The 5-width enclosure programme for your 35 mm rail unit can be adapted to suit your own specific requirements by means of 4 different terminal types (= PCB variants) which, in some cases, can be combined inside a unit.

Alternatively, the lower part can be supplied with an adjusting flap on the upper side (type CNS..) which permits subsequent access to the electronic parts, e.g. for adjustment purposes. All models are fitted with a recessed area on the front for membranes or membrane keypads.

These front membranes can also display the terminal identification strips. Clear hood covers provide optimal protection for the operating fronts against dirt, unauthorized access (lead seal) and unintentional terminal operation.

All the enclosure parts are snap-locked together and can only be opened with a tool. After dismantling, the rail latch can be used as a wall fixing element.

Enclosure material: ABS,
for technical data
see pages 646-650.
Colour: Light grey, similar
to RAL 7035;
special colours and
minimum order
quantities on
request.
**Ingress protection:** IP 40/DIN EN 60529

Scope of delivery:
CN: Base, lid, mounted latch
for rail fitting
CNS: Base, lid, adjusting flap,
mounted latch for rail fitting

Accessories (additional charge):

CNH...N: Hood cover, crystal-clear, low
CNH...H: Hood cover, crystal-clear, tall
AK...: Connection terminals
STL...: Pin bars
CNB 100: Blind bar to close off unused
terminal locations
CNA 100: Adapter for fixing PCBs and
closing off bore holes if a
connector bar is used
AK-BS: Terminal identification strip

Note:

To comply with CSA and other regula-
tions, on request we can supply the
CN enclosures in high-temperature
and flame-resistant material (UL 94
VO).
The terminals listed below are
UL (UL 1059), CUL (CSA 22.2 no.158),
VDE (EN 60998) approved.

Enclosures		External dimensions			Special features	
Model	Order no.	W	L	H	Terminals	Adjusting flap
CN 22 AK	65002210	22.5	109.5	75	max. 8	–
CNS 22 AK	65002230	22.5	109.5	75	max. 8	included
CN 45 AK	65004510	45.0	109.5	75	max. 16	–
CNS 45 AK	65004530	45.0	109.5	75	max. 16	included
CN 55 AK	65005510	55.0	109.5	75	max. 20	–
CNS 55 AK	65005530	55.0	109.5	75	max. 20	included
CN 70 AK	65007010	70.0	109.5	75	max. 26	–
CNS 70 AK	65007030	70.0	109.5	75	max. 26	included
CN 100 AK	65010010	100.0	109.5	75	max. 38	–
CNS 100 AK	65010030	100.0	109.5	75	max. 38	included

Terminal variants:
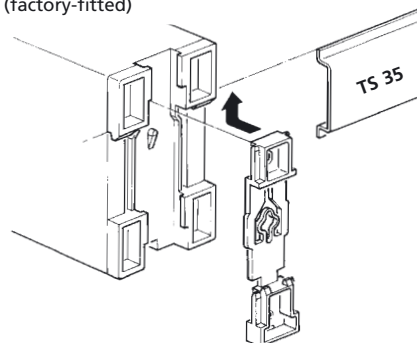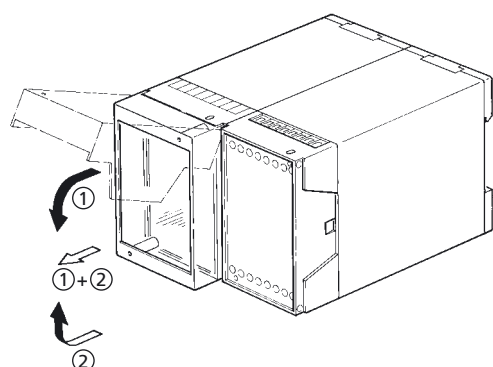**AK 700/__V**
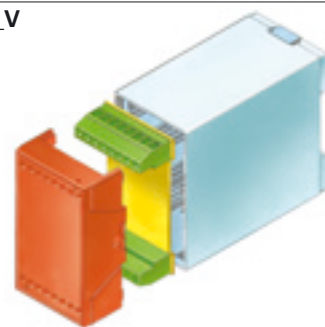
AK 700/__H
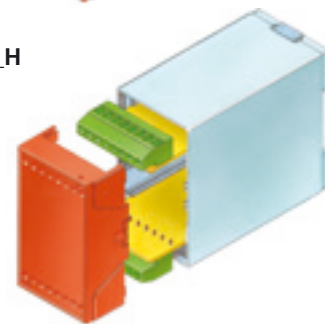
AK 950/_
STL 950/_V
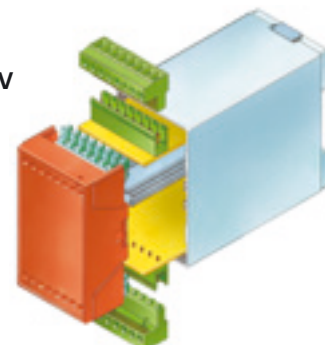
Fitting for wall fixing
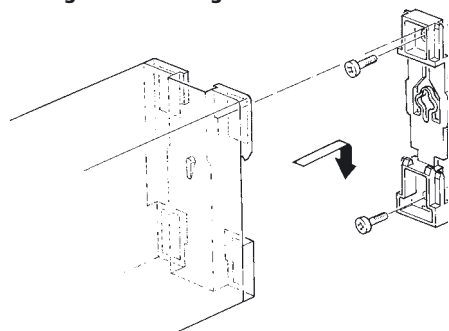
Fitting for rail fixing
(factory-fitted)

