

## IDG-A

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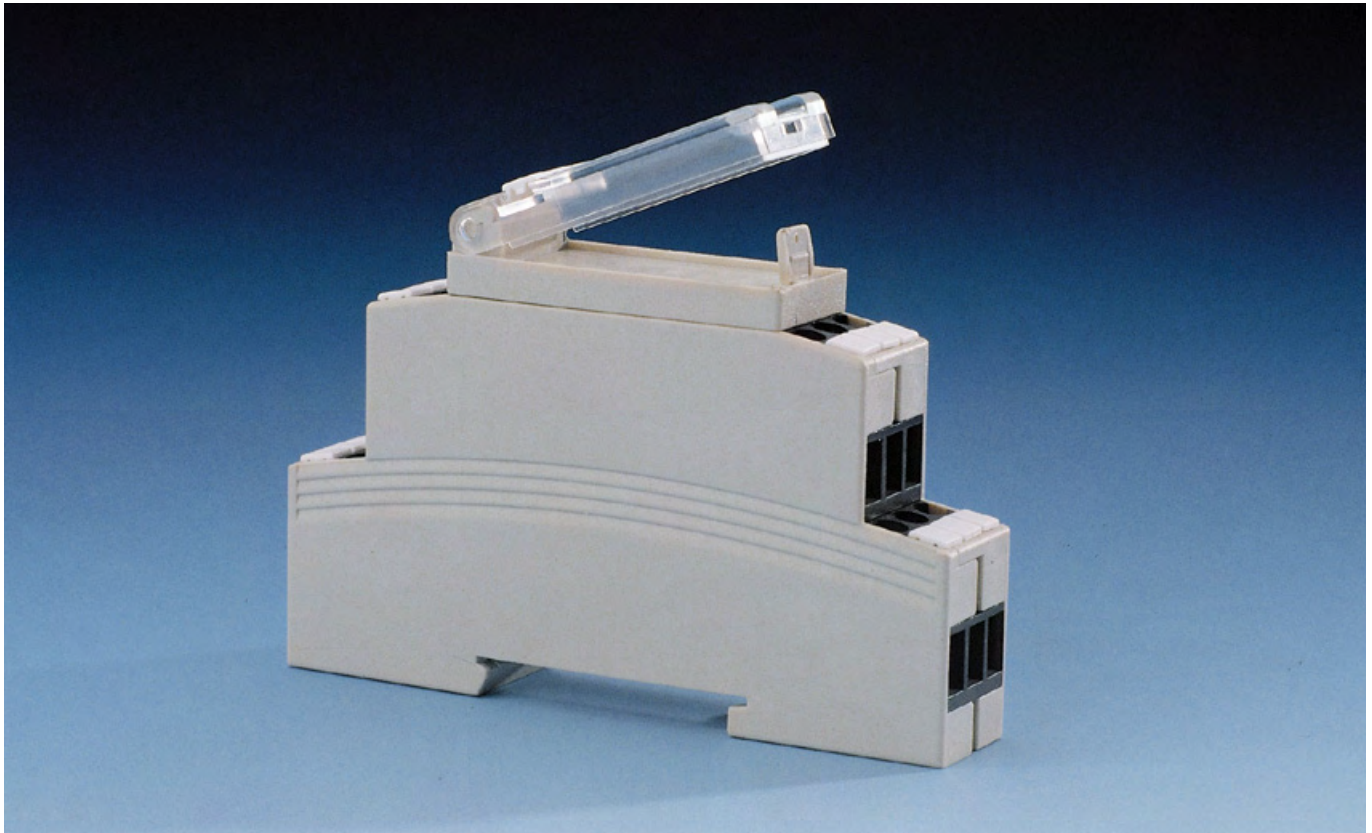
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## General

The new IDG-A1 DIN rail mount enclosure is ideal for applications requiring a housing for smaller pcbs and minimal DIN rail space loss. The IDG-A1 has sleek lines, making this an attractive packaging medium for applications such as home/building automation.

