties of the clamping body

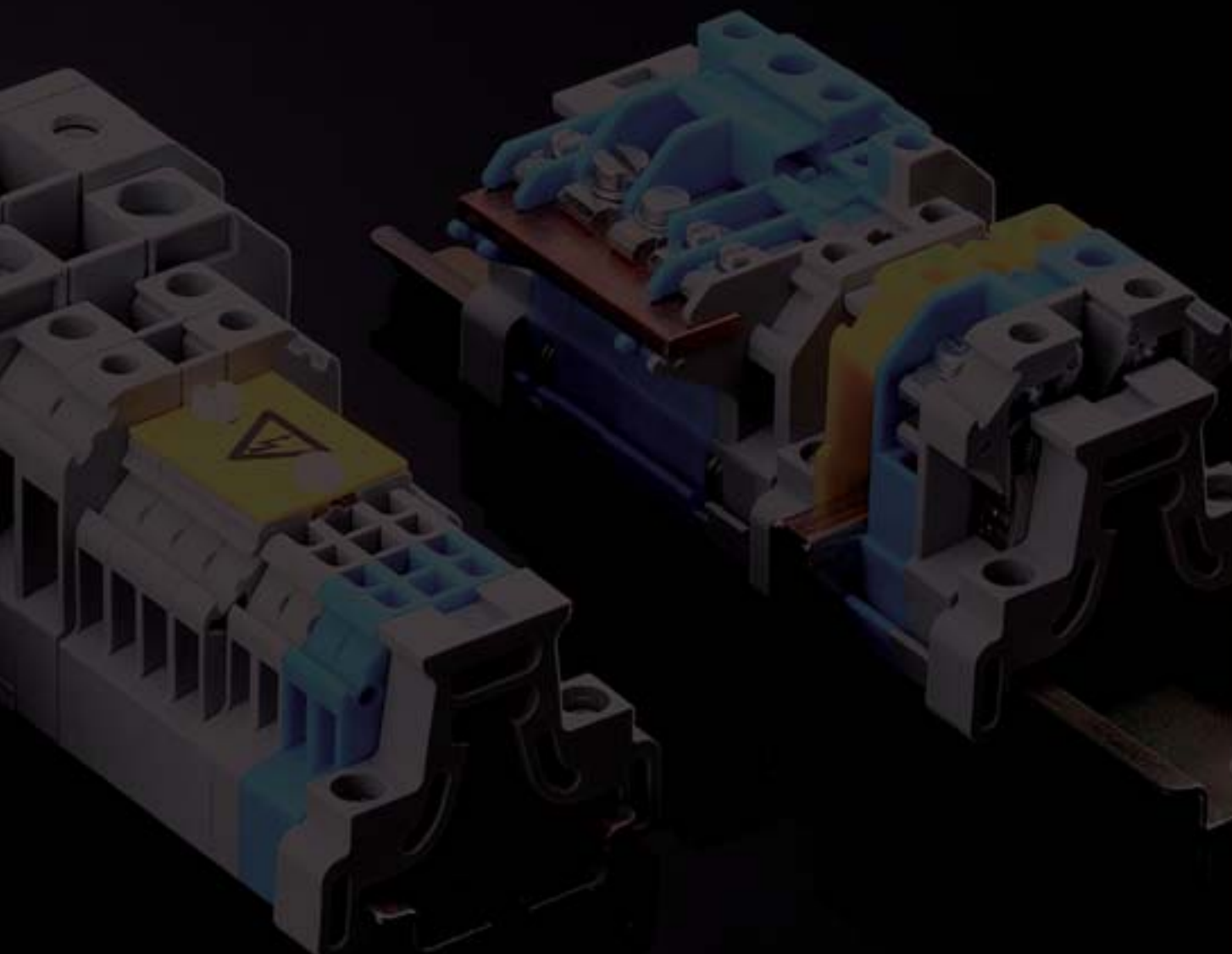
Miniature terminals

The miniature screw-type terminals for 2.5mm² (type ref. HK3) are normal feed-through terminals (same as IK3), which does not fit the top-hat rail N35 but snaps on its smaller variant N15. Accordingly, they are smaller in dimension, apart from their width.

Terminal blocks with flat-plug connections

Brief description

Particularly for the automotive industry, Schlegel also offer 4mm²-terminals with 2 x 2 flat plug connections for 6.3mm insulating sleeves (type ref. IZZ4). This connection system features very quick and easy connection of the conductors, keeping them well in place.



About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency/Stop Buttons

Bus Technology

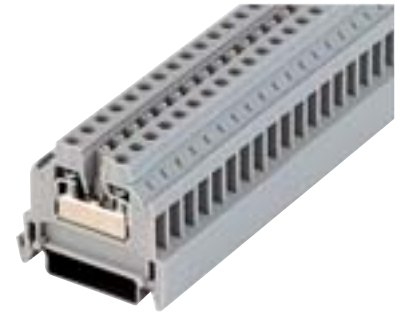
RFID

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index



Quick-assembly terminal blocks

rated cross section	2.5 mm²
solid	0.5 ... 4 mm ²
multiple wire	0.5 ... 2.5 mm ²
mounting method	Top hat rail N35, EN60715 TH35
terminal width	5.1 mm

tightening torque	0.5 Nm
rated voltage	750 V
rated current	25 A
operating temperature	-30°C ... 40°C

data acc. to IEC 60947-7-1	
flammability rating acc. to UL94	V2
pollution degree	3
overvoltage category	III
material group	II
rated impulse voltage	
stripping length	8 mm

data acc. to UL1059	
tightening torque	5 Lb In
connection range (solid wire)	22-12 AWG
rated voltage	600 V
rated current	20 A

data acc. to CSA C22.2 No 158-1987, ECN 548B	
tightening torque	
connection range (solid wire)	18-12 AWG
rated voltage	600 V
rated current	25 A

identification labels	HSKM50...
end sections	IW2, IW4
jumpers	VB2-12, VB2-2

Type	light-grey IK3
	blue IK3BL



Quick-assembly terminal blocks

rated cross section	4 mm²
solid	0.5 ... 6 mm ²
multiple wire	0.5 ... 4 mm ²
mounting method	Top hat rail N35, EN 60715 TH35
terminal width	6 mm