TS 35

Hood cover activation

Load-bearing capacity

Static
max. 40 N

TS 35

Z-2601450
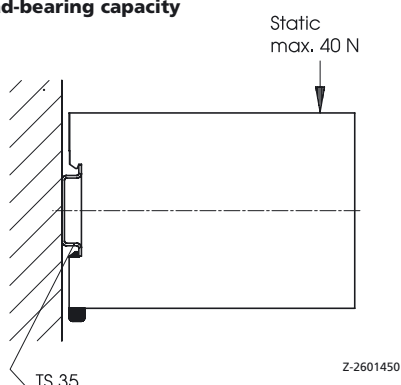
CombiNorm-Classic

CN 22 AK   CNS 22 AK

The enclosures can be latched onto the 35 mm rail in accordance with DIN EN 60715 TH35.
Any terminal positions which are not needed can be closed with blind bars CNB 100.
The hinged latching hood covers CNH..N or CNH..H can be opened upwards or downwards, as required. If necessary, they can also be removed completely or sealed.
When sealed, the hood covers also conceal the screws of the connection terminals (not STL 950/_V).

CN 45 AK   CNS 45 AK

Order designation

Model	Order no.	Description	W	L	H
CN 22 AK	65002210	Small control encl. for max. 8 terminals	22.5	109.5	75
CNS 22 AK	65002230	Small control encl. for max. 8 terminals with adjusting flap	22.5	109.5	75

Scope of delivery:
CN:
Lid,
base with latch (mounted)
CNS:
Lid,
base with latch (mounted),
adjusting flap

CNS: Enclosure with side-mounted adjusting flap to permit coordination to complete units during operation.

Accessories (additional charge)

Model	Order no.	Description	For enclosure
CNH 22 N	65002260	Hinged hood cover, crystal-clear, low	CN(S) 22 AK
CNH 22 H	65002250	Hinged hood cover, crystal-clear, tall	CN(S) 22 AK

Order designation

| Model	Order no.	Description	W	L	H
CN 45 AK	65004510	Small control encl. for max. 16 terminals	45	109.5	75
CNS 45 AK	65004530	Small control encl. for max. 16 terminals with adjusting flap	45	109.5	75

Scope of delivery:
CN:
Lid,
base with latch (mounted)
CNS:
Lid,
base with latch (mounted),
adjusting flap

CNS: Enclosure with side-mounted adjusting flap to permit coordination to complete units during operation.
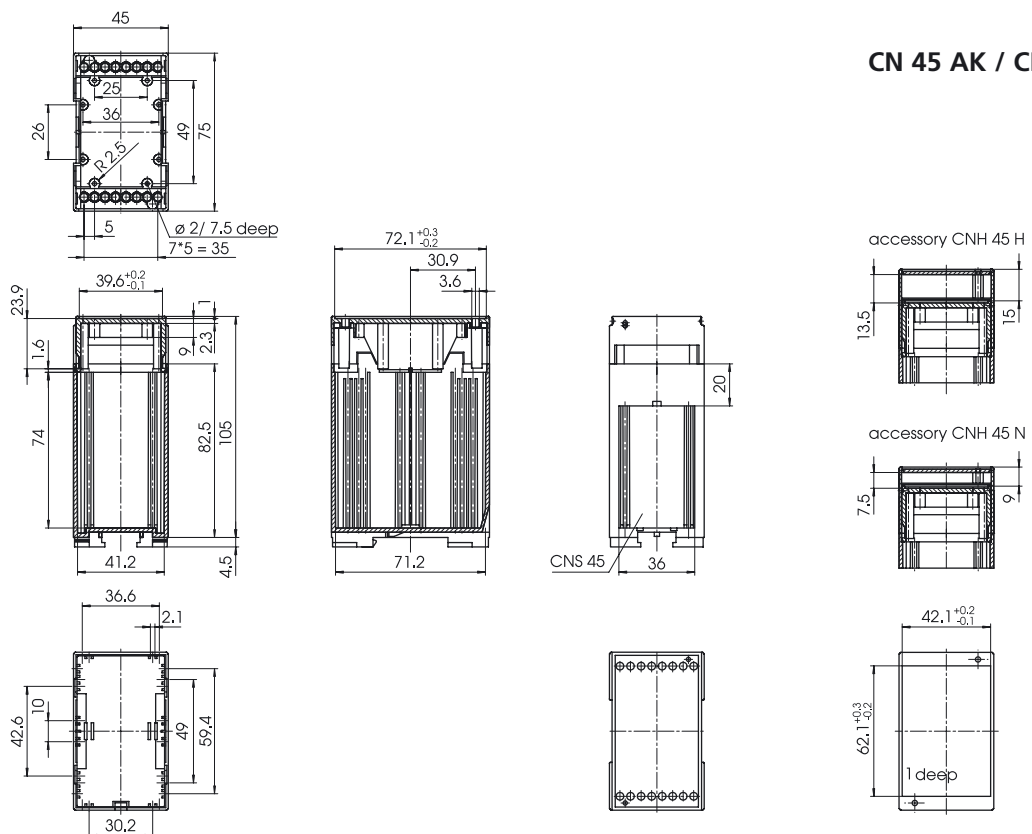
Accessories (additional charge)

Model	Order no.	Description	For enclosure
CNH 45 N	65004560	Hinged hood cover, crystal-clear, low	CN(S) 45 AK
CNH 45 H	65004550	Hinged hood cover, crystal-clear, tall	CN(S) 45 AK

