

Models

LDG-A-12 ... max. 12 connections
 LDG-A-14 ... max. 14 connections
 LDG-A-16 ... max. 16 connections
 LDG-A-30 ... max. 30 connections

General

The LDG-A series of miniature housings are fully-insulated housings to the specifications of the machinery and automobile industries, with terminals protected against accidental contact in accordance with VDE 0100 Part 750, VDE 0160 Part 100 and VBG 4.

Designed to be particularly easy to install, these housings facilitate extremely rational equipment assembly with optimal utilization of space.

- Connections between the circuit boards and the terminals by means of solderable circuit-board connecting pins, so that no wiring connections are needed.

- The connecting pins are suitable for automatic soldering processes.
- Blind plugs close off any unused terminal ducts.
- The flat cover is easily removed and can be readily drilled or otherwise adapted to requirements.
- Captive, self-locking terminal screws that are highly resistant to loosening through vibration. Large wiring entry channels and guidance for screwdrivers.
- Equipment can be completely assembled before being built into the housing.
- Structured surface and attractive design.
- Easy to assemble and simple to dismantle should servicing be necessary.
- Creepage and air distances to VDE 0110 Group C, 380 V_{eff}

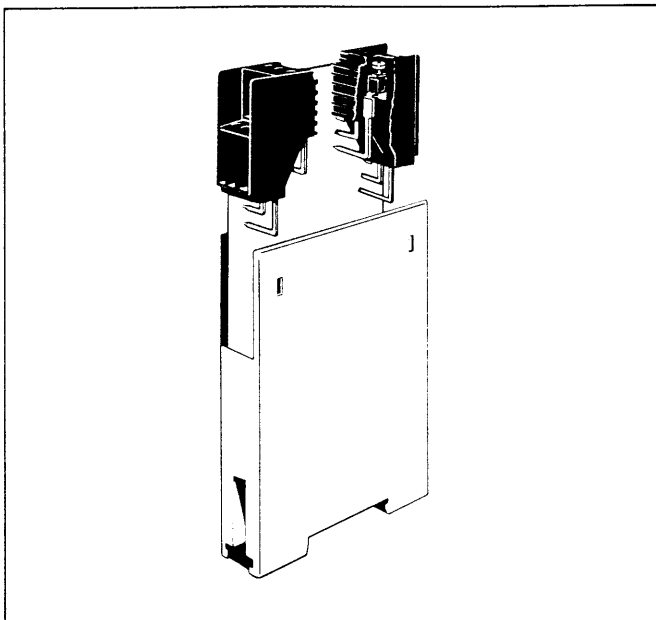
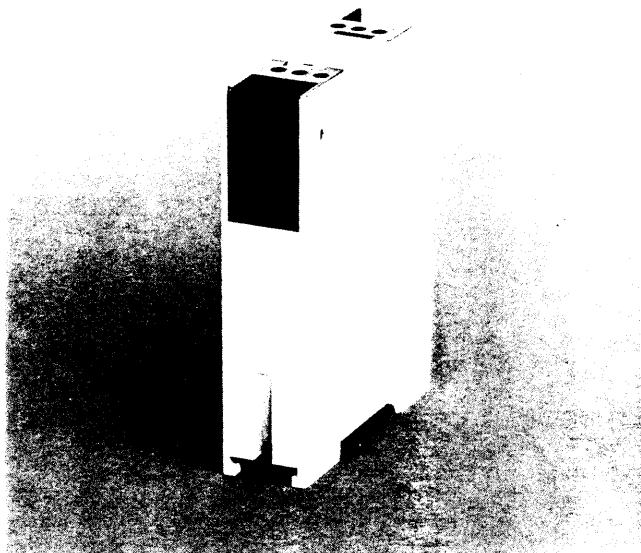
Technical Data

Description		LDG-A-12	LDG-A-14	LDG-A-16	LDG-A-30
Protection		Housing IP 40 Terminals IP 20			
Housing base		Polycarbonate (30% GFR), RAL 7032, UL 94 V-1			
Terminal housing, cover and blind plugs		Polycarbonate, UL 94 V-2			
Material		sheet steel, tinned			
Terminals	Wire cross section	max. 2.5 mm ²	max. 4 mm ²		
	Rated current	max. 16 A	max. 20 A		
Terminal pins		Tin bronze 2 μm initial nickel plating 5 μm tin plating			
Temperature range		-40° C ... +110° C			
Overall dimensions		L 75 × W 22,5 × H 100 mm	L 75 × B 45 × H 110 mm	L 75 × W 55 × H 110 mm	L 75 × W 99,7 × H 110 mm

Miniature housings

for max. 12 connections

LDG-A-12



LDG-A-12 housings are capable of accommodating one lengthwise circuit board and one crosswise circuit board. The two asymmetrical terminal housings that can be screwed to the circuit board are each capable of accommodating up to six terminal pins and terminals.

Only as many terminal pins and terminals as are required need be fitted.

The LDG-A-12 is provided with a snap fastener for fitting to DIN 46 277 and DIN EN 50 022 assembly rails.

