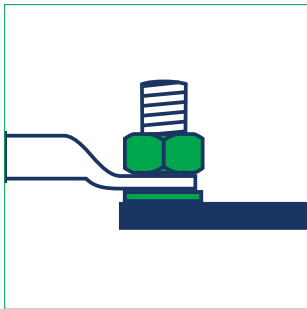


Stud connection system HSK



The newest generation of stud terminals from **CONTA-CLIP** offers secure connections for all energy-transmitting applications. Depending on the conductor cross-section, stud terminals can be used with threaded studs from **M5** to **M12**. The rated current ranges from 76 A to 269 A with a rated voltage of 1000 V. The wire connection range is from 0,2 mm² to 120 mm². Wires with crimped cable lugs are applied to threaded bolts and then connected securely by tightening the hex nut. Optimal security is guaranteed by the low voltage drop and by the use of self-extinguishing material with a V0 (UL94) flammability rating.

Designed for mounting onto **TS 35** DIN rails, the stud terminals can be adapted with accessories such as **TW** partitions and **AD** covers to suit application requirements. These products are easy to use. They also stand out with their cost-optimized line of accessories which results in reduced storage costs and assembly times.

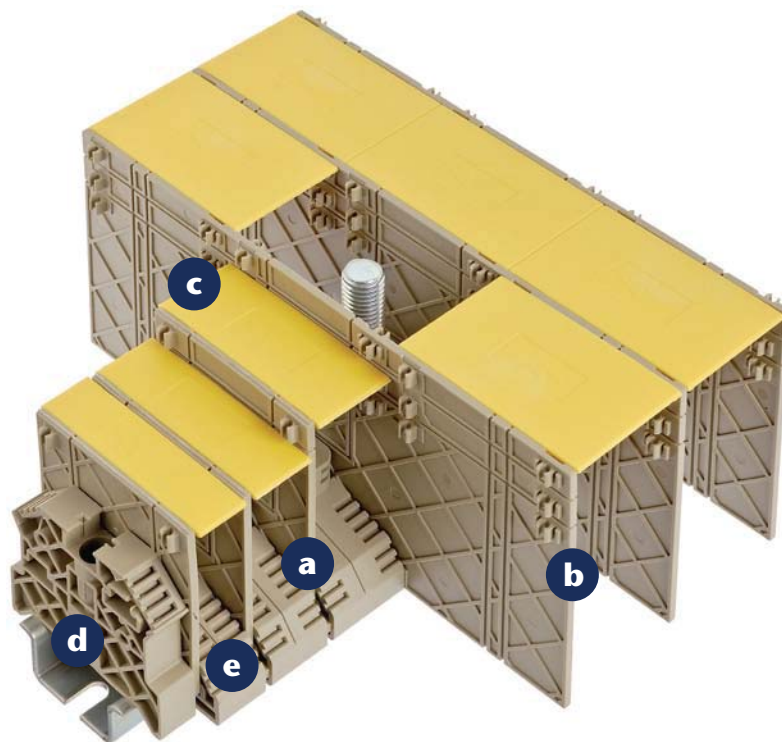


Stud connection system HSK

Features

a Base terminal HSK
CONTA-CLIP stud terminals can be arranged as required on standard **TS 35** DIN rails in accordance with EN 60715.

b Partition plates TW
Special **TW** partitions can be securely snapped into the terminal housing. This allows for good visual and electrical separation of the terminals. In addition, they are ready for fitting with snap-on covers.



c Covers AD
The **AD** covers can be snapped on, simply and securely, to the matching clips in the partitions. In this quick and reliable way, touch-safe protection of the terminal points is always guaranteed.

d End stop ES 35/K/ST
The **ES 35/K/ST** end stop grips both sides of the DIN rail with steel clamps. They are a secure method of mechanical attachment in terminal rail design. The plastic PA 6.6 housing of the brackets encapsulates the metal parts.

Handling

1 Stud terminals:

Up to four wires can be connected easily. Cable lugs are crimped onto the wire ends to facilitate the connection. The cable lugs should be aligned opposite each other when there are multiple lugs per side. When the nut is tightened, the flats of the cable lugs clamp together and a secure connection is ensured.