CN 22 AK / CNS 22 AK

accessory CNH 22 H

accessory CNH 22 N

CNS 22
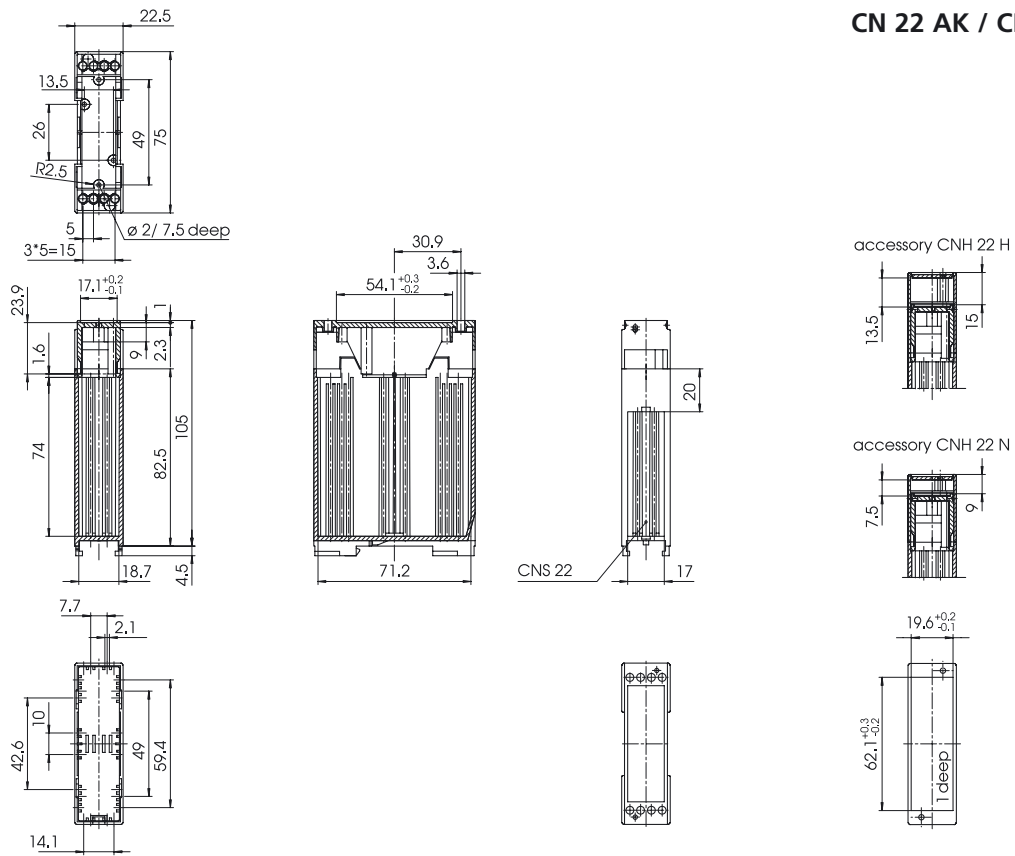
Z-2601168

CN 45 AK / CNS 45 AK

accessory CNH 45 H

accessory CNH 45 N

CNS 45

Z-2601169

CN 55 AK   CNS 55 AK

The enclosures can be latched onto the 35 mm rail in accordance with DIN EN 60715 TH35.
Any terminal positions which are not needed can be closed with blind bars CNB 100.
The hinged latching hood covers CNH..N or CNH..H can be opened upwards or downwards, as required. If necessary, they can also be removed completely or sealed.
When sealed, the hood covers also conceal the screws of the connection terminals (not STL 950/_V).

CN 70 AK   CNS 70 AK

Order designation

Model	Order no.	Description	W	L	H
CN 55 AK	65005510	Small control encl. for max. 20 terminals	55	109.5	75
CNS 55 AK	65005530	Small control encl. for max. 20 terminals with adjusting flap	55	109.5	75

Scope of delivery:
CN:
Lid,
base with latch (mounted)
CNS:
Lid,
base with latch (mounted),
adjusting flap

CNS: Enclosure with side-mounted adjusting flap to permit coordination to complete units during operation.

Accessories (additional charge)

Model	Order no.	Description	For enclosure
CNH 55 N	65005560	Hinged hood cover, crystal-clear, low	CN(S) 55 AK
CNH 55 H	65005550	Hinged hood cover, crystal-clear, tall	CN(S) 55 AK

Order designation

Model	Order no.	Description	W	L	H
CN 70 AK	65007010	Small control encl. for max. 26 terminals	70	109.5	75
CNS 70 AK	65007030	Small control encl. for max. 26 terminals with adjusting flap	70	109.5	75