Ordering information

Description	Execution	Colour	Order No.
Housing-base		light grey	414 470
Housing cover		transparent	414 462
Housing cover		light grey	414 463
Terminal housing	right	dark grey	414 453
Terminal housing	left	dark grey	414 455
PCB terminal pin	right 1		414 459
PCB terminal pin	right 2		414 460
PCB terminal pin	right 3		414 461
PCB terminal pin	left 1		414 456
PCB terminal pin	left 2		414 457
PCB terminal pin	left 3		414 458
Terminal, unassembled			414 469
Blind plug		dark grey	414 466

Miniature housings

LDG-A-12

Dimensions

Section A-B

Section C-D

transparent 414 462
 grau 414 463
 schwarz 414 464

schwarz 414 455
 blau 414 454

Crosswise circuit board

PCB terminal pin, left
 1 414 456 $L_1 = 17,55$
 2 414 457 $L_2 = 11,95$
 3 414 458 $L_3 = 6,35$

Hole for cheese-head screw
 B 2,2x6,5 DIN 7971
 413 339

Housing base with sliding catch
 414 470

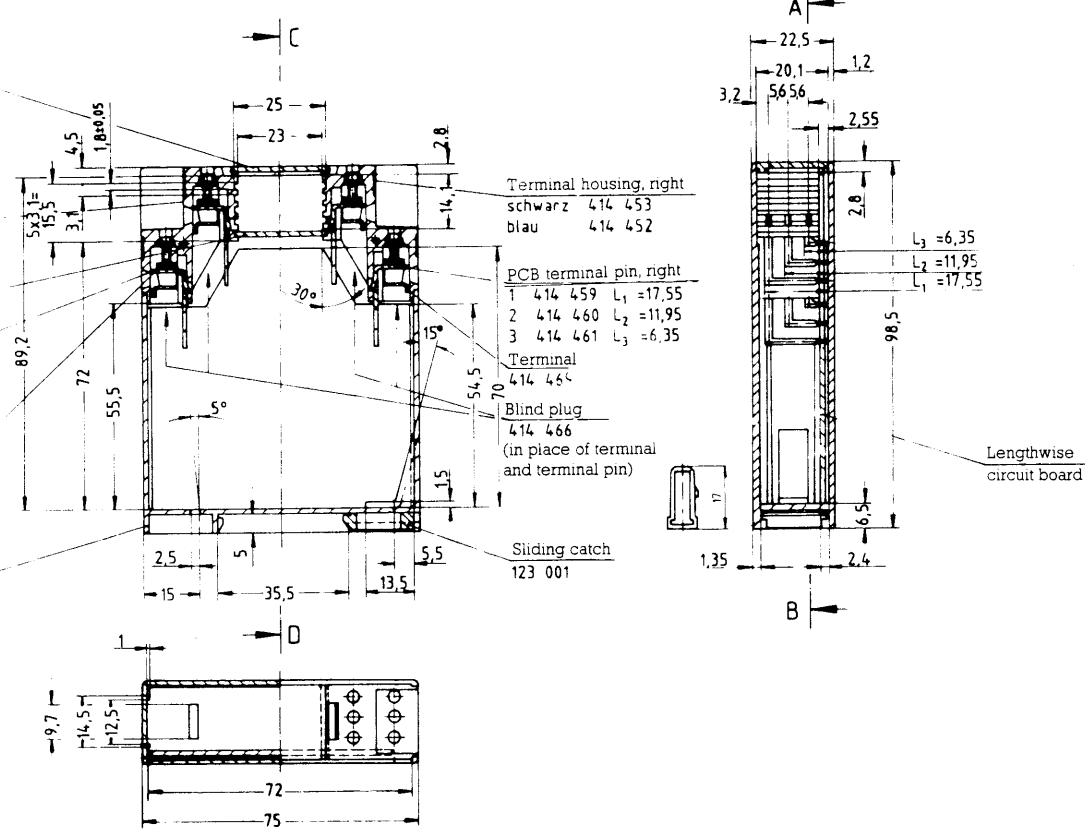
Terminal housing, right
 schwarz 414 453
 blau 414 452

PCB terminal pin, right
 1 414 459 $L_1 = 17,55$
 2 414 460 $L_2 = 11,95$
 3 414 461 $L_3 = 6,35$

Terminal 414 464
 Blind plug 414 466
 (in place of terminal and terminal pin)

Sliding catch 123 001

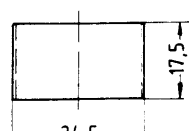
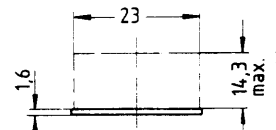
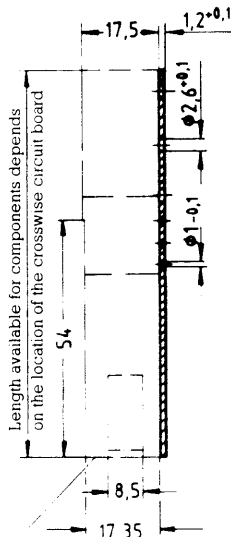
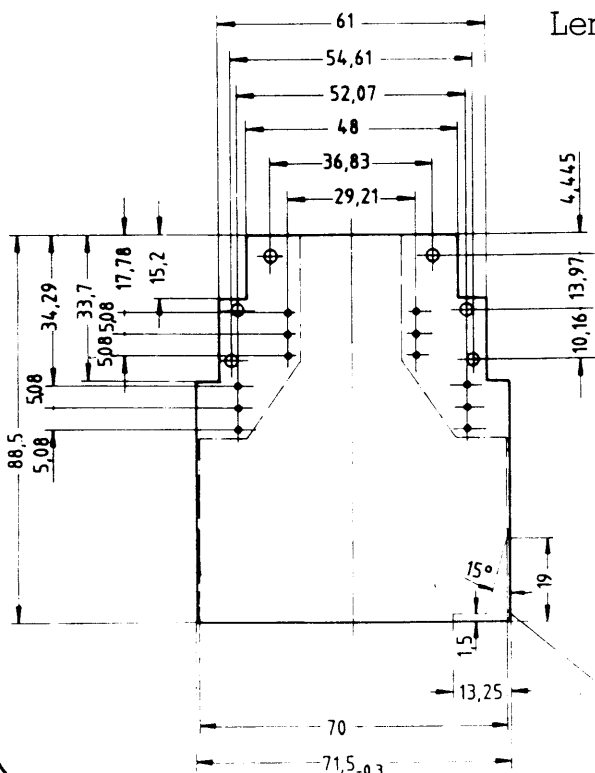
Lengthwise circuit board