2 Stud terminals:

Cable lugs are crimped onto the wire ends to facilitate the connection. The cable lugs are placed on the studs between the shake-proof washer and the busbar. The cable lugs should be aligned opposite each other when there are two lugs per stud. When the nut is tightened, the flats of the cable lugs clamp together and a secure connection is ensured.

e Labelling | Marking

The stud terminals have a labelling surface which is optimally suited for our Pocket-Maxicard **PMC (PMC BSTR 6/30)** standard marking systems.

High-power stud terminals HSK

The features in detail

Stud connection

- Stud sizes from M5 to M12
- Wire with cable lug acc. to DIN 46234 up to 120 mm²
- Up to four cable lugs per stud can be connected

Easy to use

- One-stud terminals: Put the cable lug on the stud between the base washer and the shake-proof washer
- Twin-stud terminals: Put the cable lug on the stud between the busbar and the shake-proof washer
- By tightening the steel nut, the cable lug forms a contact with the other cable lug or with the busbar.
(B/B versions)



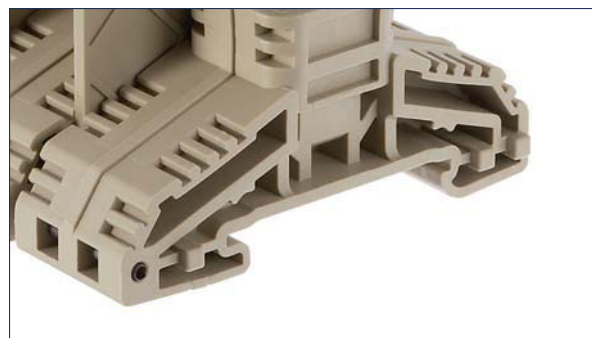
Cross-connections

- 2- and 3-pole designs
- Potential distribution between the different sizes is possible
Designed for the rated current of the corresponding stud terminal
- Clearly saves time with quick potential distribution



Terminal carriers made from Polyamide 6.6 V0

- Self-extinguishing, UL94-V0 flammability class
- Creepage-current protected, CTI = 600
- Temperature resistance: -40° to +120°C
- Spec. contact resistance: 10¹³ Ohm/cm
- Spec. surface resistance: 10¹⁵ Ohm/cm
- Temp. index, mechanical: 120°C (at 0.8 mm)
- Temp. index, electrical: 120°C (at 0.8 mm)
- Relative temperature index, electrical: 130°C (at 0.8 mm)
- Pollutant-free



Secure handling

- Touch-protection provided by partitions and yellow covers

Secure contacts

- Maintenance-free, later tightening of the nut is not needed
- High contact strength and vibration resistance from the safety/spring washer
- Direct contact of cable lugs, or contact via copper busbar

Standards

The following standard terminal block requirements are fulfilled:

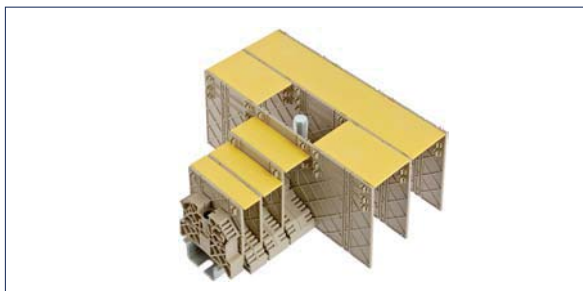
- EN 60947-7-1
- EN 50124-1
- DIN EN 61373

High-power stud terminals HSK

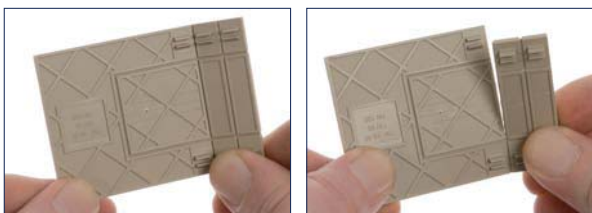
Handling and accessories

The use of TW partition plates

The **HSK...B** single-stud terminals and the **HSK...B/B** twin-stud versions make use of two **TW** partitions. The partitions can be adjusted to the rated cross-section by using the pre-determined breakage points. For your further assistance, the **TW** partitions list the cross-section range and additional dimension lines. Remember that the clearance and creepage distances for a rated voltage of 1000 V, dependent on the corresponding cross-section, must be followed.