This enclosure has been designed according to DIN 43 880, providing the dimensions and specifications required for installation component standards. Conforming to VBG 4 and IEC529/DIN VDE 0470-1, the IDG-A1 prevents accidental shock and injury while meeting the requirements of the automation industries. This new housing enables users to incorporate one vertical pcb and a top horizontal pcb or three horizontal pcbs. The top horizontal pcb is ideal for holding signalling devices/indicators and switches. Fully populated, the terminal blocks have a maximum of 12 screw clamp #terminals. For applications not requiring all 12 I/O positions or requirements for additional internal space, selective loading may be done, with empty positions being filled with blind plugs.

## Features

- Installed width of 17.5<sup>+0.5</sup> mm
- Dimensional size per DIN 43 880, component size 1
- Mountable to DIN rails meeting DIN 46 277 and DIN EN 50 022 (35mm)
- Ease of assembly due to snap-together design
- One main PCB (vertical) or up to three horizontal PCBs
- Two terminal blocks (one left, one right), each with two sets of three positions (may be custom-loaded)
- Blind insert may be utilized in-place of terminal blocks for maximum space utilization
- 2 cover versions: grey cover or grey cover frame for clear hinged face plate (for access to switching components)
- Grounding connection via DIN rail pending
- Customer-specific colors and designs available upon request

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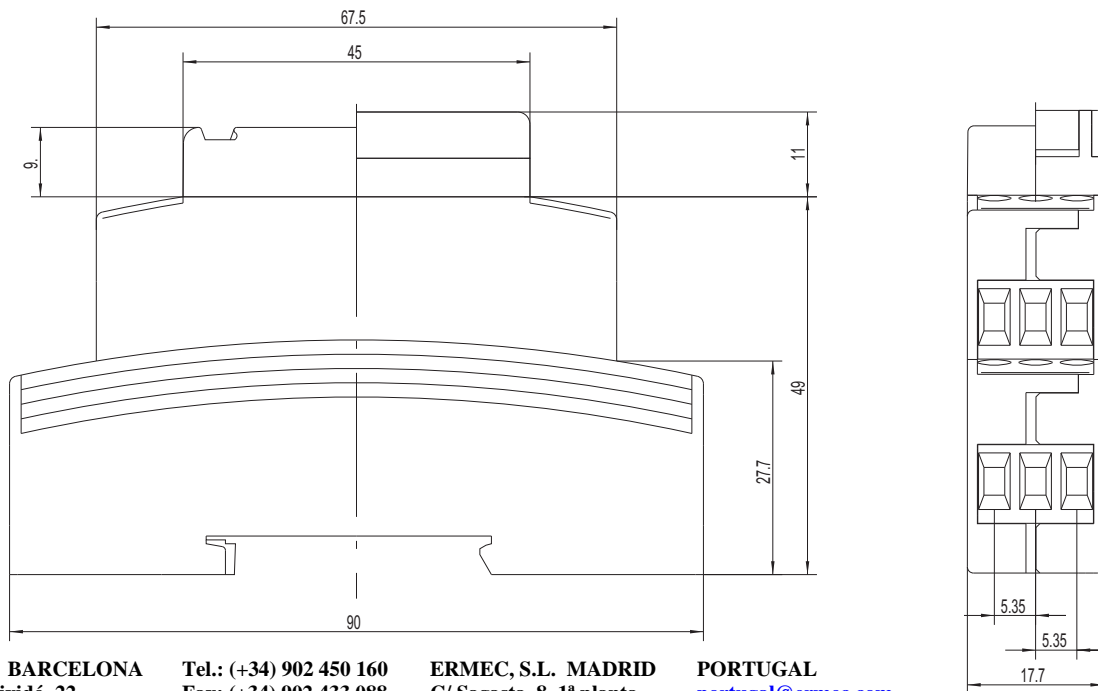
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## Electrical and Mechanical Characteristics