Recommended circuit board dimensions

Lengthwise circuit board

Crosswise circuit board



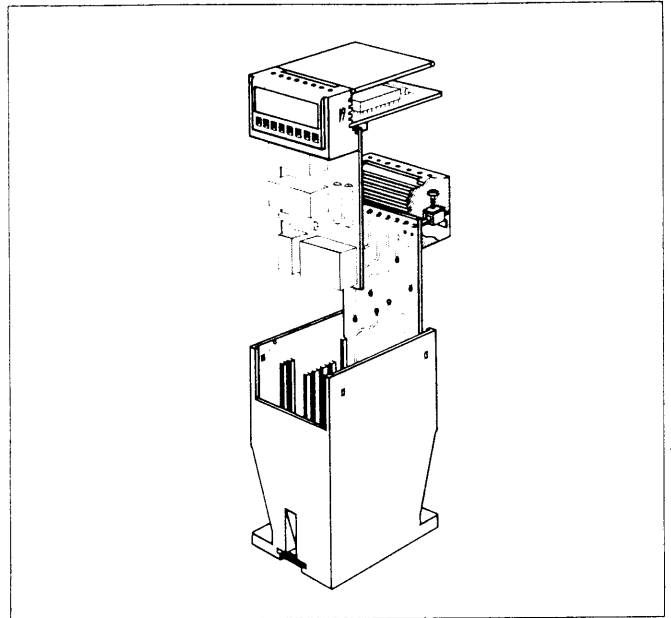
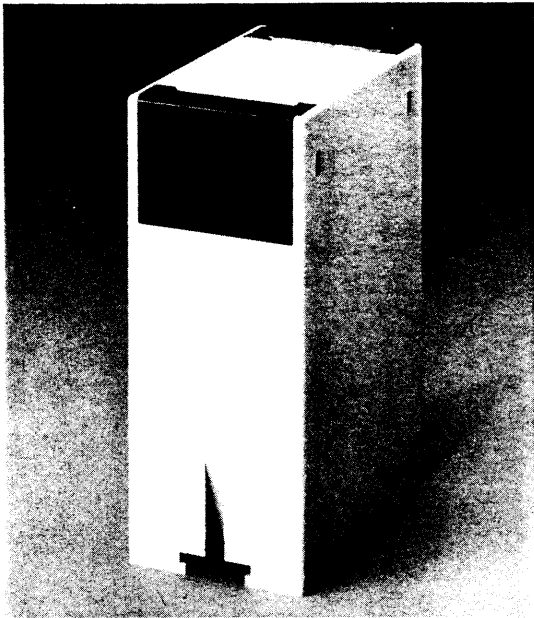
See dimensions sheet for limits for mounting components

1) height depends on location of the crosswise circuit board

Miniature housings

for max. 14 connections

LDG-A-14



LDG-A-14 housings are capable of accommodating up to two lengthwise circuit boards in addition to one top circuit board as a crosswise connection and to accommodate any actuating and indicating elements.

The two differently sized terminal housings can be fitted with as many terminal pins and terminals as are required.

The narrower terminal housing is fitted with shorter terminal pins and the wider housing with longer terminal pins. The LDG-A-14 is provided with a snap fastener for fitting to the assembly rails meeting the DIN 46277 and DIN EN 50022 or a screw fastening via a separate adapter plate.