HSK installed with TW partition plate and AD cover



Simple breaking off of the TW partition



TW partition with dimension lines

Snapping on the partition plates to the HSK high-power stud terminals

You can snap on the **TW** partition plates and the **HSK** stud terminals by using the locking pegs on the partition. The pegs lock into the foot of the stud terminals.



Snapping together the TW partition with a high-power HSK stud terminal

Using the AD covers

An individual **AD** cover is available for each width of stud terminal. Their length takes into consideration the creepage and clearance distances on the twin-stud terminals. If the covers are to be used with the one-stud versions, you can shorten the cover by breaking it along the breakage points. For your further assistance, the **AD** covers have additional dimension lines on them. Locking pegs are used to mount the **AD** cover. The cover snaps in securely from above to the **TW** partition plates. Thus a high degree of touch-safety is guaranteed.



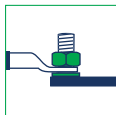
Simple breakage with the AD cover



AD cover with dimension lines

High-power stud terminals HSK

Stud connection system



- Foot can be snapped on TS 35 DIN rail
- Stud connection
- Housing made from polyamide 6.6 UL 94-V0

Connection type

Size (L x W x H) with TS 35 x 7.5 mm

Size (L x W x H) with TS 35 x 7.5 mm with TW/AH

Type

Type/colour

Cat. no.

Colours available

Rated data, in compliance (Approvals on page xxx)

Rated voltage, V

Rated current, A

Rated cross-section mm²/AWG

Rated surge voltage kV / Contamination degree

Plug gauge acc. to EN 60947-1/flamm. class UL 94

Connection data

Contact wire range, mm²

Stud size

Clampable cable lug

DIN 46234/1 cable lug per side mm

DIN 46234/2 cable lugs per side mm

DIN 46235/1 cable lug per side mm

DIN 46235/2 cable lugs per side mm

Torque, Nm

Features

Material of insulated housing | Temperature range

Number of cross-connection channels | Test pick-off

Accessories

Partition plate TW up to 1000 V

Cat. no.

Partition plate TW up to 1000 V for insul. cable lugs

Cat. no.

AD cover profile

Cat. no.

Cross-connector Q

2 poles

Cat. no.

Cross-connector Q

3 poles

Cat. no.

Cross-connector Q, from M6 to M8

2 poles

Cat. no.

Cross-connector Q, from M6 to M10

3 poles

Cat. no.

End stop ES

Cat. no.

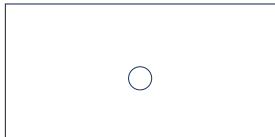
Quick marking PMC SB

Cat. no.

HSK 16/M5 B



M5



High-power terminal
1 connection

Stud connection

67 x 13 x 55.5

67 x 13 x 58

	Qty.
HSK 16/M5 B BG	10
17000.2	

IEC	CSAus	CSA
1000	1000	1000
76	60	60
16 10-0		
8 3		
- V0		

≤ 16
M5

0,1 - 16	
0,1 - 16	
6,0 - 10	
6,0 - 10	
2,0 - 4,0	8,5

PA 6.6 -40 to +120°C
1 -

	Page	Qty.
TW 16-120 BG	316	20
17018.2		

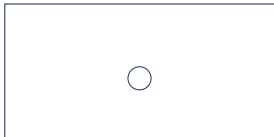
AD 16 YE	312	20
17019.8		
Q2/16	298	10
17008.0		
Q3/16	298	10
17009.0		

ES 35/K/ST BG	274	50
2828.0		
PMC SB 6/50 WH	340	500
4702.7		

HSK 35/M6 B



M6



High-power terminal
1 connection

Stud connection

67 x 16 x 55.5

67 x 16 x 58

	Qty.
HSK 35/M6 B BG	10
17001.2	

IEC	CSAus	CSA
1000	1000	1000
125	115	115
35 14-2		
8 3		
- V0		

≤ 35
M6

2,5 - 35	
2,5 - 35	
6,0 - 35	
6,0 - 25	
3,0 - 6,0	12,4

PA 6.6 -40 to +120°C
1 -

	Page	Qty.
TW 16-120 BG	316	20
17018.2		

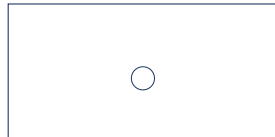
AD 35 YE	312	20
17020.8		
Q2/35	298	10
17010.0		
Q3/35	298	10
17011.0		
Q2 HSK 35/M6 - M8	299	
17028.2		
Q3 HSK 35/M6 - M10/2	299	
17029.2		