tightening torque	0.8 Nm
rated voltage	750 V
rated current	32 A
operating temperature	-30°C ... 40°C

data acc. to IEC 60947-7-1	
flammability rating acc. to UL94	V2
pollution degree	3
overvoltage category	III
material group	I
rated impulse voltage	
stripping length	9 mm

data acc. to UL1059	
tightening torque	9...13 Lb In
connection range (solid wire)	10-22 AWG
rated voltage	600 V
rated current	30 A

data acc. to CSA C22.2 No 158-1987, ECN 548B	
tightening torque	
connection range (solid wire)	20-10 AWG
rated voltage	600 V
rated current	40 A

identification labels	HSKM60...
end sections	IW16, IW4
jumpers	VB4-12, VB4-2

Type	light-grey IK5
	blue IK5BL

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency-Stop Buttons

Bus Technology

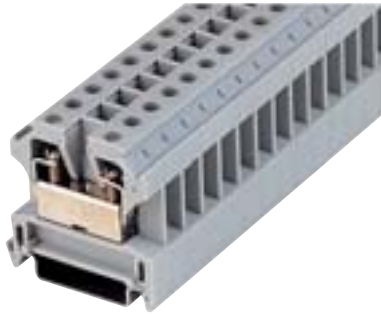
RFD

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index



Quick-assembly terminal blocks

10 mm²
0.5 ... 10 mm²
0.5 ... 10 mm²
Top hat rail N35, EN 60715 TH35
8 mm

0.8 Nm
830V/1000V (-> Hinweis!)
57 A
-30°C ... 40°C (bei 57A)

V2
3
III
I

11 mm

18 Lb In
6-22 AWG
600 V
65 A

2 Nm
24-8 AWG
600 V
50 A

HSKM80...
IW16, IW50
VB6-12, VB6-2

light-grey **IK10**
blue **IK10BL**



Quick-assembly terminal blocks

16 mm²
0.5 ... 16 mm²
0.5 ... 16 mm²
Top hat rail N35, EN 60715 TH35
10 mm

1.2 Nm
1000 V
76 A
-30°C ... 40°C

V2
3
III
I

11 mm

27 Lb In
6-22 AWG
600 V
85 A

2 Nm
20-6 AWG
600 V
68 A

HSKM100...
IW16, IW50
VB16-12, VB16-2

light-grey **IK16**
blue **IK16BL**



Quick-assembly terminal blocks

25 mm²
10 ... 25 mm²
10 ... 25 mm²
Top hat rail N35, EN 60715 TH35
12 mm

2.5 Nm
1000 V
101 A
-30°C ... 40°C

V2
3
III
I

16 mm

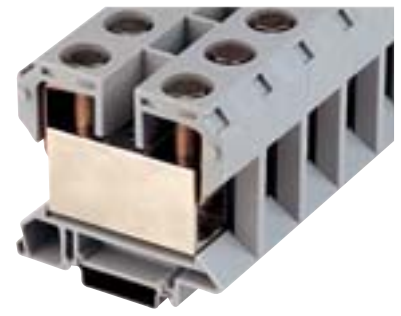
18 Lb In
4-8 AWG Str
600 V
85 A

2 Nm
10-4 AWG
600 V
70 A

HSKM60...
IW50, IW70
VB25, VBU35

light-grey **IK25**
blue **IK25BL**

1000 V max. when using a partition wall IW16 between the terminals



Quick-assembly terminal blocks

rated cross section	50 mm²
solid	2x16/1x16 50 mm ²
multiple wire	2x16/1x16 50 mm ²
mounting method	Top hat rail N35, EN 60715 TH35
terminal width	16 mm

tightening torque	5.6 Nm / 4 Nm (hexagon socket / slotted screw)
rated voltage	1000 V
rated current	150 A
operating temperature	-30°C ... 40°C

data acc. to IEC 60947-7-1	
flammability rating acc. to UL94	V2
pollution degree	3
overvoltage category	III
material group	I

stripping length	16 mm
------------------	-------

data acc. to UL1059	
tightening torque	5,6 Nm
connection range (solid wire)	1/0-6 AWG
rated voltage	600 V
rated current	150 A

data acc. to CSA C22.2 No 158-1987, ECN 548B	
tightening torque	
connection range (solid wire)	
rated voltage	
rated current	
identification labels	HSKM60...
end sections	IW51, IW70
jumpers	VB35, VBU35

Type	light-grey IK51
	blue IK51BL



Quick-assembly terminal blocks

rated cross section	70 mm²
solid	25 ... 70 mm ²
multiple wire	25 ... 70 mm ²
mounting method	Top hat rail N35, EN 60715 TH35
terminal width	23 mm

tightening torque	10 Nm
rated voltage	1000 V
rated current	192 A
operating temperature	-30°C ... 40°C

data acc. to IEC 60947-7-1	
flammability rating acc. to UL94	V2
pollution degree	3
overvoltage category	III
material group	I

stripping length	26 mm
------------------	-------

data acc. to UL1059	
tightening torque	123 Lb In
connection range (solid wire)	4/0-2 AWG
rated voltage	600 V
rated current	250 A

data acc. to CSA C22.2 No 158-1987, ECN 548B	
tightening torque	20 Nm
connection range (solid wire)	2-0000 AWG
rated voltage	600 V
rated current	200 A
identification labels	HSKM60...
end sections	IW70
jumpers	VB70, VBU35

Type	light-grey IK70
-------------	------------------------

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency-Stop Buttons

Bus Technology

RFD

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index



Quick-assembly terminal blocks

120 mm²
120 mm ²
120mm ²
Top hat rail N35, EN 60715 TH35
48 mm
10 Nm
750 V
269 A
-30°C ... 40°C
V2
3
III
II
360 Lb In
3/0 AWG
600 V
200 A
0-0000 AWG
600 V
280 A
HSKM100...
IW120
light-grey
IK120