Scope of delivery:
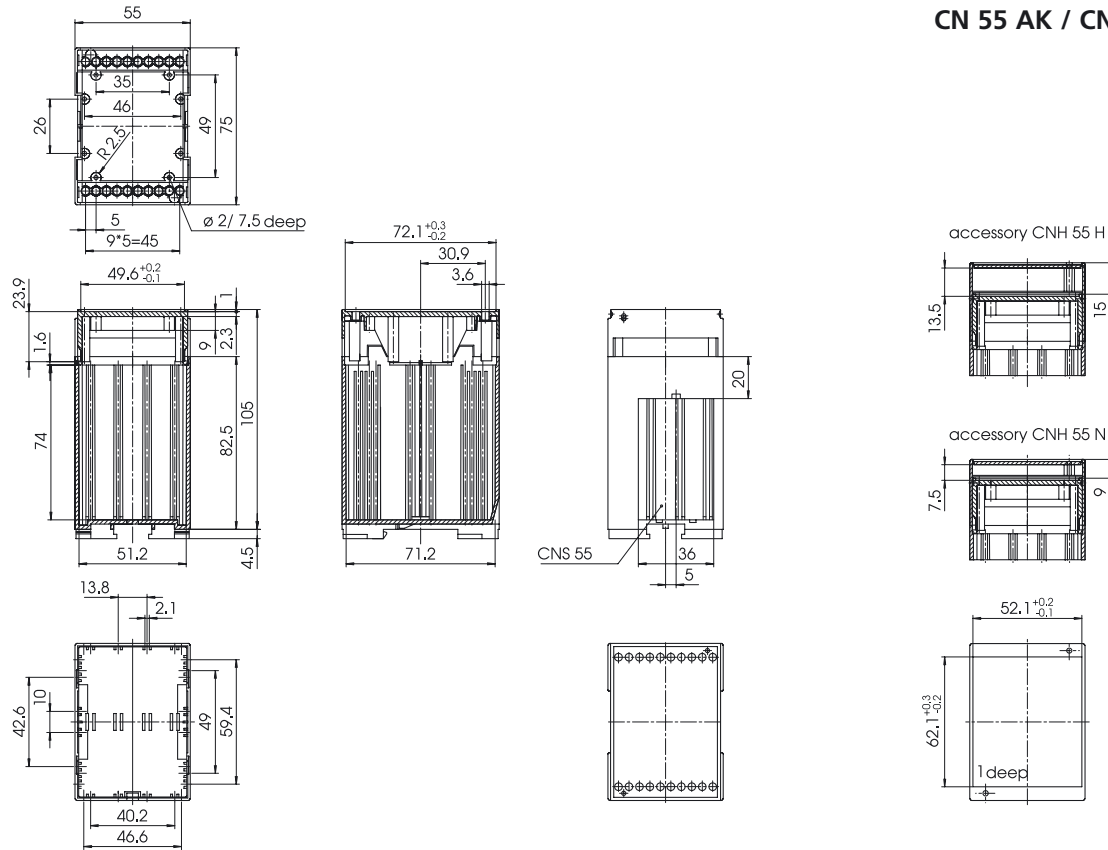**CN:**
Lid,
base with latch (mounted)
CNS:
Lid,
base with latch (mounted),
adjusting flap

CNS: Enclosure with side-mounted adjusting flap to permit coordination to complete units during operation.
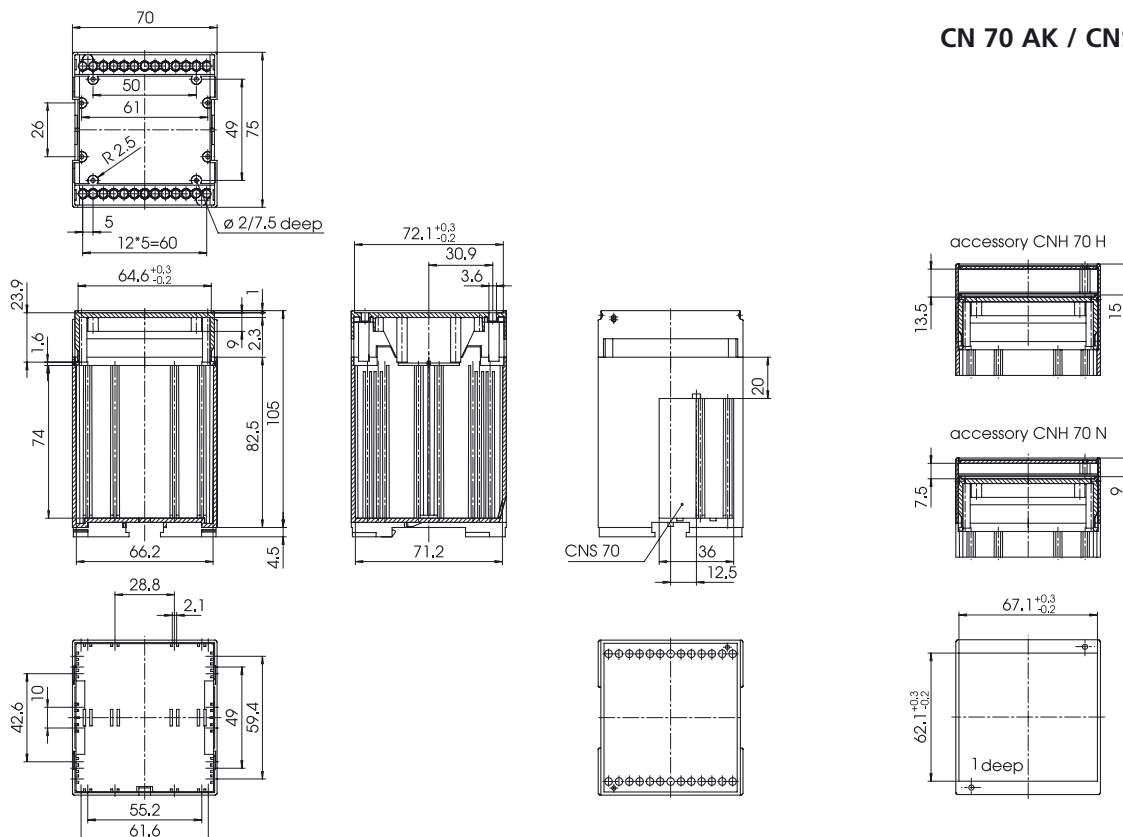
Accessories (additional charge)

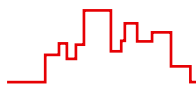| Model	Order no.	Description	For enclosure
CNH 70 N	65007060	Hinged hood cover, crystal-clear, low	CN(S) 70 AK
CNH 70 H	65007050	Hinged hood cover, crystal-clear, tall	CN(S) 70 AK