ES 35/K/ST BG	274	50
2828.0		
PMC SB 6/50 WH	340	500
4702.7		

HSK 50/M8 B



M8



High-power terminal
1 connection

Stud connection

67 x 21 x 63.5

67 x 21 x 66

	Qty.
HSK 50/M8 B BG	10
17002.2	

IEC	CSAus	CSA
1000	1000	1000
150	125	125
50 14-1/0		
8 3		
- V0		

≤ 50
M8

2,5 - 50	
2,5 - 50	
6,0 - 35	
6,0 - 35	
6,0 - 12	16,9

PA 6.6 -40 to +120°C
1 -

	Page	Qty.
TW 16-120 BG	316	20
17018.2		

AD 50 YE	312	20
17021.8		
Q2/50	298	10
17012.0		
Q3/50	298	10
17013.0		
Q2 HSK 35/M6 - M8	299	
17028.2		

ES 35/K/ST BG	274	50
2828.0		
PMC SB 6/50 WH	340	500
4702.7		

HSK 120/M10 B	HSK 120/M12 B	HSK 35/M6 B/B	HSK 50/M8 B/B	HSK 120/M10 B/B
				
M10	M12	M6	M8	M10
				
High-power terminal 1 connection	High-power terminal 1 connection	High-power terminal 2 connections	High-power terminal 2 connections	High-power terminal 2 connections
Stud connection 67 x 32 x 73.5 67 x 32 x 76	Stud connection 67 x 32 x 73.5 67 x 32 x 76	Stud connection 67 x 16 x 55.5 67 x 16 x 61.5	Stud connection 67 x 21 x 63.5 120 x 21 x 71.5	Stud connection 67 x 32 x 73.5 156 x 32 x 78.5
Qty. HSK 120/M10 B BG 17003.2 10	Qty. HSK 120/M12 B BG 17004.2 10	Qty. HSK 35/M6 B/B BG 17005.2 10	Qty. HSK 50/M8 B/B BG 17006.2 10	Qty. HSK 120/M10 B/B BG 17007.2 10
IEC UL CSA 1000 1000 269 220	IEC UL CSA 1000 1000 269 220	IEC UL CSA 1000 1000 125	IEC UL CSA 1000 1000 150	IEC UL CSA 1000 1000 269
120 10-Kcmil 250 8 3 - V0	120 10-Kcmil 250 8 3 - V0	35 14-2 8 3 - V0	50 14-1/0 8 3 - V0	120 10-Kcmil 250 8 3 - V0
≤ 120 M10	≤ 120 M12	≤ 35 M6	≤ 50 M8	≤ 120 M10
6 - 120 6 - 120 10 - 95 10 - 95 10 - 20 20,0	6 - 120 6 - 120 10 - 95 10 - 95 14 - 31 20,0	2,5 - 35 2,5 - 35 6,0 - 25 6,0 - 25 3,0 - 6,0 12,4	2,5 - 50 2,5 - 50 6,0 - 35 6,0 - 35 6,0 - 12 16,9	6 - 120 6 - 120 10 - 95 10 - 95 10 - 20 20,9
PA 6.6 -40 to +120°C 1 -	PA 6.6 -40 to +120°C 1 -	PA 6.6 -40 to +120°C 1 -	PA 6.6 -40 to +120°C 1 -	PA 6.6 -40 to +120°C 1 -
Page Qty. TW 35-120/B/B BG 17022.2 316 20	Page Qty. TW 35-120/B/B BG 17022.2 316 20	Page Qty. TW 35-120/B/B BG 17022.2 316 20	Page Qty. TW 35-120/B/B BG 17022.2 316 20	Page Qty. TW 35-120/B/B BG 17022.2 316 20
TW 16-120 BG 17018.2 316 20	TW 16-120 BG 17018.2 316 20	AD 35 YE 17020.8 312 20	AD 50 YE 17021.8 312 20	AD 120 YE 17026.8/20 313 20
AD 120 YE 17026.8 313 20	AD 120 YE 17026.8 312 20	Q2/35 17010.0 298 10	Q2/50 17012.0 298 10	Q2/120/10 17014.0/10 299 10
Q2/120/10 17014.0 299 10	Q2/120/10 17016.0 299 10	Q3/35 17011.0 298 10	Q3/50 17013.0 298 10	Q3/120/10 17015.0/10 299 10
Q3/120/10 17015.0 299 10	Q3/120/12 17017.0 299 10	Q2 HSK 35/M6 - M8 17028.2 299 1	Q2 HSK 35/M6 - M8 17028.2 299 1	Q3 HSK 35/M6 - M10/2 17029.2 299 1
Q3 HSK 35/M6 - M10/2 17029.2 299 1	ES 35/K/ST BG 2828.0 274 50	Q3 HSK 35/M6 - M10/2 17029.2 299 1	ES 35/K/ST BG 2828.0 274 50	ES 35/K/ST BG 2828.0 274 50
ES 35/K/ST BG 2828.0 274 50	PMC SB 6/50 WH 4702.7 340 500	ES 35/K/ST BG 2828.0 274 50	PMC SB 6/50 WH 4702.7 340 500	PMC SB 6/50 WH 4702.7 340 500
PMC SB 6/50 WH 4702.7 340 500		PMC SB 6/50 WH 4702.7 340 500	PMC SB 6/50 WH 4702.7 340 500	PMC SB 6/50 WH 4702.7 340 500