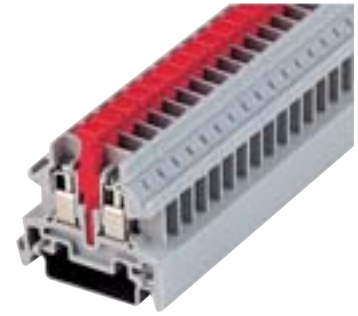


Quick-assembly terminal blocks

240 mm²
240 mm ²
240mm ²
Top hat rail N35, EN 60715 TH35
58 mm
14 Nm
750 V
415 A
-30°C ... 40°C
V2
3
III
II
480 Lb In
300 MCM
600 V
285 A
000 AWG-350 MCM
600 V
380 A
HSKM100...
light-grey
IK240

Quick-assembly terminal blocks

4 mm²
Top hat rail N35, EN 60715 TH35
6.1 mm
750 V
32 A
-30°C ... 40°C
V2
3
III
II
HSKM60...
VB4-12, VB4-2
light-grey
IZZ4



Separator terminals

Separator terminals

rated cross section

solid
multiple wire
mounting method
terminal width

4 mm²
0.5 ... 4 mm²
0.5 ... 4 mm²
Top hat rail N35, EN 60715 TH35
6 mm

4 mm²
0.5 ... 4 mm²
0.5 ... 4 mm²
Top hat rail N35, EN 60715 TH35
6 mm

tightening torque
rated voltage
rated current
operating temperature

0.8 Nm
500 V
16 A
-30°C ... 40°C

0.8 Nm
500 V
16 A
-30°C ... 40°C

data acc. to IEC 60947-7-1

flammability rating acc. to UL94
pollution degree
overvoltage category
material group
rated impulse voltage
stripping length

V2
3
III
II
7 mm

V2
3
III
II
7 mm

data acc. to UL1059

tightening torque
connection range (solid wire)
rated voltage
rated current

data acc. to CSA C22.2 No 158-1987, ECN 548B

tightening torque
connection range (solid wire)
rated voltage
rated current

22-12 AWG
300 V
20 A

identification labels
end sections
jumpers

HSKM60...
IW16, IW4

HSKM60...
IW16, IW4

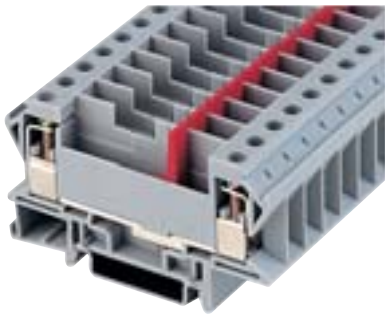
Type

light-grey **IKT4**
red **IKT4RT**
blue **IKT4BL**

light-grey **IKTS4**

Separator terminal + disconnecting plug (captive)

Separator terminal without disconnecting plug



Separator terminals with disconnect slider

10 mm²

0.5 ... 10 mm²

0.5 ... 10 mm²

Top hat rail N35, EN 60715 TH35

8 mm

0.8 Nm

500 V

57 A

-30°C ... 40°C

V2

3

III

II

6 kV

9 mm

HSKM80...

IWT10, IWTT10

VBL10, VBT10-4

light-grey

IKT10

Neutral wire separator terminals

4 mm²

0.5 ... 6 mm²

0.5 ... 4 mm²

Top hat rail N35, EN 60715 TH35

6 mm

0.5 Nm

500 V

32 A

-30°C ... 40°C

V2

3

III

II

8 mm

HSKM60...

IWTR4

blue

IKTR4

Neutral wire separator terminals

10 mm²

0.5 ... 10 mm²

0.5 ... 10 mm²

Top hat rail N35, EN 60715 TH35

8 mm

0.8 Nm

500 V

57 A

-30°C ... 40°C

V2

3

III

II

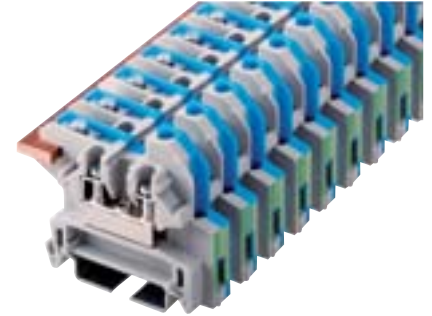
10 mm

HSKM80...

IWTR4

blue

IKTR10



Neutral wire separator terminals

PE/N combined three-wire terminals

rated cross section	16 mm²	4 mm²
solid	0.5 ... 16 mm ²	0.5 ... 6 mm ²
multiple wire	0.5 ... 16 mm ²	0.5 ... 4 mm ²
mounting method	Top hat rail N35, EN 60715 TH35	Top hat rail N35, EN 60715 TH35
terminal width	10 mm	12 mm
tightening torque	1.2 Nm	0.5 Nm
rated voltage	500 V	500 V
rated current	76 A	32 A
operating temperature	-30°C ... 40°C	-30°C ... 40°C
data acc. to IEC 60947-7-1		
flammability rating acc. to UL94	V2	V2
pollution degree	3	3
overvoltage category	III	III
material group	II	II
rated impulse voltage		
stripping length	10 mm	Earth connection terminal 10 mm, separator terminal 7 mm, feed-through terminal 9 mm
data acc. to UL1059		
tightening torque		
connection range (solid wire)		
rated voltage		
rated current		
data acc. to CSA C22.2 No 158-1987, ECN 548B		
tightening torque		
connection range (solid wire)		
rated voltage		
rated current		
identification labels	HSKM100...	HSKM50...
end sections	IWTR4	IW2
jumpers		
Type	blue IKTR16	blue/light-grey IKTR16

Combined three-wire terminal for the neutral, for the phase and for the PE conductor (with green/yellow marking)



Initiator terminals

2.5 mm²
0.5 ... 2.5 mm ²
0.5 ... 2.5 mm ²
Top hat rail N35, EN 60715 TH35
6 mm
0.5 Nm
24 A
-30°C ... 40°C
V2
3
III
II

Distribution terminals

4 mm²
0.5 ... 6 mm ²
0.5 ... 4 mm ²
Top hat rail N35, EN 60715 TH35
6 mm
0.8 Nm
380 V
32 A
-30°C ... 40°C
V2
3
III
II

Distribution terminals

4 mm²
0.5 ... 6 mm ²
0.5 ... 4 mm ²
Top hat rail N35, EN 60715 TH35
6 mm
0.8 Nm
380 V
32 A
-30°C ... 40°C
V2
3
III
II

Feed-through terminal 7 mm,
connecting rail connectors 8 mm

7 mm / earth connection terminal 10 mm

7 mm / earth connection terminal 10 mm

HSKM60...