CN 55 AK / CNS 55 AK

55
35
46
26
75
49
R 2.5
5
9*5=45
ø 2/ 7.5 deep

72.1 +0.3 -0.2
30.9
3.6
71.2

49.6 +0.2 -0.1
23.9
1.6
74
1
9
2.3
82.5
105
51.2
4.5

13.8
2.1
42.6
10
49
59.4
40.2
46.6

20
CNS 55
36
5

accessory CNH 55 H
13.5
15

accessory CNH 55 N
7.5
9

52.1 +0.2 -0.1
62.1 +0.3 -0.2
1 deep

Z-2601170

CN 70 AK / CNS 70 AK

70
50
61
26
75
49
R 2.5
5
12*5=60
ø 2/7.5 deep

72.1 +0.3 -0.2
30.9
3.6
71.2

64.6 +0.3 -0.2
23.9
1.6
74
1
9
2.3
82.5
105
66.2
4.5

28.8
2.1
42.6
10
49
59.4
55.2
61.6

20
CNS 70
36
12.5

accessory CNH 70 H
13.5
15

accessory CNH 70 N
7.5
9

67.1 +0.3 -0.2
62.1 +0.3 -0.2
1 deep

Z-2601171

CombiNorm-Classic

Order designation

Model	Order no.	Description	W	L	H
CN 100 AK	65010010	Small control encl. for max. 38 terminals	100	109.5	75
CNS 100 AK	65010030	Small control encl. for max. 38 terminals with adjusting flap	100	109.5	75

Scope of delivery:
CN:
Lid,
base with latch (mounted)
CNS:
Lid,
base with latch (mounted),
adjusting flap

CNS: Enclosure with side-mounted adjusting flap to permit coordination to complete units during operation.
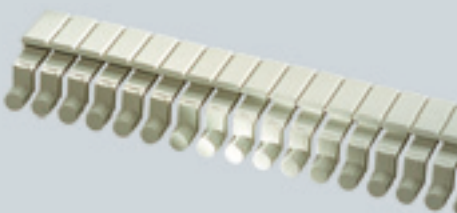
Accessories (additional charge)

| Model	Order no.	Description	For enclosure
CNH 100 N	65010060	Hinged hood cover, crystal-clear, low	CN (S) 100 AK
CNH 100 H	65010050	Hinged hood cover, crystal-clear, tall	CN (S) 100 AK

CN 100 AK   CNS 100 AK

The enclosures can be latched onto the 35 mm rail in accordance with DIN EN 60715 TH 35. Any terminal positions which are not needed can be closed with blind bars CNB 100. The hinged latching hood covers CNH..N or CNH..H can be opened upwards or downwards, as required. If necessary, they can also be removed completely or sealed. When sealed, the hoods also conceal the screws of the connection terminals (not STL 950/_V).

Blind bar CNB 100

blind plate CNB 100

Order designation

Model	Order no.	PU
CNB 100	65010070	2 pcs

Z-2601154-B

Blind bar CNB 100
19-piece, pieces can be broken off individually to close the free areas of any unoccupied terminal locations.
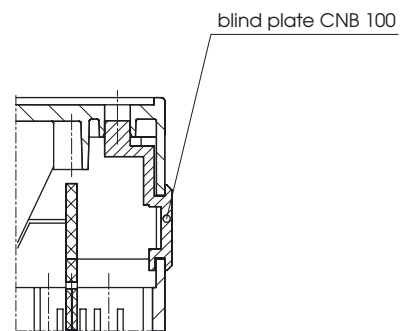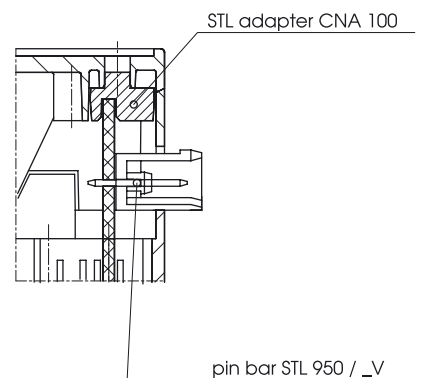
STL adapter CNA 100

STL adapter CNA 100

Order designation

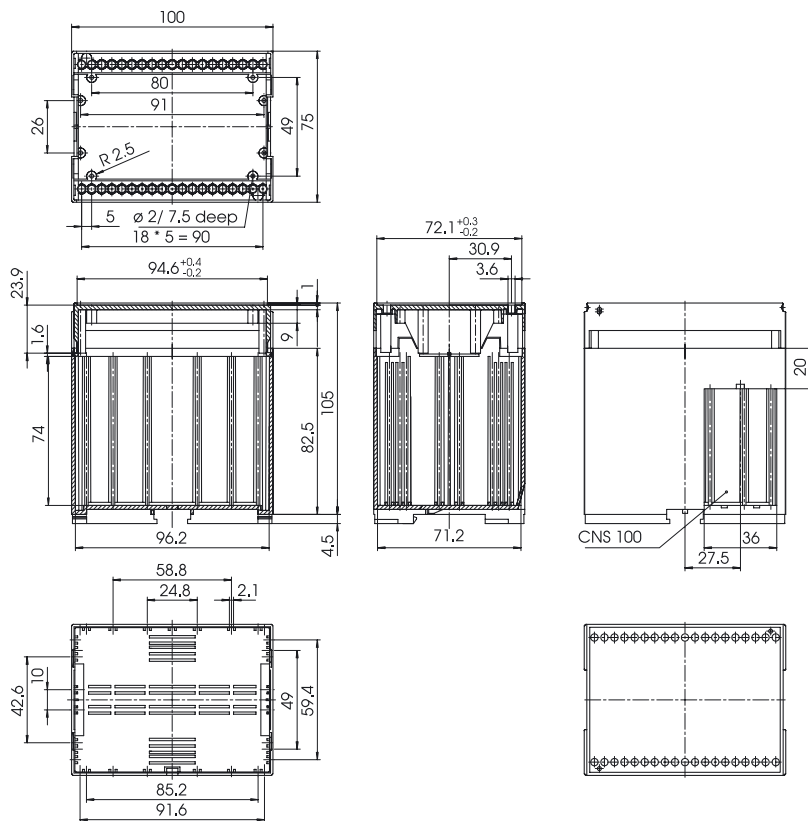| Model	Order no.	PU
CNA 100	65010100	2 pcs