HSKG

High-power stud terminals

*CONTA-CLIP is extending its line of stud terminals with the new **HSKG**. We now offer a wider range of solutions for energy-transmission applications.*

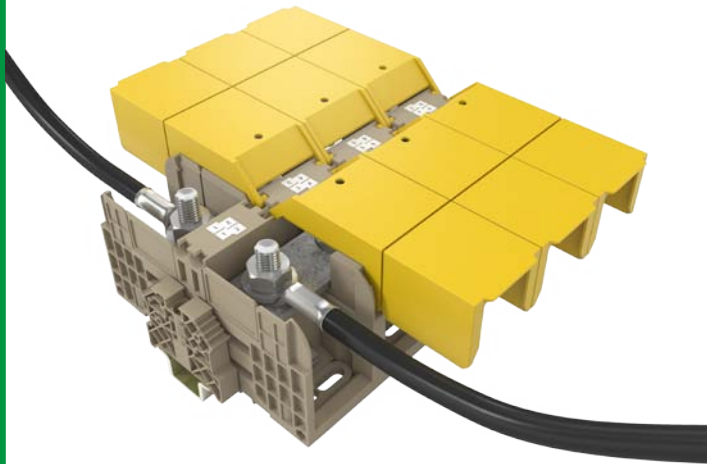
Depending on the wire cross-section, the **HSKG** stud terminals with M10, M12 and M16 threaded studs can be used. The rated current is from 269 A to 520 A with a rated voltage of 1000 V. The wire connection range is from 6 mm² to 300 mm². Wires with crimped cable lugs are applied to threaded studs and then connected securely to the busbar by tightening the hex nut. Optimal security is guaranteed by the low voltage drop and by the use of self-extinguishing material with a V0 (UL94) flammability rating.

When used together with the **ADH** hinged covers, the **HSKG** stud terminals provide outstanding finger and touch protection. The **ADH** cover is easy to mount; it simply snaps into the side walls of the stud terminals as it is closed. In this quick and reliable way, touch-safe protection of the terminal points is always guaranteed.

HSKG features:

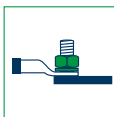
- **M10, M12 and M16 studs**
- **Wire with cable lug, according to DIN 46234, up to 300 mm²**
- **Maintenance-free, subsequent tightening of the nut is not required**
- **High contact strength and vibration resistant because of the safety/spring washer**
- **Direct contact with cable lugs, or contact via a copper busbar**
- **2- and 3-pole cross-connectors, designed for the rated current of the corresponding stud terminal**
- **Secure mount to the TS35 DIN rail**
- **Can be mounted directly**

HSKG



HSKG high-power stud terminals

Stud connection system



- Foot can be snapped on TS35 DIN rail
- Direct mount
- Stud connection
- Housing made from polyamide 6.6 UL 94-V0

Connection diagram

HSKG 120/M10/B/B



HSKG 185/M12/B/B



HSKG 300/M16/B/B



Connection type

Size (L x W x H) with TS35 x 7.5
Size (L x W x H) with TS35 x 7.5, including ADH on both sides

TYPE

Type / colour

Cat. no.