HSKM60...

HSKM60...

IWEPTR

IWEPTR

VB4-12, VB4-2

VB4-12, VB4-2

light-grey

IKI4

light-grey

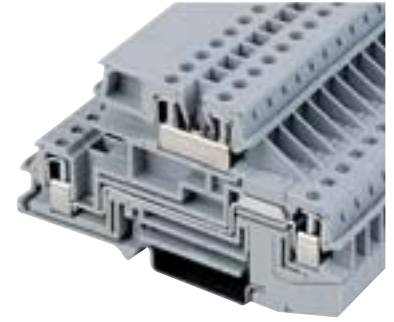
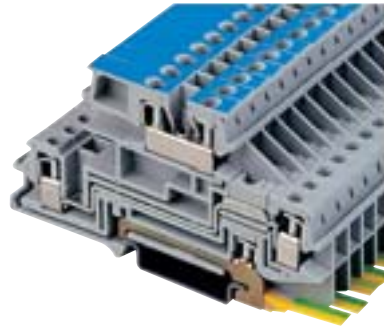
IKEPTR

light-grey

IKEPT

PE conductor on support rail, neutral wire
isolation on busbar

PE conductor on support rail, neutral wire
isolation



About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency-Stop Buttons

Bus Technology

RFD

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index

rated cross section

solid
multiple wire
mounting method
terminal width

tightening torque
rated voltage
rated current
operating temperature

data acc. to IEC 60947-7-1

flammability rating acc. to UL94
pollution degree
overvoltage category
material group
rated impulse voltage

stripping length

data acc. to UL1059

tightening torque
connection range (solid wire)
rated voltage
rated current

data acc. to CSA C22.2 No 158-1987, ECN 548B

tightening torque
connection range (solid wire)
rated voltage
rated current

identification labels
end sections
jumpers

Type

Distribution terminals

4 mm²
0.5 ... 6 mm²
0.5 ... 4 mm²
Top hat rail N35, EN 60715 TH35
6 mm

0.8 Nm
380 V
32 A
-30°C ... 40°C

V2
3
III
II

Earth connection terminal 10 mm, neutral wire 9 mm, feed-through terminal 7 mm

HSKM60...
IWEPTR
VB4-12, VB4-2

light-grey **IKEPN**

PE conductor on support rail, continuous neutral wire

Distribution terminals

4 mm²
0.5 ... 6 mm²
0.5 ... 4 mm²
Top hat rail N35, EN 60715 TH35
6 mm

0.8 Nm
380 V
32 A
-30°C ... 40°C

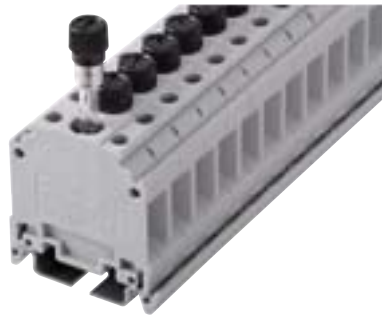
V2
3
III
II

9 / 7 mm

HSKM60...
IWEPTR
VB4-12, VB4-2

light-grey **IKPP**

2-pole feed-through terminal



Distribution terminals

4 mm²
0.5 ... 6 mm²
0.5 ... 4 mm²
Top hat rail N35, EN 60715 TH35
6 mm

0.8 Nm
380 V
32 A
-30°C ... 40°C

V2
3
III
II

Earth connection terminal 10 mm, feed-through terminal 7 / 9 mm

light-grey **IKEPP**

2-pole, PE conductor on support rail



Fuse terminals

4 mm²
0.5 ... 6 mm²
0.5 ... 4 mm²
Top hat rail N35, EN 60715 TH35
10 mm

0.8 Nm
500 V
6.3 A
-30°C ... 40°C

V2
3
III
II

7 mm

24-12 AWG
150 V
15 A

HSKM100...

light-grey **IKSI4**

with fuseholder, fuse cartridge*) not included, please order separately *) fuse cartridges acc. to DIN 41571



Fuse terminals

4 mm²
0.5 ... 6 mm²
0.5 ... 4 mm²
Top hat rail N35, EN 60715 TH35
8.1 mm

0.5 Nm
250 V
6.3 A
-30°C ... 40°C

V2
3
III
II

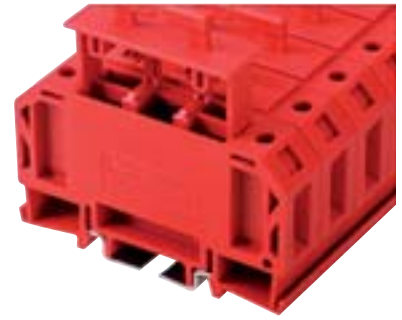
4 kV
7 mm

10 Lb In
14-22 AWG
300 V
10 A

HSKM80...

light-grey **IKSI5**
red **IKSI5RT**

for G-fuses 5x20 mm, with fuseholder, fuse cartridge*) not included, please order separately *) fuse cartridges acc. to DIN 41571



About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency-Stop Buttons

Bus Technology

RFD

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index

rated cross section

solid
multiple wire
mounting method
terminal width

tightening torque
rated voltage

rated current

operating temperature

data acc. to IEC 60947-7-1

flammability rating acc. to UL94
pollution degree
overvoltage category
material group
rated impulse voltage
stripping length

data acc. to UL1059

tightening torque
connection range (solid wire)
rated voltage
rated current

data acc. to CSA C22.2 No 158-1987, ECN 548B

tightening torque
connection range (solid wire)
rated voltage
rated current

identification labels
end sections
jumpers

Type

Fuse terminals

4 mm²

0.5 ... 6 mm²
0.5 ... 4 mm²
Top hat rail N35, EN 60715 TH35
8.1 mm

0.8 Nm

20 A max.

-30°C ... 40°C

V2

3

III

II

7 mm

light-grey

IKFS15

For automotive fuse links, used e.g. in construction machinery and caravans.