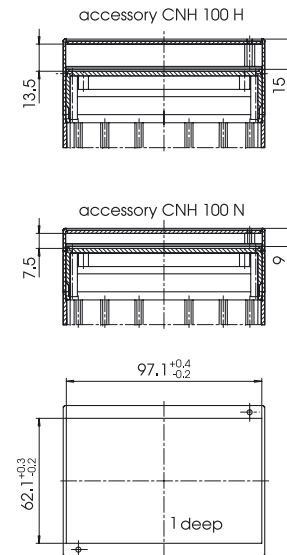pin bar STL 950 / _V

STL adapter CNA 100
19-piece, pieces can be broken off individually for fixing the PCB and for closing the screwdriver openings if a connector bar is used.

Z-2601154-STL

CN 100 AK / CNS 100 AK

accessory CNH 100 H

accessory CNH 100 N

CNS 100

Z-2601172

Terminal identification strip AK-BS

Order designation

Model	Order no.
AK-BS	66000100

CombiNorm
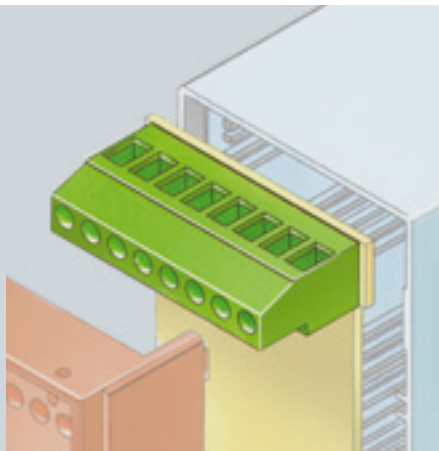terminal labels

BOPLA
A Phoenix Mecano Company

Self-adhesive transparent strips for the universal marking of terminal entrances and screwdriver openings. Especially suitable for prototypes and pilot production runs.

For large quantities we recommend the use of a silk screen or tampon print specially designed for your enclosure.
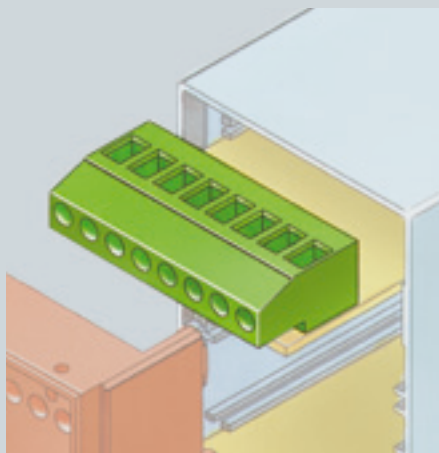
Z-2601451

AK 700 V
This AK 700/_V terminal is specially designed for a PCB which is fitted to the base and parallel to the front lid.
This makes it possible to fit front operating elements at the same time.
IP 20 protection

AK 700 H
The AK 700/_H terminal is designed for use with vertically inserted PCBs. It creates a 9 mm clearance to the outside.
This makes it possible to fit the PCBs with components on both sides, for example.
IP 20 protection

Connection terminals AK 700 V

Order designation

Model	Order no.	Poles
AK 700/2 V	66002000	2
AK 700/3 V	66003000	3
AK 700/4 V	66004000	4
AK 700/8 V	66008000	8
AK 700/10 V	66010000	10
AK 700/13 V	66013000	13
AK 700/19 V	66019000	19

Ratings according to EN 60998

Rated voltage	250 V
Rated current	24 A (T60)
Wire dimension	2.5 mm^2
Test voltage	2.0 kV
Torque/screw size	0.5 Nm/M3

Maximum connection cross-section

Single wire (rigid)	4.0 mm^2
Fine-strand (flexible)	2.5 mm^2

Materials

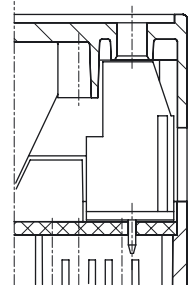|	
Insulating material	PA
Inflammability class	UL 94 V-0
Temperature range	-30 °C / +105 °C
Terminal piece	CuZn
Soldering tag	Cu

* On AK 700/4 V the 0.6 mm wide terminal bayonet left out for lack of space.

