

L/N/PE Connecting Terminal Blocks

AK, AKG, EK

In electrical systems subject to the construction requirements stipulated in DIN VDE 0100 or IEC 204-1/EN 60 204-1/ VDE 0113 part 1, neutral (N), ground (PE) or phase conductors (L) are often connected to central busbars. This requires clear marking of the conductor or of the terminal block to the corresponding circuit.

The AKG connecting terminal blocks fulfil these requirements in two ways:

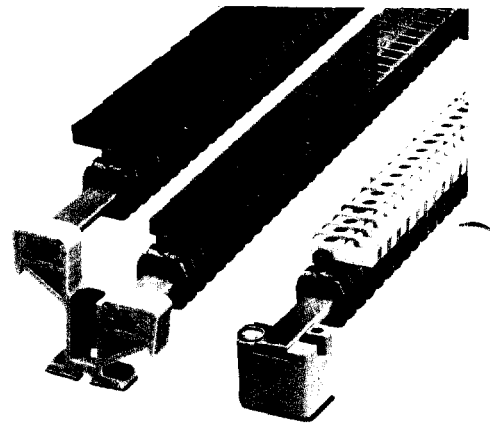
1. by marking each terminal block individually and
2. by their blue, green-yellow or black colored housings.

Three supports made of insulating material are available for holding the busbars:

1. the simple AB/SS support for one bar,
2. the AB 2/SS double supports for offset mounting of neutral and ground (PE) busbars and
3. the UAB 1 universal support, which fits on both commercially available EN mounting rails and guides the 3 x 10 mm busbar parallel to the terminal strip.

AZK 35 branch terminal block

In switchgear and controlgear, it is often necessary to branch flat copper busbars. The AZK 35 branch terminal block simplifies this in the following ways: the terminal block can be placed at any position on the copper bar (up to a thickness of max. 5 mm) after assembly and clamped firmly. On the exit side, connection conductors of 0.75 mm² to 35 mm² can be clamped easily and reliably.



AKG 4

(IEC) [mm ²]	rigid solid	flexible stranded	I AWG [A]
Connection data	0.5-6	0.5-4	20-10 41*

* Note the current carrying capacity of the busbars.
Explosion-protected version also available on request.



Description

L/N/PE connecting terminal block,
without insulating cap
with insulating cap: blue (for N)
green-yellow (for PE)
black (for L1, L2, L3)

L/N/PE connecting terminal block,
without insulating cap
with insulating cap: blue (for N)
green-yellow (for PE)
black (for L1, L2, L3)

Connecting terminal block, copper, nickel-plated
is pushed onto the neutral busbar NLS
up to 16 mm² solid
up to 35 mm² solid

Branch terminal block, for connection
to copper bars up to 5mm thick

- (1) **Neutral busbar,** 3 x 10 mm, 1 m long copper, tin-plated
- (2) **Support,** insulating material, with retaining screw, optionally applicable for 3 x 10 mm or 6 x 6 mm busbars
- (3) **Double support,** insulating material, optionally applicable for 3 x 10 mm or 6 x 6 mm busbars, 48 mm high
- (4) **Double support,** as above, however only 36.8 mm high
- (5) **Support,** with universal foot for mounting on C or L; guides busbar parallel to terminal strip

(6) **Zack strip,** 10-section, white

(7) **Screwdriver**



NLS-CU 3/10

I_{max}: 140 A

04 02 17 4

10



AB/SS

04 04 42 8

10



AB 2/SS

04 04 43 1

10



ABN 2/SS

04 04 46 0

10



UAB 1

30 32 43 1

50



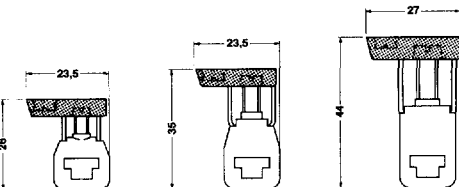
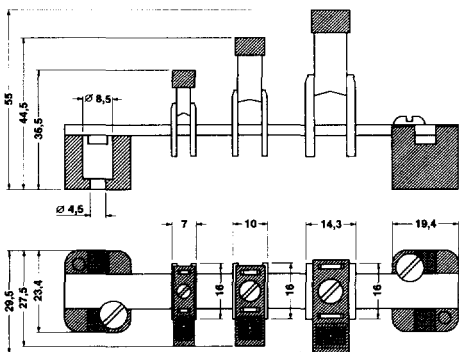
ZB 6 (order data, see page 283)



SZS 0,6 x 3,5

12 05 05 3

10



Dimensions

Width / length / height [mm]

see description drawing

Technical data in accordance with IEC/VDE

Maximum load current / cross section [A] / [mm²]

41 / 6

Current carrying capacity of the neutral busbar [A]

140

Connection capacity

stranded with ferrule without / with plastic sleeve [mm²]

0.5 - 6 / 0.5 - 6

Multi-conductor connection (2 conductors with same cross section)

solid / stranded [mm²]

0.5 - 2.5 / 0.5 - 2.5

stranded with ferrule without plastic sleeve [mm²]

0.5 - 2.5

stranded with TWIN ferrule with plastic sleeve [mm²]

0.5 - 2.5

Stripping length [mm]

16

Internal cylindrical gage (IEC 947-1:1988)

A 4

Thread

M 4

Torque [Nm]