Fuse terminals

6 mm²

0.5 ... 6 mm²
0.5 ... 6 mm²
Top hat rail N35, EN 60715 TH35
16 mm

0.8 Nm

850 V

13.5 A/20 A max.
(composite/individual arrangement)

-30°C ... 55°C

V0

3

III

I

9 mm

8-22 AWG

600 V

20 A

light-grey

IKS110

red

IKS10RT

for 10,3x38 mm fuses incl. fuseholder but without cartridge fuses (please order separately)



Earth connection terminals

4 mm²

0.5 ... 4 mm²

0.5 ... 4 mm²

Top hat rail N35, EN 60715 TH35

7.5 mm

0.5 Nm

-30°C ... 40°C

V2

3

III

9 mm

8 Lb In

10-22 AWG

HSKM80...

yellow/green

IKE4

Please follow the instructions about the electrical short-term withstand current of top hat rails.



Earth connection terminals

10 mm²

4 ... 10 mm²

4 ... 10 mm²

Top hat rail N35, EN 60715 TH35

8.5 mm

0.8 Nm

-30°C ... 40°C

V2

3

III

10 mm

13.3 Lb In

8 AWG, Str

HSKM80...

yellow/green

IKE10

Please follow the instructions about the electrical short-term withstand current of top hat rails.



Earth connection terminals

16 mm²

0.5 ... 16 mm²

0.5 ... 16 mm²

Top hat rail N35, EN 60715 TH35

10.5 mm

1.2 Nm

-30°C ... 40°C

V2

3

III

11 mm

18 Lb In

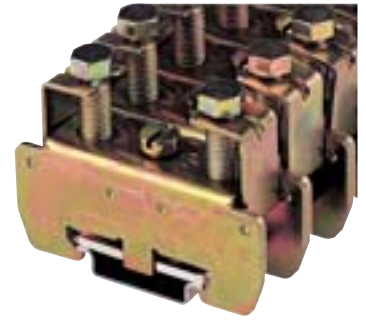
6 AWG, Str

HSKM100...

yellow/green

IKE16

Please follow the instructions about the electrical short-term withstand current of top hat rails.



Earth connection terminals

Earth connection terminals

rated cross section

35 mm²

70 mm²

solid

2x16/1x16 35 mm²

16 70 mm²

multiple wire

2x16/1x16 35 mm²

16 70 mm²

mounting method

Top hat rail N35, EN 60715 TH35

Top hat rail N35, EN 60715 TH35

terminal width

19 mm

20 mm

tightening torque

5.6 Nm

6 Nm

rated voltage

rated current

operating temperature

-30°C ... 40°C

-30°C ... 40°C

data acc. to IEC 60947-7-1

flammability rating acc. to UL94

V2

pollution degree

3

3

overvoltage category

III

III

material group

II

rated impulse voltage

stripping length

13 mm

22 mm

data acc. to UL1059

tightening torque

connection range (solid wire)

rated voltage

rated current

data acc. to CSA C22.2 No 158-1987, ECN 548B

tightening torque

connection range (solid wire)

rated voltage

rated current

identification labels

HSKM100...

end sections

jumpers

Type

IKE51

IKE70

Please follow the instructions about the electrical short-term withstand current of top hat rails.

Please follow the instructions about the electrical short-term withstand current of top hat rails.

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency-Stop Buttons

Bus Technology

RFD

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index



Pickaback terminals

4 mm²
0.5 ... 6 mm ²
0.5 ... 4 mm ²
Top hat rail N35, EN 60715 TH35
6 mm
0.5 Nm
750 V
32 A
-30°C ... 40°C
V2
3
III
II
7 mm
9...13 Lb In
10-22 AWG
600 V
30 A
20-10 AWG
600 V
40 A
HSKM60...
IWH4
VB4-12, VB4-2
light-grey IKH4
blue IKH4BL

Terminal types that fit on the second level:
IK3 up to IK16, IKS14, IKT4, IKTR4, IKTR16

Double-level terminal

4 mm²
0.5 ... 6 mm ²
0.5 ... 4 mm ²
Top hat rail N35, EN 60715 TH35
6 mm
0,5...0,8 Nm
750 V
32 A
-30°C ... 40°C
V2
3
III
I
top level 9 mm, bottom level 7 mm
9...13 Lb In
10-22 AWG
600 V
30 A
18-12 AWG
300 V
25 A
HSKM60...
HSKM60_1-100, IWD5
VB4-12, VB4-2
light-grey IKD5



Miniature terminals

2.5 mm²
0.5 ... 4 mm ²
0.5 ... 2.5 mm ²
Top hat rail N 15
5.1 mm
0.5 Nm
500 V
25 A
-30°C ... 40°C
V2
3
III
II
8 mm
5 Lb In
22-12 AWG
300 V
20 A
18-12 AWG
300 V
25 A
HSKM50...
EH2
VB2-12, VB2-2
light-grey HK3

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency/Stop Buttons

Bus Technology

RFID

Enclosures

Pedal Switches

Terminal Blocks

Type Index



Rail-less terminal blocks

Rail-less terminal blocks

rated cross section

solid
multiple wire
mounting method
terminal width

4 mm²

0.5 ... 6 mm²
0.5 ... 4 mm²
screw fastening
6.9 mm

16 mm²

0.5 ... 16 mm²
0.5 ... 16 mm²
screw fastening
10 mm

tightening torque
rated voltage
rated current
operating temperature

0.8 Nm
750 V
32 A
-30°C ... 40°C

1.2 Nm
750 V
76 A
-30°C ... 40°C

data acc. to IEC 60947-7-1

flammability rating acc. to UL94
pollution degree
overvoltage category
material group
rated impulse voltage
stripping length

V2
3
III
II
7 mm

V2
3
III
II
11 mm

data acc. to UL1059

tightening torque
connection range (solid wire)
rated voltage
rated current

18 Lb In
6-22 AWG
600 V
65 A

data acc. to CSA C22.2 No 158-1987, ECN 548B

tightening torque
connection range (solid wire)
rated voltage
rated current

6 AWG
600 V
80 A

identification labels
end sections
jumpers

HSKM60...
VBS4-2, VBS4-3

HSKM100...
VB16-2

Type

light-grey **FK5**

light-grey **FK16**

Easy and simple mounting. Screw every tenth terminal to secure the interlocking of the terminal row.