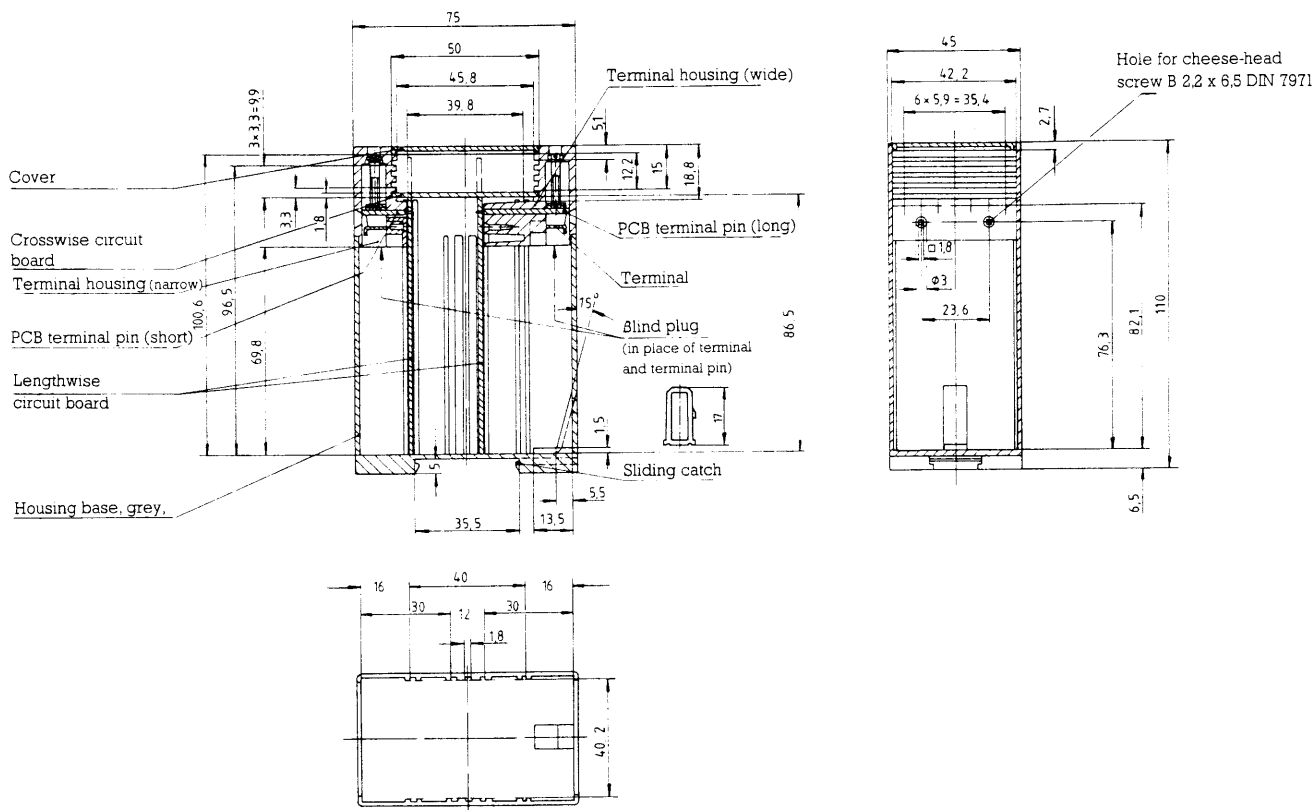
Ordering information

Description	Execution	Colour	Order No.
Housing base		light grey	423 280
Housing cover		light grey	423 273
Housing cover		transparent	423 272
Housing cover		dark grey	423 274
Terminal housing	narrow	dark grey	423 275
Terminal housing	narrow	blue	423 276
Terminal housing	wide	dark grey	423 277
Terminal housing	wide	blue	423 278
PCB terminal pin	short		113 024
PCB terminal pin	long		113 025
Terminal, unassembled			103 008
Blind plug		dark grey	103 006
Adapter plate for screw fastening			424 140

Miniature housings

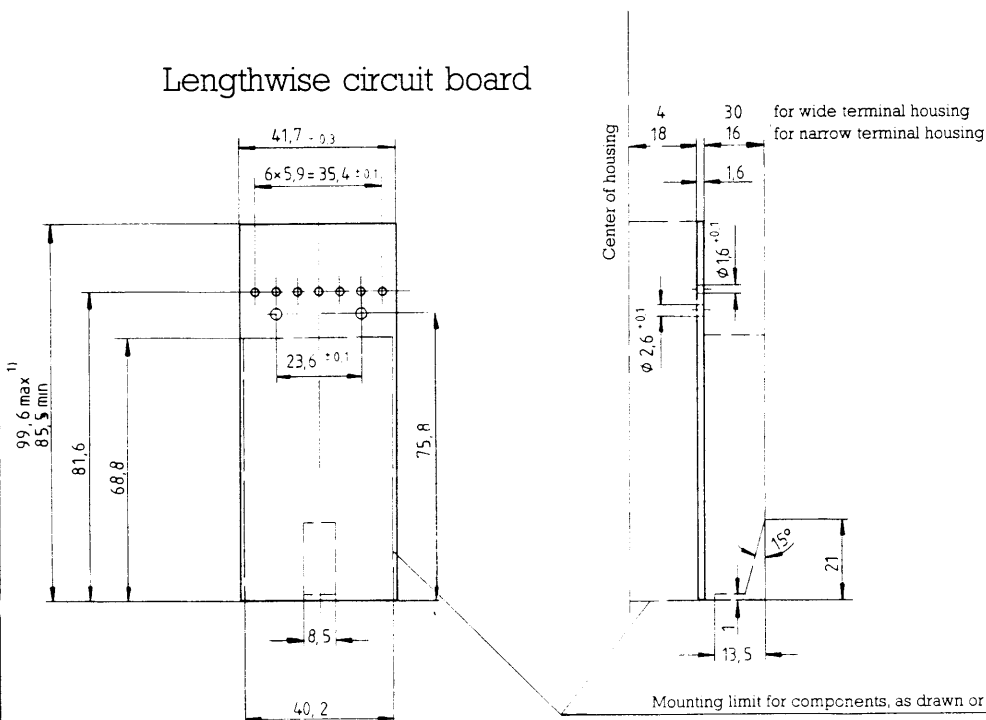
LDG-A-14

Dimensions

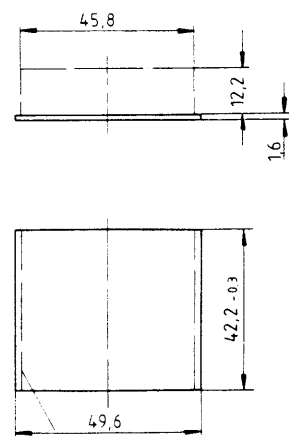


Recommended circuit board dimensions

Lengthwise circuit board



Crosswise circuit board



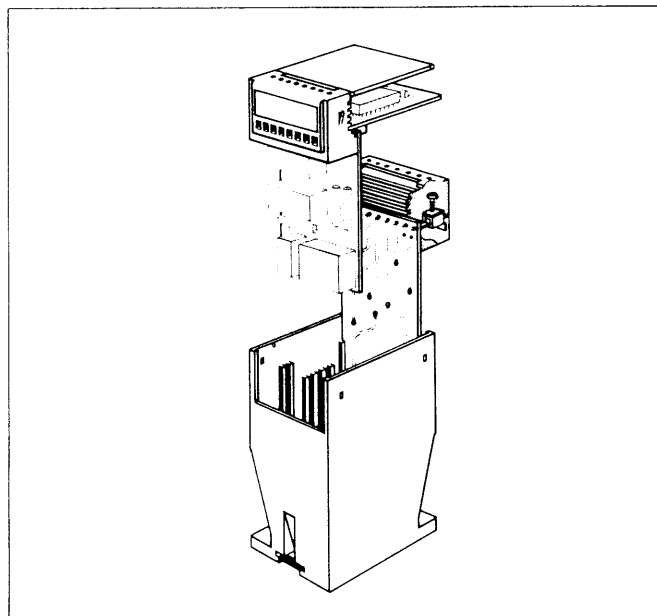
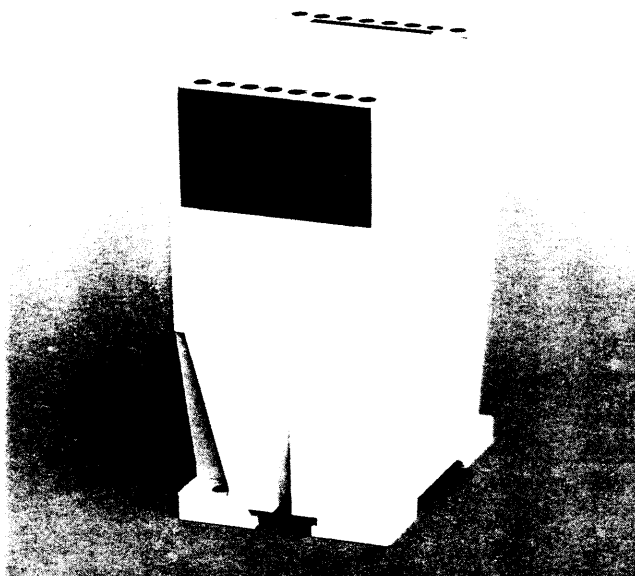
1) height depends on location of the crosswise circuit board