Dimensions
Pitch dim.   5.0 mm
Drill hole diameter   1.3 mm
Wire stripping length   8.0 mm
Colour: green, similar to RAL 6018

Z-2601174

Connection terminals AK 700 H

Order designation

Model	Order no.	Poles
AK 700/2 H	66004110	2
AK 700/3 H	66003100	3
AK 700/4 H	66004100	4
AK 700/8 H	66008100	8
AK 700/10 H	66010100	10
AK 700/13 H	66013100	13
AK 700/19 H	66019100	19

Ratings according to EN 60998

Rated voltage	250 V
Rated current	24 A (T60)
Wire dimension	2.5 mm^2
Test voltage	2.0 kV
Torque/screw size	0.5 Nm/M3

Maximum connection cross-section

Single wire (rigid)	4.0 mm^2
Fine-strand (flexible)	2.5 mm^2

Materials

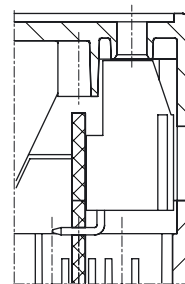|	
Insulating material	PA
Inflammability class	UL 94 V-0
Temperature range	-30 °C / +105 °C
Terminal piece	CuZn
Soldering tag	Cu

* On AK 700/4 V the 0.6 mm wide terminal bayonet left out for lack of space.
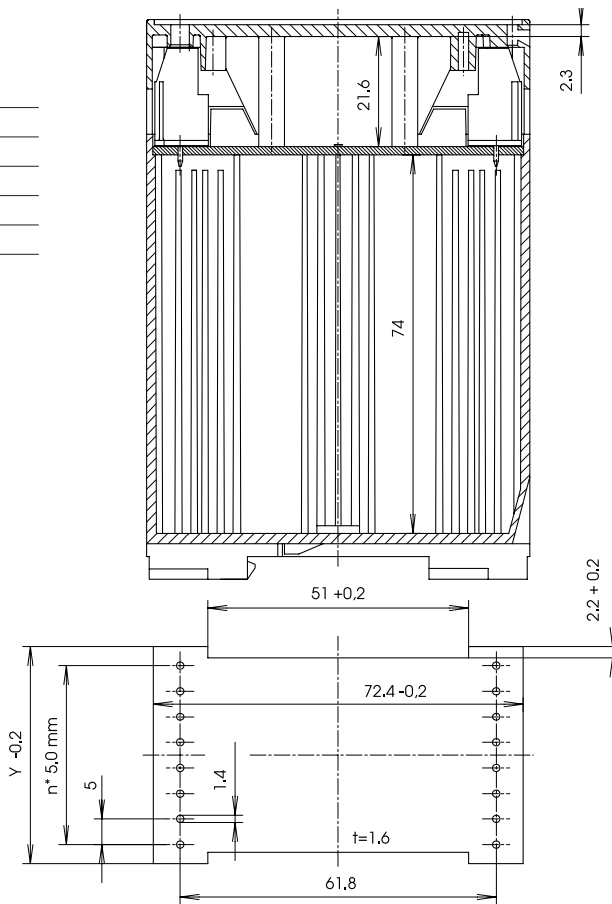
Dimensions
Pitch dim.   5.0 mm
Drill hole diameter   1.3 mm
Wire stripping length   8.0 mm
Colour: green, similar to RAL 6018

Z-2601175

Terminal AK 700 V

PCB dimensions for AK 700 V

for enclosures	Y	n
CN 22 AK/V	19.9	3
CN 45 AK/V	42.4	7
CN 55 AK/V	52.4	9
CN 70 AK/V	67.4	12
CN 100 AK/V	97.4	18

Z-2601167-700V

Terminal AK 700 H

PCB dimensions for AK 700 H

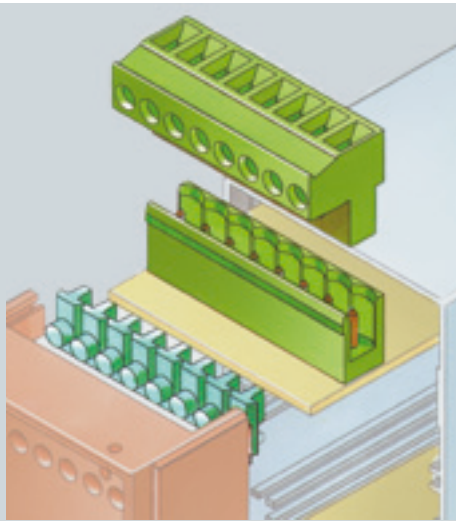| for enclosures	X	n
CN 22 AK/H	18.5	3
CN 45 AK/H	41.0	7
CN 55 AK/H	51.0	9
CN 70 AK/H	66.0	12
CN 100 AK/H	96.0	18
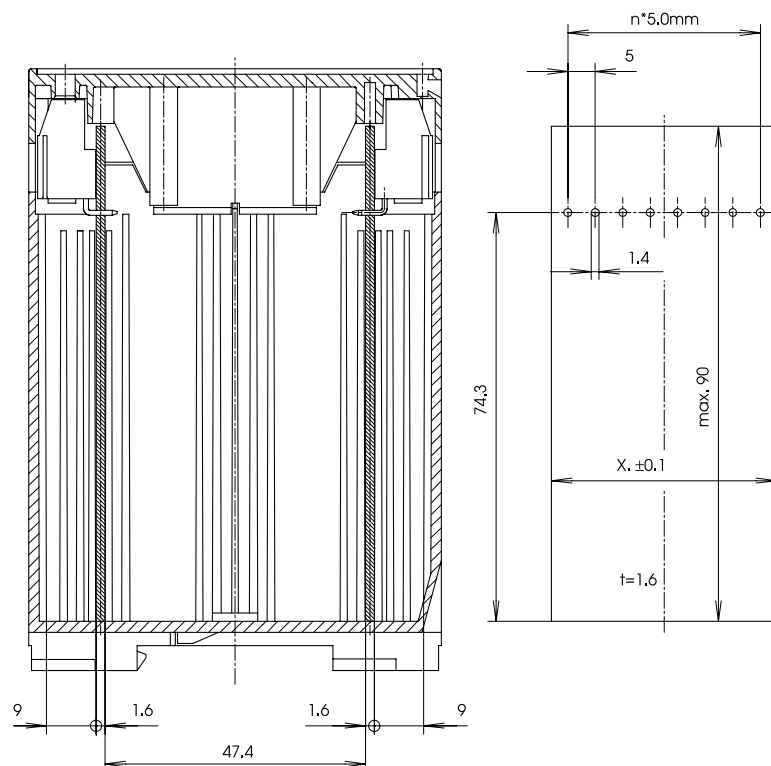
Z-2601167-700H