Easy and simple mounting. Screw every tenth terminal to secure the interlocking of the terminal row.



Rail-less terminal blocks

1.5 mm²

0.15 ... 1.5 mm²

0.15 ... 1.5 mm²

PCB-mount terminals

5mm

0.5 Nm

250 V

-30°C ... 40°C

V2

7 mm

HSKM50...

GWL3

light-grey

GKL3

Fixation on PCB: 2 soldering pins for PCB's with 1.3 mm holes
Wire insertion: at an angle of 30° upward from the horizontal line

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency/Stop Buttons

Bus Technology

RFID

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency-Stop Buttons

Bus Technology

RFD

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index

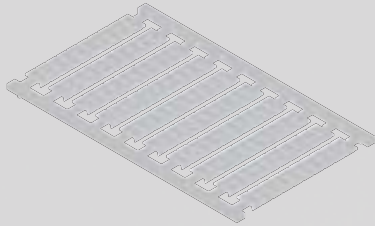
Illustration

Dimensions

Description

Type

Accessories



Identification labels, blank 100-piece sheet

suitable for
GKL3, HK3, IK3, IKTRED, IK3BL

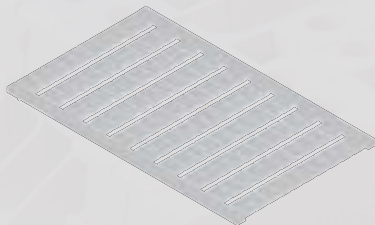
HSKM50U



Identification labels, printed 100-piece sheet

printed from 1 ... 100
other imprints on request
suitable for
GKL3, HK3, IK3, IKTRED, IK3BL

HSKM50_1-100



Identification labels, blank 100-piece sheet

suitable for
FK5, IK25, IK5, IK51, IK70, IKEPN, IKEPP, IKEPT, IKEPTR, IKH4,
IK14, IKPP, IKT4, IKTR4, IKTS4, IZZ4, IK5BL, IK25BL, IK51BL, IKT4RT,
IKT4BL, IKH4BL, IKD5

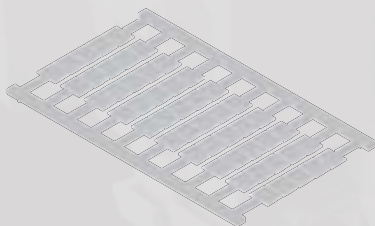
HSKM60U



Identification labels, printed 100-piece sheet

printed from 1 ... 100
other imprints on request
suitable for
FK5, IK25, IK5, IK51, IK70, IKEPN, IKEPP, IKEPT, IKEPTR, IKH4,
IK14, IKPP, IKT4, IKTR4, IKTS4, IZZ4, IK5BL, IK25BL, IK51BL, IKT4RT,
IKT4BL, IKH4BL, IKD5

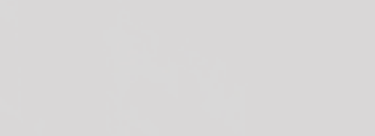
HSKM60_1-100



Identification labels, blank 50-piece sheet

suitable for
IK10, IKE10, IKE4, IKFSI5, IKS15, IKT10, IKTR10, IK10BL

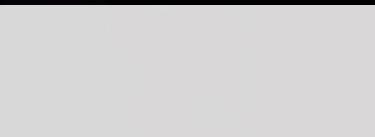
HSKM80U



Identification labels, printed 50-piece sheet

printed from 1 ... 50
other imprints on request
suitable for
IK10, IKE10, IKE4, IKFSI5, IKS15, IKT10, IKTR10, IK10BL

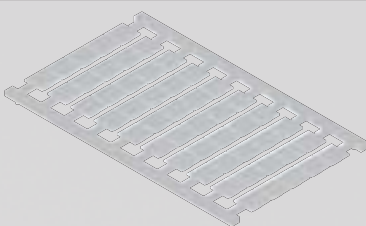

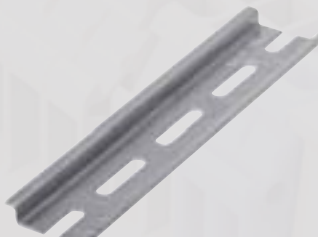
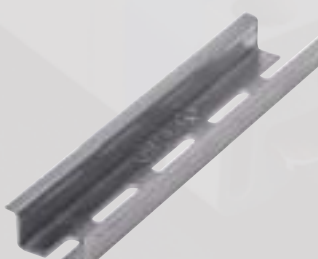

HSKM80_1-50



Identification labels, printed 50-piece sheet

printed from 51 ... 100
other imprints on request
suitable for
IK10, IKE10, IKE4, IKFSI5, IKS15, IKT10, IKTR10, IK10BL