Mounting limit for components, as drawn or mirror image
See also dimension sheet

Miniature housings

for max. 16 connections

LDG-A-16



LDG-A-16 housings are capable of accommodating up to two lengthwise circuit boards in addition to one top circuit board as a crosswise connection and to accommodate any actuating and indicating elements.

The two differently sized terminal housings can be fitted with as many terminal pins and terminals as are required.

The narrower terminal housing is fitted with shorter terminal pins and the wider housing with longer terminal pins. The housings can be mounted either by means of screws passed through the two holes to DIN 46 121 and DIN 43 660 or by a snap fastener for fitting to DIN 46 277 and DIN EN 50 022 assembly rails.

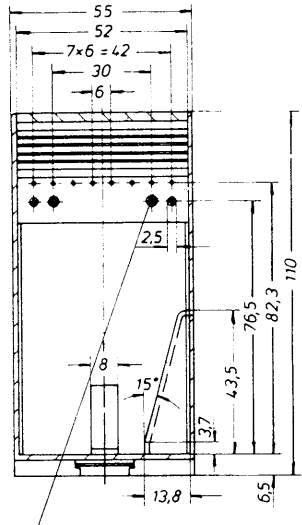
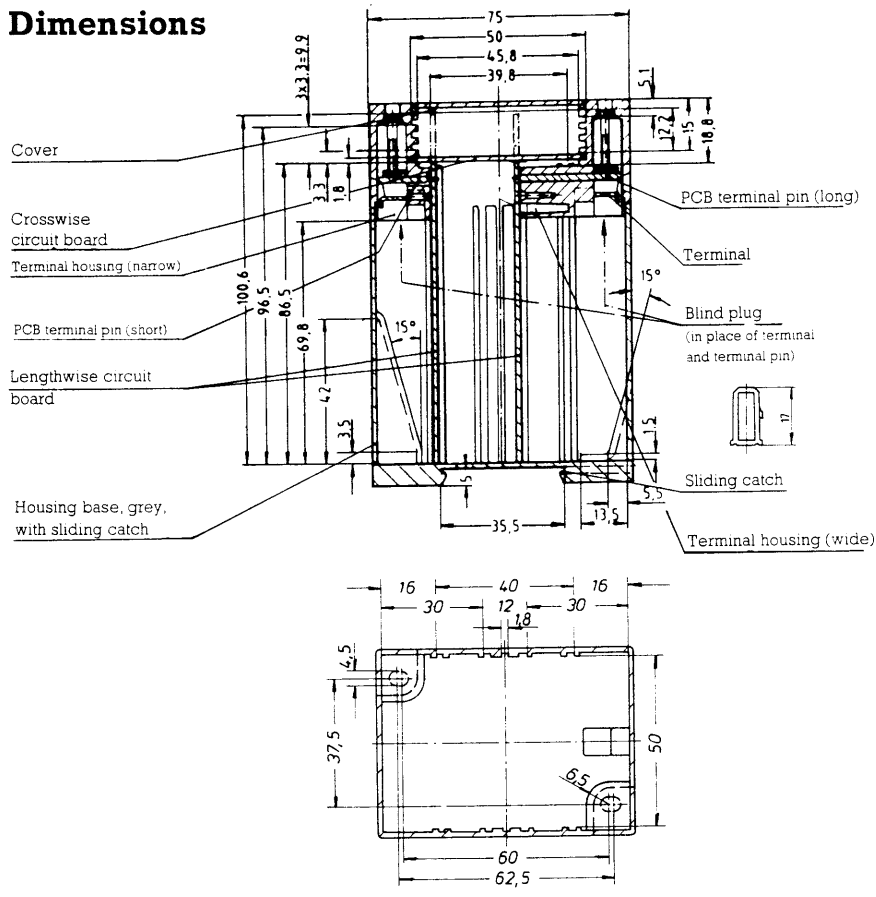
Ordering information

Description	Execution	Colour	Order No.
Housing base		light grey	414 124
Housing cover		light grey	203 032
Housing cover		transparent	203 031
Housing cover		dark grey	203 030
Terminal housing	narrow	dark grey	103 031
Terminal housing	narrow	blue	103 033
Terminal housing	wide	dark grey	103 032
Terminal housing	wide	blue	103 034
PCB terminal pin	short		113 024
PCB terminal pin	long		113 025
Terminal, unassembled			103 008
Blind plug		dark grey	103 006