1.5 - 1.8

Insulation material

Inflammability class acc. to UL 94

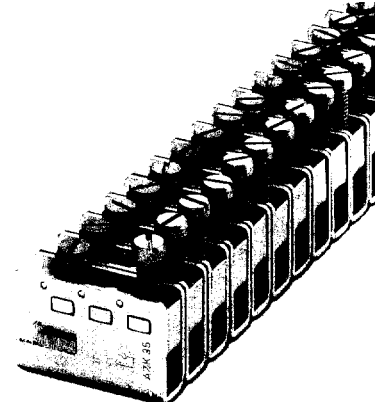
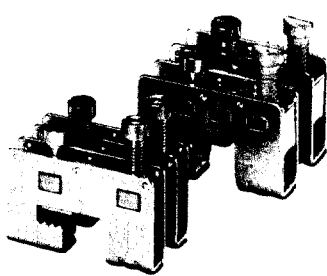
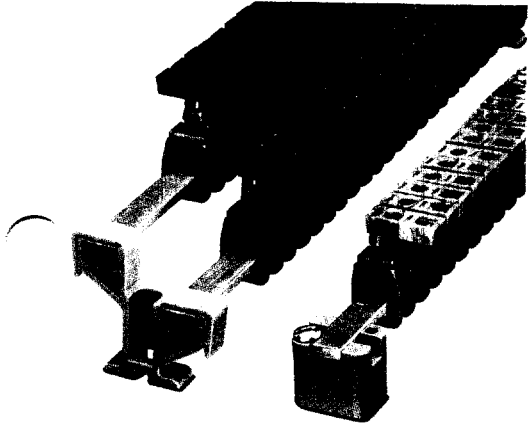
PA

Temperature indices RTI / T_i

V2

125 / 100

1) Information on installation and usage of accessories for EEx e applications see page 244-249.



AKG 16 / AKG 35

EK 116 / EK 135

AZK 35

	(IEC) [mm ²]	rigid solid	flexible stranded	AWG	I [A]
Connection data					
AKG 16		1.5-16	1.5-16	16-6	76*
AKG 35		2.5-35	2.5-25	16-2	125*

	(IEC) [mm ²]	rigid solid	flexible stranded	AWG	I [A]
Connection data					
EK 116		0.5-16	0.5-10	20-6	76
EN 50 019*		0.5-16	0.5-10	-	-
EK 135		0.75-35	0.75-25	18-2	125
EN 50 019*		0.75-35	0.75-25	-	-

	(IEC) [mm ²]	rigid solid	flexible stranded	AWG	I [A]
Connection data					
AZK 35		0.75-35	0.75-35	18-2	125

* Note the current carrying capacity of the busbars.

* Certificate no.: NEMKO Ex-93.C.354U '1)



Type	Order No.	Pcs. Pkt.
AK 16	04 04 03 3	50
AKG 16 BU	04 23 01 4	50
AKG 16 GNYE	04 23 02 7	50
AKG 16 BK	04 23 03 0	50
AK 35	04 04 04 6	50
AKG 35 BU	04 24 01 3	50
AKG 35 GNYE	04 24 02 6	50
AKG 35 BK	04 24 03 9	50
NLS-CU 3/10	04 02 17 4	10
AB/SS	04 04 42 8	10
AB 2/SS	04 04 43 1	10
ABN 2/SS	04 04 46 0	10
UAB 1	30 32 43 1	50
ZB 8 (order data, see page 263)		
SZS 1,0 x 4,0 (AK... 16)	12 05 06 6	10
SZS 1,0 x 6,5 (AK... 35)	12 05 07 9	10

Type	Order No.	Pcs. Pkt.
EK 116	04 01 01 0	10
EK 135	04 01 02 3	10
NLS-CU 3/10	04 02 17 4	10
AB/SS	04 04 42 8	10
AB 2/SS	04 04 43 1	10
ABN 2/SS	04 04 46 0	10
UAB 1	30 32 43 1	50
SZS 1,0 x 6,5	12 05 07 9	10

Type	Order No.	Pcs. Pkt.
AZK 35	07 02 99 7	10
SZS 1,0 x 6,5	12 05 07 9	10

AKG 16	AKG 35	EK 116	EK 135	AZK 35
see description drawing	see description drawing	8 / 40 / 36	12 / 40 / 37	12 / 40 / 36
76 / 16	125 / 35	76 / 16	125 / 35	125 / 35
140	140	140	140	-
1.5 - 16 / 1.5 - 16	2.5 - 35 / 2.5 - 35	0.5 - 16 / 0.5 - 10	0.75 - 35 / 0.75 - 25	0.75 - 35 / 0.75 - 35
1.5 - 4 / 1.5 - 4	1.5 - 16 / 1.5 - 16	0.5 - 10 / 0.5 - 10	0.75 - 10 / 0.75 - 10	0.75 - 10 / 0.75 - 10
1.5 - 6	1.5 - 16	0.5 - 10	0.75 - 10	0.75 - 10
1.5 - 10	1.5 - 10	0.5 - 10	0.75 - 10	0.75 - 10
16	16	14	14	15
B 6	B 9	B 6	B 7	B 7
M 5	M 6	M 5	M 6	M 6
2.5 - 3	3.2 - 3.7	2.5 - 3	3.2 - 3.7	3.2 - 3.7
PA	PA	-	-	-
V2	V2	-	-	-
125 / 100	125 / 100	-	-	-