Stud connection

133 x 42 x 72
226 x 42 x 80

Qty.

HSKG 120/M10/B/B BG
17023.2 10

Stud connection

164 x 55 x 78
288 x 55 x 90

Qty.

HSKG 185/M12/B/B BG
17024.2 10

Stud connection

164 x 55 x 86
288 x 55 x 90

Qty.

HSKG 300/M16/B/B BG
17027.2 10

Colours available

Ratings

Rated voltage, V

Rated current, A

Rated cross-section, mm² | AWG

Rated impulse voltage, kV | Contamination degree

Flamm. class acc. to UL 94

Connection data

Clamping area, mm²

Stud size

Clampable cable lug

DIN 46234 / 1 cable lug per side, mm²

DIN 46234 / 2 cable lugs per side, mm²

DIN 46235 / 1 cable lug per side, mm²

DIN 46235 / 2 cable lugs per side, mm²

Torque, Nm

②		
IEC*	UL*	CSA*
1000	1000	600
269	310	310
120 10-Kcmil 250		
8 3		
V0		
≤ 120		
M10		
6 - 150		
6 - 120		
16 - 150		
16 - 120		
10 - 20		

②		
IEC*	UL*	CSA*
1000	1000	600
353	380	360
185 10-Kcmil 500		
8 3		
V0		
≤ 185		
M12		
10 - 240		
10 - 185		
25 - 240		
25 - 185		
14 - 31		

②		
IEC*	UL*	CSA*
1000	1000	600
520	500	510
300 10-Kcmil 600		
8 3		
V0		
≤ 300		
M16		
25 - 240		
50 - 240		
50 - 300		
50 - 240		
25 - 60		

Features

Material of insulated housing | Temperature range

PA 6.6 | -40 to +120°C

PA 6.6 | -40 to +120°C

PA 6.6 | -40 to +120°C

Accessories

AD cover profile

Cat. no.

AD cover profile

Cat. no.

QS cross-connection rail

Cat. no.

QS cross-connection rail

Cat. no.

ES end stop

Cat. no.

PMC SB quick marking

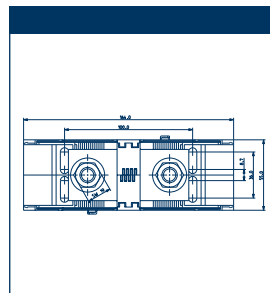
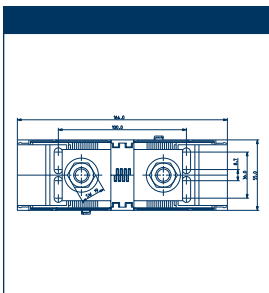
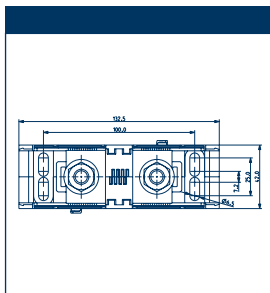
Cat. no.

	Qty.
ADH 120 BU	20
17025.5	
ADH 120 YE	20
17025.8	
QS 2/120/10	10
17241.0	
QS 3/120/10	10
17242.0	
ES 35/K/ST BG	50
2828.0	
PMC SB 6/50 WH	500
4702.7	

	Qty.
ADH 185/300 BU	20
17123.5	
ADH 185/300 YE	20
17123.8	
QS 2/185/12	10
17243.0	
QS 3/185/12	10
17244.0	
ES 35/K/ST BG	50
2828.0	
PMC SB 6/50 WH	500
4702.7	

	Qty.
ADH 185/300 BU	20
17123.5	
ADH 185/300 YE	20
17123.8	
QS 2/300/16	10
17245.0	
QS 3/300/16	10
17246.0	
ES 35/K/ST BG	50
2828.0	
PMC SB 6/50 WH	500
4702.7	

Dimension diagram



* Approval applied for