Miniature housings

LDG-A-16

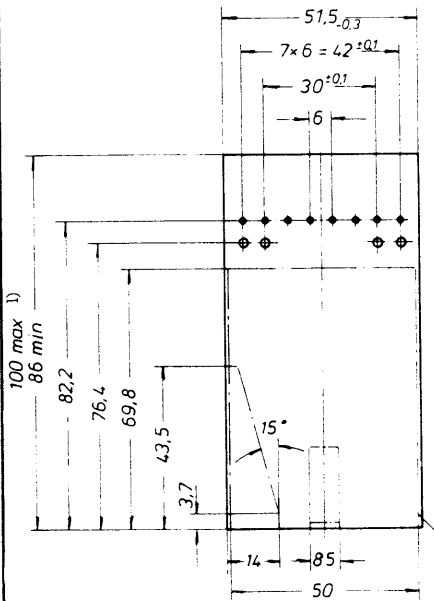
Dimensions



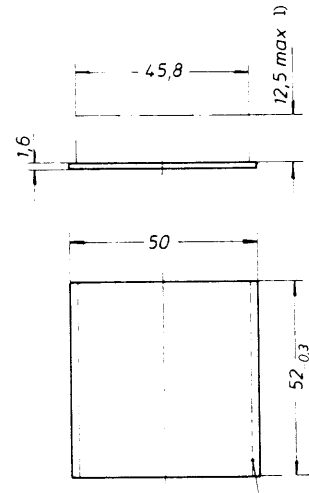
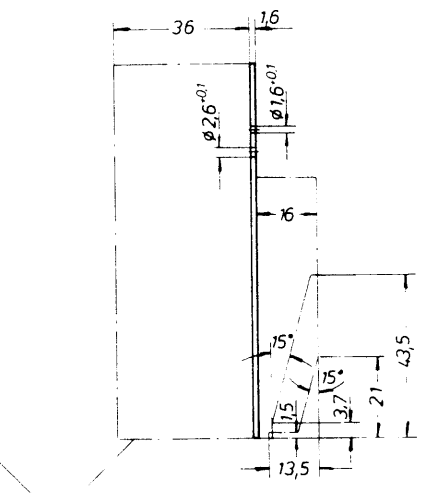
Hole for cheese-head screw B 2.2 x 6.5 DIN 7971

Recommended circuit board dimensions

Lengthwise circuit board



Crosswise circuit board



Mounting limit for components, as drawn or mirror image.

See also dimension sheet.

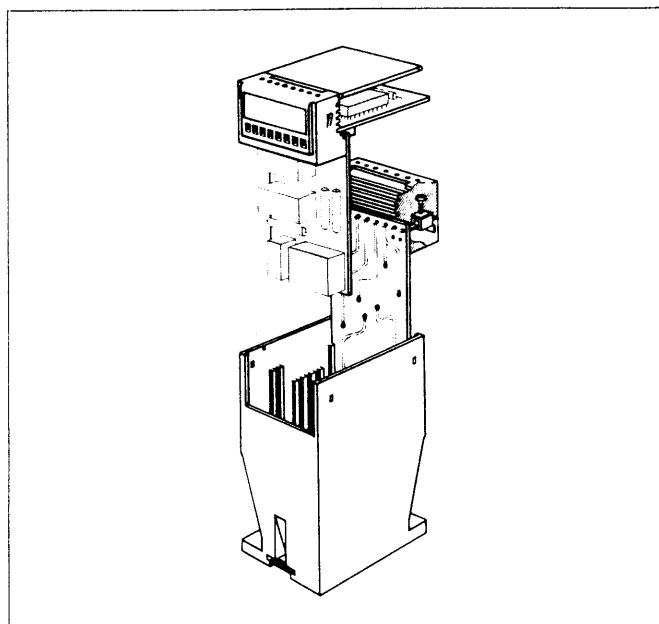
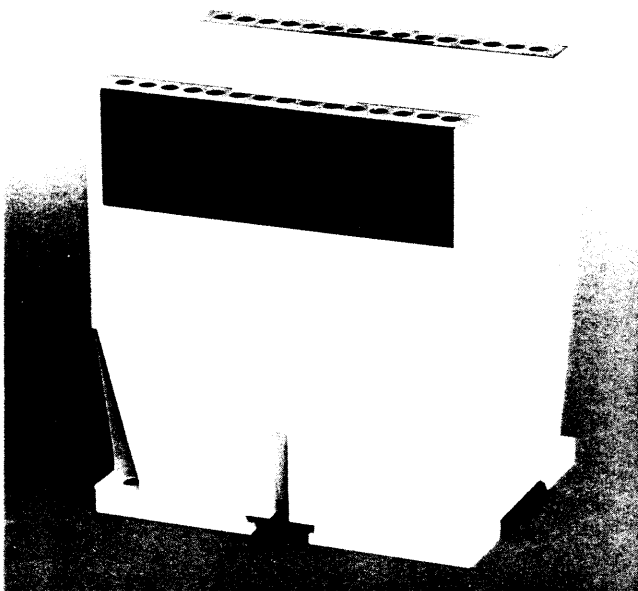
1) height depends on location of the crosswise circuit board

Note: reduced space for components in the corner area

Miniature housings

LDG-A-30

for max. 30 connections



LDG-A-30 housings are capable of accommodating up to two lengthwise circuit boards in addition to one top circuit board as a crosswise connection and to accommodate any actuating and indicating elements.

The two differently sized terminal housings can be fitted with as many terminal pins and terminals as are required.