HSKM80_51-100

Illustration	Dimensions	Description	Type
		Identification labels, blank 50-piece sheet suitable for FK16, IK120, IK16, IK240, IKE16, IKE51, IKS14, IKTR16, IK16BL	HSKM100U
		Identification labels, printed 50-piece sheet printed from 1 ... 50 other imprints on request suitable for FK16, IK120, IK16, IK240, IKE16, IKE51, IKS14, IKTR16, IK16BL	HSKM100_1-50
		Identification labels, printed 50-piece sheet printed from 51 ... 100 other imprints on request suitable for FK16, IK120, IK16, IK240, IKE16, IKE51, IKS14, IKTR16, IK16BL	HSKM100_51-100
		Top-hat rail N35-7.5 mm The rails are made of rolled sheet steel, galvanised and passivated. Short-time current resistance: 1.92kA 2 m long	N35-2
		Top-hat rail N35-7.5 mm, punched The rails are made of rolled sheet steel, galvanised and passivated. Short-time current resistance: 1.92kA 2 m long	N35L-2
		Top-hat rail N35-15 mm, punched The rails are made of rolled sheet steel, galvanised and passivated. Short-time current resistance: 6kA 2 m long	N35L-2_15MM
		End clamp bracket used as a fixing bracket at the end of a row of terminal blocks fits on N35-2, N35L-2, N35L-2_15MM rails	SK35

Illustration

Dimensions

Description

Type



End clamp bracket, reinforced version

used as a fixing bracket at the end of a row of terminal blocks, for terminal blocks from 50 mm² up the reinforced version is recommended,
fits on N35-2, N35L-2, N35-2_15MM rails

SKS35



End clamp bracket

used as a fixing bracket at the end of a row of terminal blocks
fits on N15-2 rails

SK15



Insulated end section

The end section of each terminal size is designed in a way that it can be used as partition for the next smallest terminal size,
fits on

IK3, IKTRED, IK3BL

IW2

IK3, IK5, IKT4, IKTS4, IK3BL, IK5BL, IKT4RT, IKT4BL

IW4

IKD5

IWD5

IK5, IK10, IK16, IK5BL, IK10BL, IK16BL, IKT4, IKT4RT, IKT4BL, IKTS4

IW16

IK10, IK16, IK25, IK10BL, IK16BL, IK25BL

IW50

IK51, IK51BL

IW51

IK25, IK51, IK70, IK25BL, IK51BL

IW70

IKEPTR, IKEPT, IKEPN, IKPP, IKEPP

IWEPTR

IKT10

IWT10

IKTR4, IKTR10, IKTR16

IWTR4

IZZ4

IWZZ4

HK3

EH2

GKL3

GWL3



Insulating partition, large size

fits on

IK3, IK5, IK3BL, IK5BL

ITW4

Insulating partition

fits on

IKT10

IWTT10

IK120, IK240

TW240

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency-Stop Buttons

Bus Technology

RFD

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index

Illustration	Dimensions	Description	Type
--------------	------------	-------------	------



Jumper, 2 poles

to connect adjacent terminals

max. current load:
the permissible total current running through the jumper must not exceed the rated current of the respective terminal blocks

2 poles, suitable for	
IK3, HK3, IK3BL	VB2-2
IK3, HK3, IK3BL	VB2-12
IK5, IZZ4, IKH4, IKEPTR, IKEPT, IKEPN, IKPP, IKEPP, IK5BL, IKH4BL, IKD5	VB4-2
IK5, IZZ4, IKEPTR, IKEPT, IKEPN, IKPP, IKEPP, IKH4, IK5BL, IKH4BL, IKD5	VB4-12
FK5	VBS4-2
FK5	VBS4-3
IK10, IK10BL	VB6-2
IK10, IK10BL	VB6-12
IK16, FK16, IK16BL	VB16-2
IK16, IK16BL	VB16-12
IK25, IK25BL	VB25
IK51, IK51BL	VB35
IK70	VB70



Connecting Strap

to connect adjacent 2 jumpers, suitable for

IK3, HK3, IK3BL	VL2-2
IK5, IKH4, FK5, IKEPN, IKPP, IKEPP, IK5BL, IKH4BL	VL4-2
IK10, IK10BL	VL6-2
IK16, FK16, IK16BL	VL16-2
IK25, IK25BL	VL25
IK25, IK25BL	VL25-3
IK51, IK51BL	VL35-3
IK70	VL70
IK70	VL70-3



Connecting plug

for bridging two terminals suitable for

IKT10	VST10
-------	--------------

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency/Stop Buttons

Bus Technology

RFID

Enclosures

Pedal Switches

Terminal Blocks

Type Index

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency-Stop Buttons

Bus Technology

RFD

Enclosures

Pedal Switches

→ Terminal Blocks

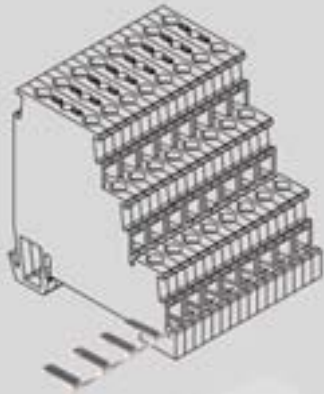
Type Index

Illustration

Dimensions

Description

Type



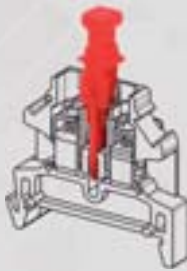
Comb-type jumper

fits on
IKFS15
IKI4

KVFI4-12
KVI4-12

IKSI10RT, IKSI10

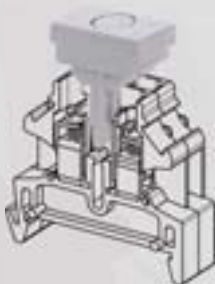
KVS10-8



Disconnecting plug

suitable for
IKT4, IKT4RT, IKT4BL

TS4



Quenching diode plug

with diode up to 400V / 1A, the diode plugs have reverse polarity protection, suitable for
IKT4, IKT4RT, IKT4BL




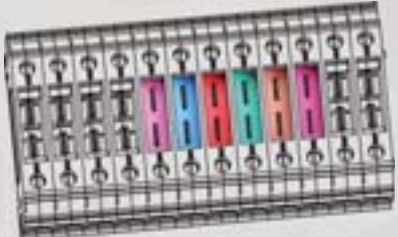

DSL



Diode plug, blue

with diode up to 400V / 1A, the diode plugs have reverse polarity protection, suitable for
IKT4, IKT4RT, IKT4BL