|  |                                     |
|--|-------------------------------------|
| Type   | IDG-A1                              |
| Degree of Protection                                 | IP 20                               |
| Air Distance and Creepage (Terminal Block)           | min. 2.5 mm                         |
| Creepage proof (Terminal Block)                      | CTI 250                             |
| Insulation Material                                  | III a                               |
| Maximum Current                                      | max. 12 A                           |
| Maximum Wire Size                                    | max. 2.5 mm <sup>2</sup> (14 AWG)   |
| Materials  |                                     |
| Upper Housing Shell                                  | PC 30 % GF UL 94-V1                 |
| Lower Housing Shell                                  | PC 30 % GF UL 94-V1                 |
| Blind Terminal Block                                 | PC 30 % GF UL 94-V1                 |
| Cover  | PC 30 % GF UL 94-V1                 |
| Hinged Face Plate                                    | PC UL 94-V2                         |
| Terminal Block                                       | PA 46 30 % GF UL 94-V0              |
| Blind Plug   | PC UL 94-V2                         |
| Screw Clamp  | Steel (zinc plated)                 |
| pcb Termination Pin                                  | CuSn 6 (2 μm Ni +5 μm SnPb plating) |
| Nomenclature Marker                                  | PA 66                               |
| Operating Temperature                                | -40 °C .... +110 °C                 |
| Outer Dimensions: With Cover (W x H x D)             | 90 x 58 x 17.7 mm                   |
| Outer Dimensions: With Hinged Face Plate (W x H x D) | 90 x 60 x 17.7 mm                   |

All data only for the housing shell without pcb connection. Notice the influencing of the air distance and the creepage because of the wiring.