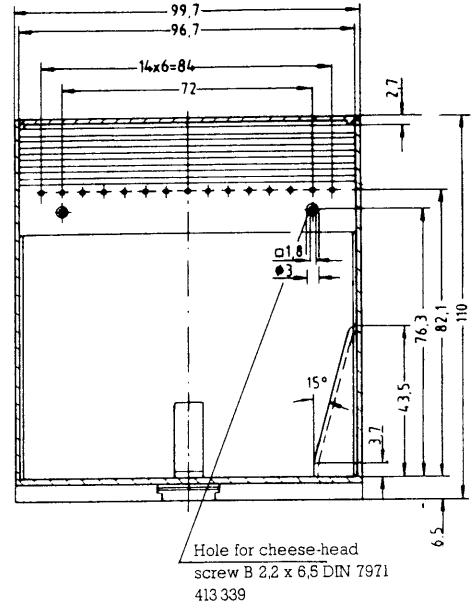
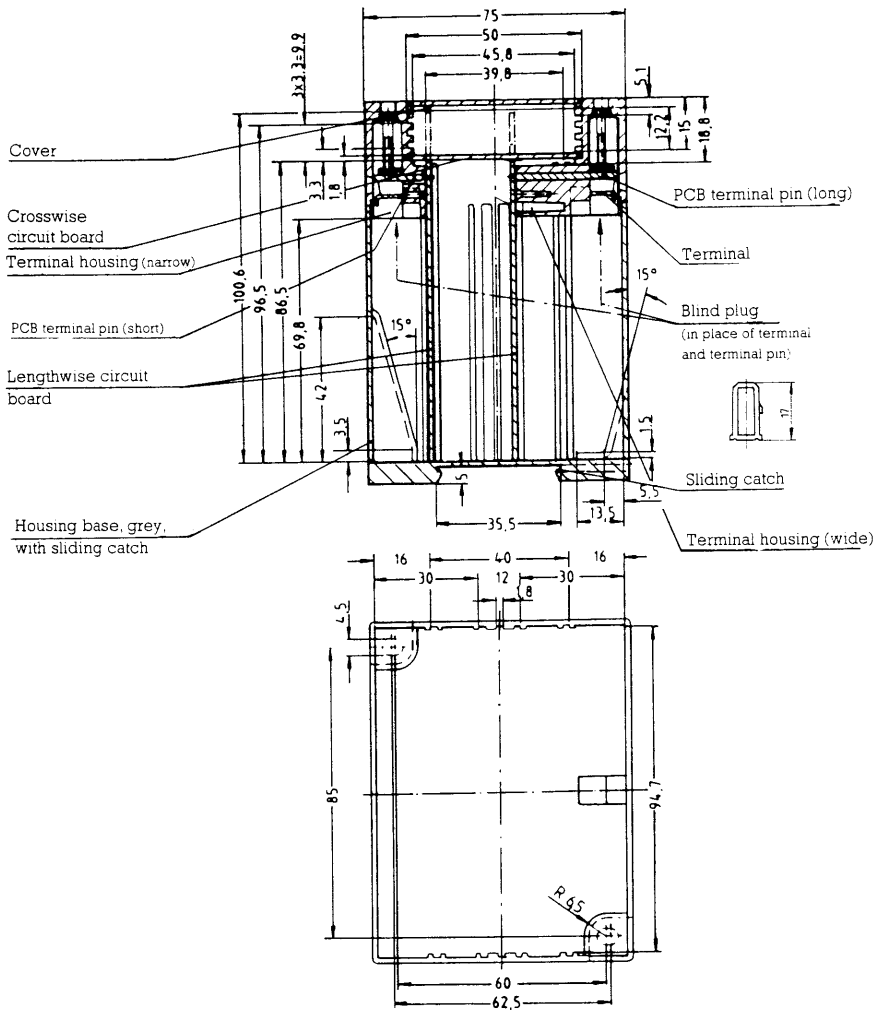
The narrower terminal housing is fitted with shorter terminal pins and the wider housing with longer terminal pins. The housing can be mounted either by means of screws passed through the two holes to DIN 46 121 and DIN 43 660 or by a snap fastener for fitting to DIN 46 277 and DIN EN 50 022 assembly rails.

Ordering information

Description	Execution	Colour	Order No.
Housing base		light grey	414 165
Housing cover		light grey	413 962
Housing cover		transparent	413 963
Housing cover		dark grey	413 964
Terminal housing	narrow	dark grey	413 966
Terminal housing	narrow	blue	413 965
Terminal housing	wide	dark grey	413 968
Terminal housing	wide	blue	413 967
PCB terminal pin	short		113 024
PCB terminal pin	long		113 025
Terminal, unassembled			103 008
Blind plug		dark grey	103 006

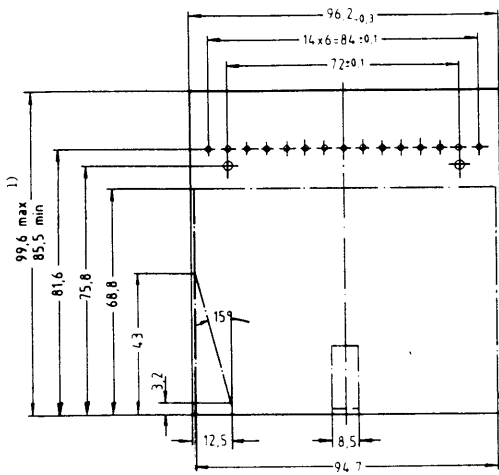
Miniature housings

LDG-A-30

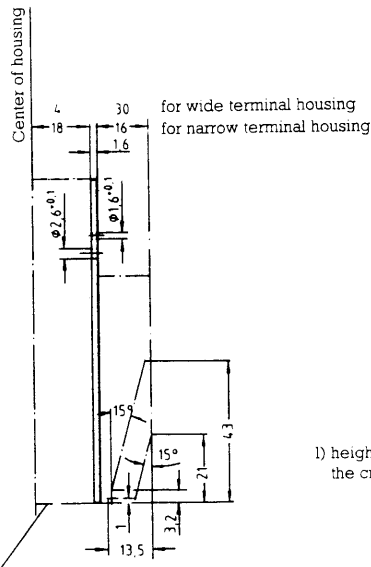


Recommended circuit board dimensions

Lengthwise circuit board

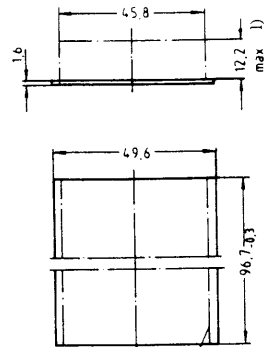


Note:
reduced space for components in the corner area



See also dimension sheet

Crosswise circuit board



1) height depends on location of the crosswise circuit board

Further products:

PCB relays with 1, 2 or 4 switching contacts

High voltage relays combined with micro-switches

Decade- and Coding-Switches

Display-units

Miniature rotary (coding-) switches

Miniature step- (rotary) switches

Flat mounting rotary switches

Male contact-strips

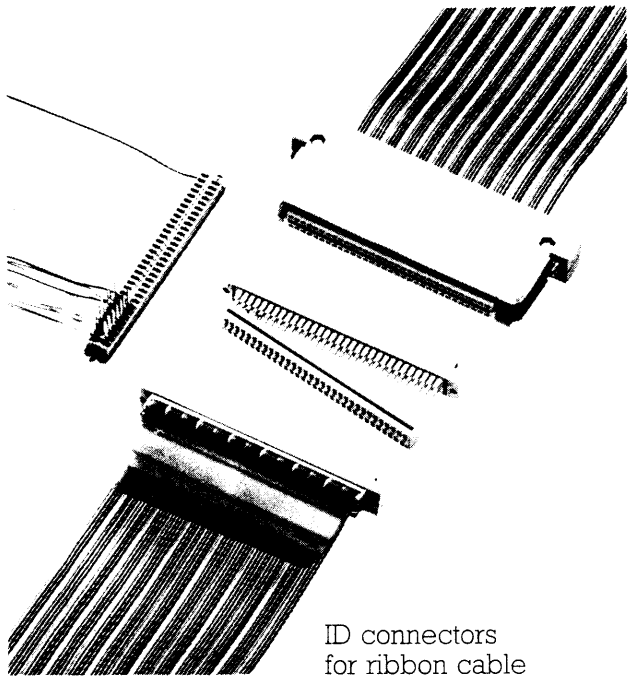
Direct PCB-connectors

Two-piece connectors to DIN 41612 and VG 95 324

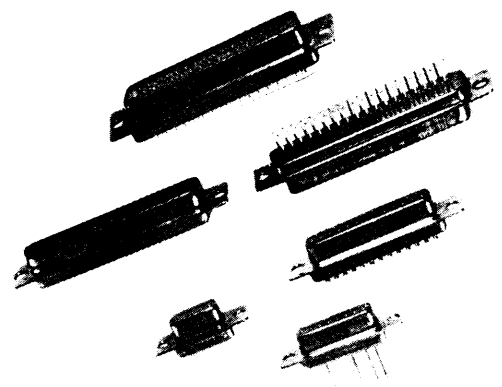
Subminiature-D connectors with machined
and die-cut contacts

A complete range of hoods suitable for all
DIN/VG and Subminiature-D connectors

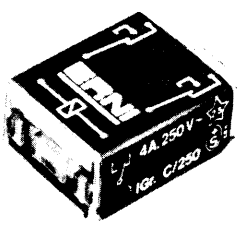
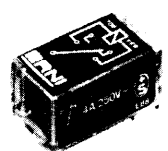
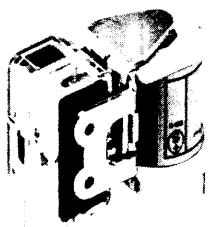
PC-boards to customer's specifications,
equipped with ERNIPRESS connectors,
incl. supply of PC-Boards.



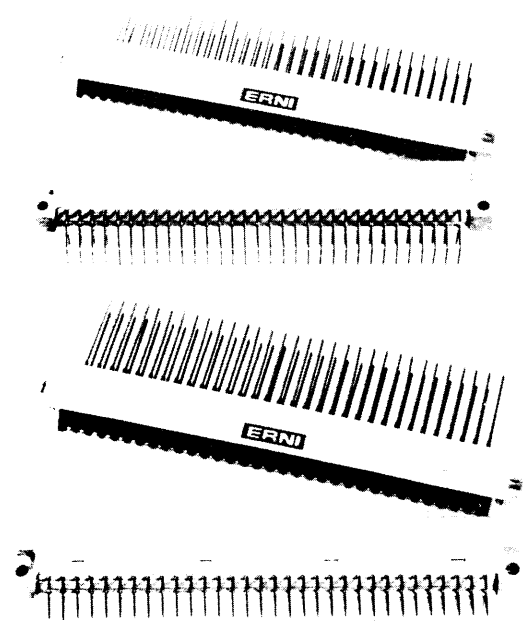
ID connectors for ribbon cable



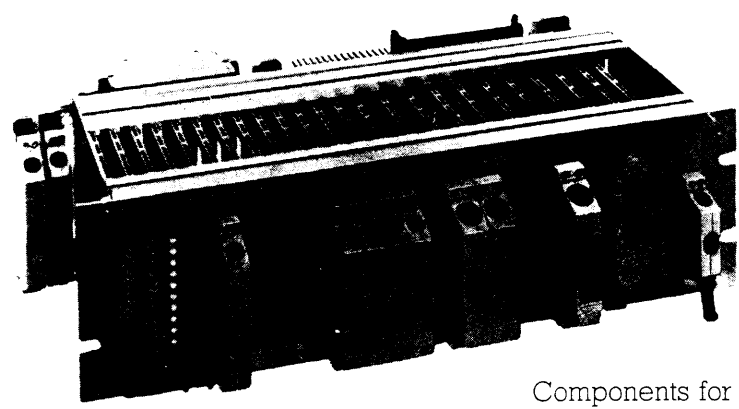
Subminiature D connectors



Relays



Connectors as per DIN 41612



Components for mateable transfer-wirings