DS_BL

Illustration	Dimensions	Description	Type
		<p>Diode plug, red with diode up to 400V / 1A, the diode plugs have reverse polarity protection, suitable for IKT4, IKT4RT, IKT4BL</p>	DS_RT
		<p>Fuseholder suitable for IKS14</p>	SH20
		<p>Cartridge fuse DIN 41571 0.125A, suitable for</p>	<p>SP20-0,125 SP20-0,2 SP20-0,5 SP20-0,8 SP20-1,0 SP20-1,6 SP20-2,0 SP20-4,0 SP20-6,3</p>
		<p>Colour identification plate suitable for IKFS15 colour: violet</p>	<p>EP3 EP4 EP5 EP7,5 EP10 EP15 EP20 EP25 EP30</p>
		<p>Test plug test plug for plug socket STB2 2 mm suitable for IK5, IKH4, FK5, IK5BL, IKH4BL IK16, IK25, IK51, IK70, IKT10, FK16, IK16BL, IK25BL, IK51BL</p>	<p>PST2 PST4</p>

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency/Stop Buttons

Bus Technology

RFID

Enclosures

Pedal Switches

Terminal Blocks

Type Index

About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency-Stop Buttons

Bus Technology

RHD

Enclosures

Pedal Switches

Illustration

Dimensions

Description

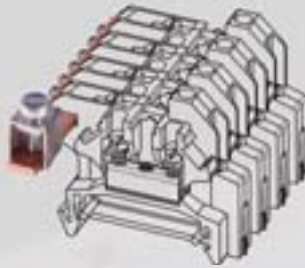
Type



Neutral busbar

10x3mm, 1 m long, bare copper
suitable for
IKTR4, IKTR10, IKTR16, IKTRED, IKEPTR

S10X3

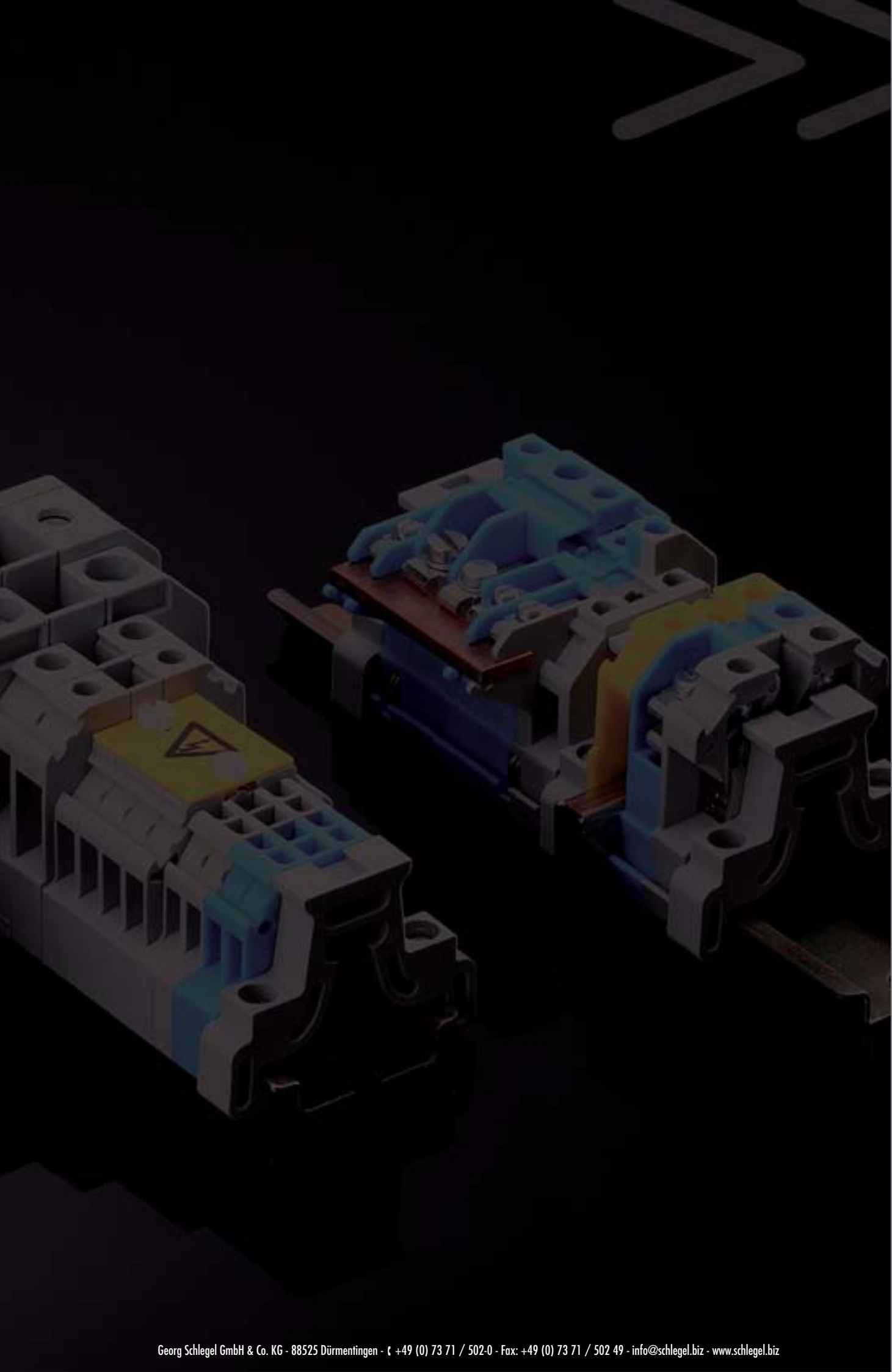


Connecting Clamp

to connect the supply line to the neutral busbar
suitable for

→ Terminal Blocks

Type Index



About Us

Pushbuttons/Switches

Panel Mount Jacks

Emergency/Stop Buttons

Bus Technology

RFID

Enclosures

Pedal Switches

→ Terminal Blocks

Type Index