## IDG-A1: Dimensional Drawing

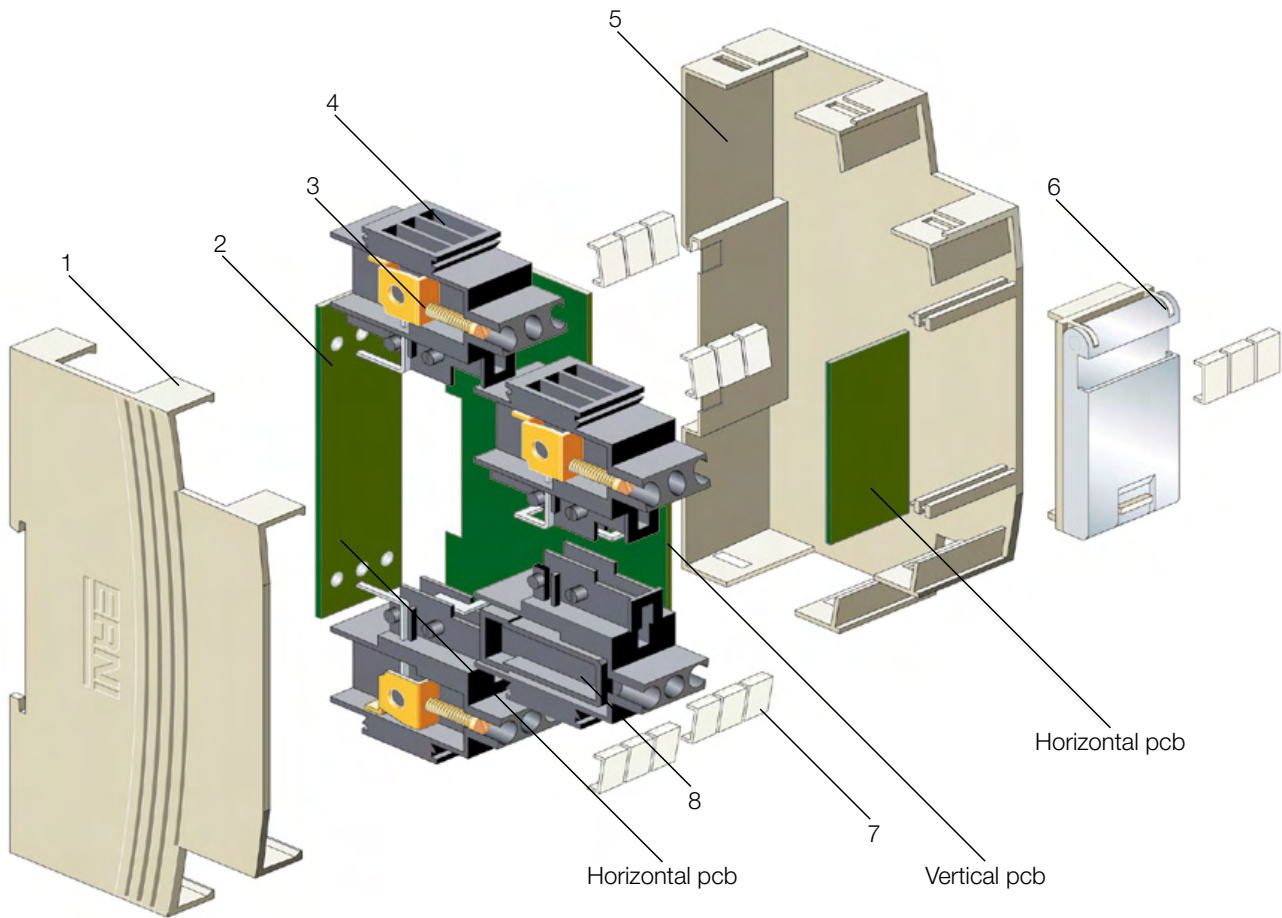


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## Individual Components

| Item | Description                  | Material            |
|------|------------------------------|---------------------|
| 1    | Upper Housing Shell          | PC 30% GF           |
| 2    | pcb Termination Pin          | CuSn6 (tin plated)  |
| 3    | Screw Clamp                  | Steel (zinc plated) |
| 4    | Terminal Block               | PA 46 30% GF        |
| 5    | Lower Housing Shell          | PC 30% GF           |
| 6    | Cover with Hinged Face Plate | PC 30% GF/PC        |
| 7    | Snap-on Nomenclature Marker  | PA 66               |
| 8    | Blind Plug                   | PC                  |



## Ordering Information

| Description  | PCB Orientation* | Cover Version                | Part No. |
|--------------|------------------|------------------------------|----------|
| Complete Kit | Vertical         | Cover                        | 104990   |
| Complete Kit | Vertical         | Cover with Hinged Face Plate | 104991   |
| Complete Kit | Horizontal       | Cover                        | 104992   |
| Complete Kit | Horizontal       | Cover with Hinged Face Plate | 104993   |

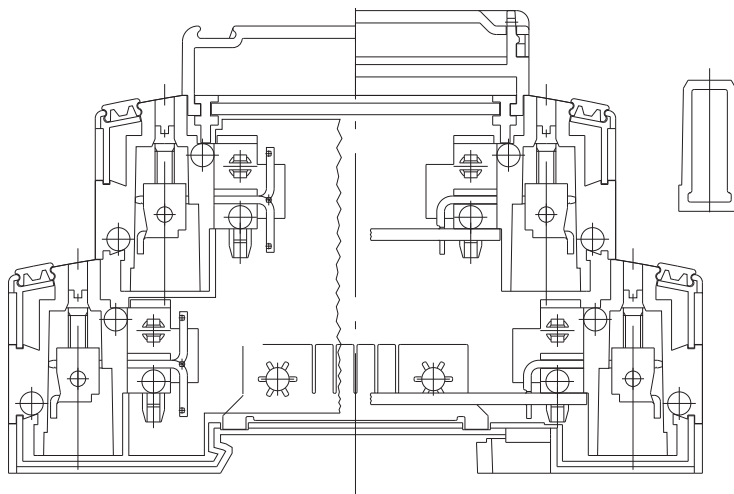
Note: \*pcb Orientation is in relation to DIN rail

The complete kits are packaged individually and consist of the following: an upper housing shell, lower housing shell, two left terminal blocks, two right terminal blocks (both terminal blocks are populated with 6 pins and screw clamps each) and a cover.

The individual components listed in the table below are ideal for applications with high production volumes.

| Description                              | Part No. | Description                       | Part No. |
|--|----------|-----------------------------------|----------|
| Lower Housing Shell                      | 064080   | pcb Pin 1, Left/Right             | 064087   |
| Upper Housing Shell                      | 064081   | pcb Pin 2, Left                   | 064088   |
| Left Terminal Block, Assembled           | 104872   | pcb Pin 3, Left                   | 103681   |
| Right Terminal Block, Assembled          | 104873   | pcb Pin 2, Right                  | 103950   |
| Horizontal pcb Terminal Block, Assembled | 104874   | pcb Pin 3, Right                  | 103951   |
| Snap-on Nomenclature Markers             | 104413   | pcb Pin Horizontal pcb            | 103684   |
| Blind Terminal Block                     | 064085   | Cover                             | 064082   |
| Empty Terminal Block Housing             | 064086   | Cover Frame for Hinged Face Plate | 064083   |
| Blind Plug for Terminal Block Housing    | 414466   | Hinged Face Plate, Transparent    | 064084   |
| Screw Clamp                              | 104150   |                                   |          |

## Installation Diagram



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