CombiNorm-Classic

STL 950 / AK 950
This 950 terminal series consists of two parts. The STL 950 connector bar is soldered to the PCB which is to be inserted vertically.
The AK 950 terminal slots into the connector bar, so faulty parts can be replaced quickly.

Pin bars STL 950 / Connection terminals AK 950

Order designation

Model	Order no.	Poles
STL 950 4 V	66004500	4
STL 950 8 V	66008500	8
STL 950 10 V	66010500	10
STL 950 13 V	66013500	13
STL 950 19 V	66019500	19

Ingress protection IP 20

Order designation

Model	Order no.	Poles
AK 950/4	66004600	4
AK 950/8	66008600	8
AK 950/10	66010600	10
AK 950/13	66013600	13
AK 950/19	66019600	19

Ingress protection IP 20

Important:
For STL 950 components, STL adapter CNA 100 must be mounted to support the PCB.
Connector bar STL 950 and connection terminal AK 950 can only be used together.

Ratings according to EN 60998

Rated voltage	250 V
Rated current	12 A (T60)
Wire dimension	2.5 mm^2
Measured surge voltage/	
Degree of soiling	4 kV/3
Torque/screw size	0.5
Nm/M3	

Maximum connection cross-section

Single wire (rigid)	4.0 mm^2
Fine-strand (flexible)	2.5 mm^2

Materials

Insulating material	PA
Inflammability class	UL 94 V-0
Temperature range	-30 °C /
	+105 °C
Terminal piece (AK 950)	CuZn
Contact spring (AK 950)	CuSn
Contact pin (STL 950)	Cu

Dimensions

Pitch dim.	5.0 mm
Drill hole diameter	1.4 mm
Wire strip length	6.0 mm

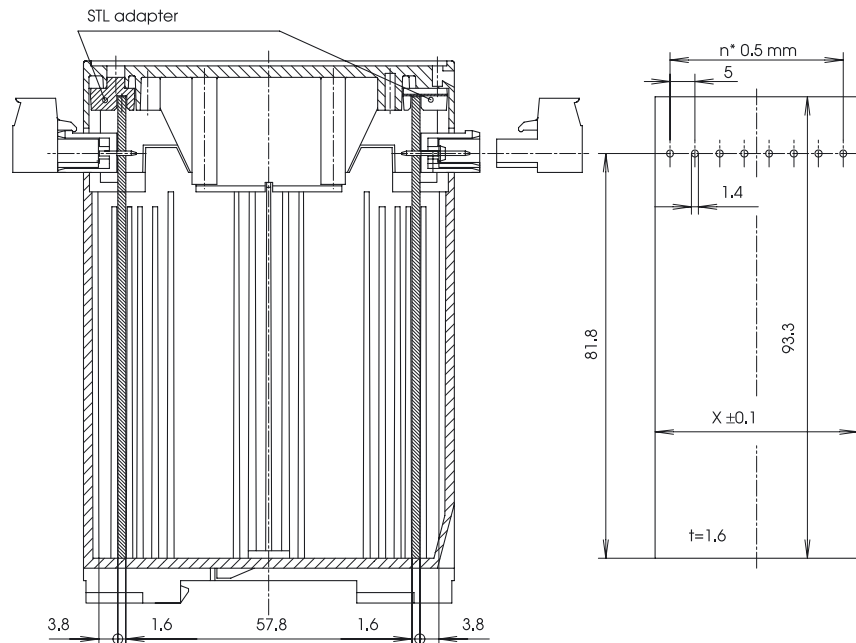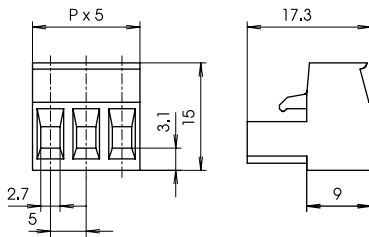**Colour:** green, similar to RAL 6018

Pin bar STL 950 V

P x 5

7.9

□1

8.4

5

3.8 3.9 12

Terminal AK 950

P x 5

17.3

3.1

15

2.7

5

9
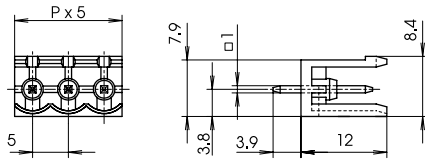
Z-2601176

PCB dimensions for STL 950 V

for enclosures	X	n
CN 22 AK/H	18.5	3
CN 45 AK/H	41.0	7
CN 55 AK/H	51.0	9
CN 70 AK/H	66.0	12
CN 100 AK/H	96.0	18

STL adapter

3.8 1.6 57.8 1.6 3.8

Terminal 950

n* 0.5 mm

5

1.4

81.8

93.3

X ±0.1

t=1.6

Z-2601167