

COMBI



IP40 Surface distribution boxes

The COMBI series surface distribution boxes are manufactured with the highest-quality halogen-free plastic materials.

With a modular capacity from 4 to up to 36 models, they have been designed exclusively for indoor installation in the tertiary and residential sector.



COMBI Technical Specifications

- Degree of protection: IP40*.
- Resistance to impact: IK08.
- Glow wire resistance: 650 °C.
- Ball pressure test: 70 °C.
- Ambient temperature range: -25 °C / +40 °C.
- Maximum operating voltage: 1000 V AC/1500 V DC.
- Double insulation: Class II.

* Except Ref. BT2 and BT4.

COMBI Certifications



Compliant with the Low Voltage Directive 2014/35/EU.
Standards: UNE-EN 62208 and UNE-EN 61439-1
(as applicable).

Surface distribution boxes for indoor use: dwellings, detached houses, offices and shops

COMBI

IP40 surface distribution boxes



Product series

- Terminal boxes with a capacity of 2 and 4 modules.
- Surface boxes with a capacity of 4, 8, 12, 24 and 36 modules with opaque or transparent window.

Material

- Halogen-free plastic materials.
- Base, frame and opaque window: ABS RAL 9003 white.
- Transparent window in tinted PC, with UV protection.

Supply

- Supplied in individual packaging. When several items are sent together, they are bundled together with transparent film. They are supplied with all the elements assembled, except for the ones supplied in the accessory bag.
- Accessory bag:
 - Hermetic caps.
 - Frame-base locking screws.
 - Grey module cover (6 modules).
 - Module identification strips.
 - Assembly instructions.

Ultra-modern and exclusive design, compliant with the technical and quality standards demanded by the market

Terminal boxes

- Available in 2 and 4-modules.
- They consist of a base and a cover that is closed by means of two 4x13 screws.
- The DIN rail emerges directly from the base injection and is therefore plastic.
- They have a cable entry on each side, at the top and bottom and at the rear of the box.
- They can be sealed by means of tabs located diagonally on the outside of the box.
- These boxes make it possible to protect a protective element secured to the DIN rail of a larger panel.





Base

- The inner walls have ribs that reinforce the box and prevent possible deformation.
- The top and bottom sides have knock-outs with the standard metric M25, M32 and M40 diameters so that they can be quickly removed with a screwdriver for cable and pipe entry.
- The side walls also have knock-outs to facilitate cable passage between boxes if they are joined together.
- There is an arrow on the bottom of the base that indicates correct box position; this ensures that the space between the rails is suitable in order to guarantee that power dissipates inside the enclosure correctly, in accordance with the regulations.
- For two rails, the top space must be greater than 115 mm; for three rails the top space must be greater than 135 mm. The bottom space should always be greater than 100 mm.
- The bottom of the base is fitted with supports for attaching neutral and earth bars, as well as the housings for attaching the DIN rail.

Wall-mounting

- It is performed by means of four screws, directly from the housings located at the bottom of the base provided for this purpose; these housings are covered with hermetic caps (supplied in the accessories bag) to maintain the degree of protection and dielectric strength.

Frame-base closing

- The top and bottom sides of the enclosure have clips on the frame and their corresponding housings on the base. With the help of these clips, and applying a little pressure, the frame-base assembly can easily be opened and closed. This is a provisional closure during the installation period. The box is definitively closed by means of four 4x13 screws in the housings located inside the window gap. These screws are supplied in the accessory bag.
- The 4-module box has a special closure that seals the box, for which purpose the 25975 sealable kit should be ordered.



Window

- RAL 9003 white opaque windows.
- Transparent windows in tinted PC, with UV protection.
- Opening and closing by means of vertical rotation.
- When the windows are opened fully out, they remain anchored in order to facilitate switch control and handling.
- The windows are wave-shaped, giving them a very attractive look, and they adapt perfectly to places where decoration is highly important.

DIN rail attachment

- The bases have grooved housings for screwless DIN rail assembly.
- For boxes with two and three rows (24 and 36 modules), the rails are supplied in frame form. This keeps the whole unit assembled comfortably on the workbench, and it can then be moved to the enclosure for the final assembly.

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IP40 surface distribution boxes

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| Reference No. | | No. of modules | Dimensions | Weight | Power dissipation according to temperature increase °C P(W)* | | | | | Type |
|---------------|----------------|--------------------|------------|--------|--|------|------|------|------|-------|
| OPAQUE WINDOW | TRANSP. WINDOW | | | | 20 | 25 | 30 | 35 | 40 | |
| BT2 | - | 1x2 DIN rail | 130x50x64 | 0.08 | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 40SP2 |
| BT4 | - | 1x4 DIN rail | 130x85x64 | 0.10 | 2.7 | 3.3 | 4.0 | 4.7 | 5.3 | 40SP4 |
| BV4PO | BV4PT | 1x4 DIN rail | 228x120x99 | 0.43 | 6.7 | 8.4 | 10.0 | 11.7 | 13.4 | 40S04 |
| BV8PO | BV8PT | 1x8 DIN rail | 228x191x99 | 0.61 | 9.0 | 11.2 | 13.4 | 15.7 | 17.9 | 40S08 |
| BV12PO | BV12PT | 1x12 DIN rail | 228x264x99 | 0.80 | 11.3 | 14.1 | 17.0 | 19.8 | 22.6 | 40S12 |
| BV24PO | BV24PT | 2x12 (24) DIN rail | 353x264x99 | 1.28 | 16.1 | 20.1 | 24.1 | 28.2 | 32.2 | 40S24 |
| BV36PO | BV36PT | 3x12 (36) DIN rail | 497x264x99 | 1.82 | 21.6 | 27.0 | 32.4 | 37.8 | 43.2 | 40S36 |

HALOGEN-FREE PLASTIC MATERIALS

Ref. BV4PO sealable by ordering the 25975 kit.

Frame, base and opaque window in white ABS RAL 9003.

Transparent window in tinted PC, with UV protection.

IP40 - Surface.

IP20: BT2 and BT4.

* Calculations obtained according to the CEI 890:1997 standard (including Corrigendum 1998). Method of temperature-rise assessment by extrapolation for partially type-tested assemblies (PTTA) of low-voltage switchgear and control gear.



**1x2 modules
BT2**



**1x4 modules
BT4**



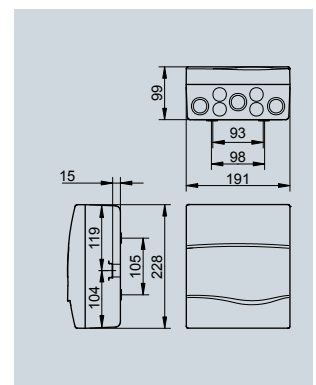
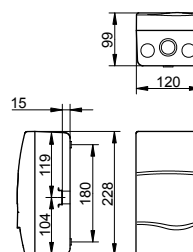
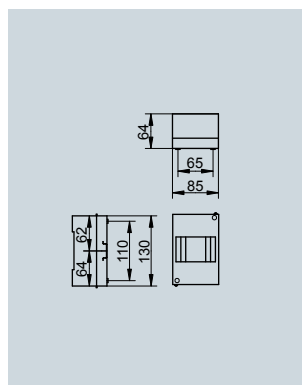
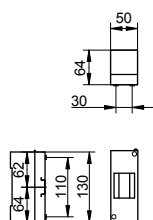
**1x4 modules
BV4PO**

TOP: 3xM25/32
BOTTOM: 3xM25/32
LEFT: 1xM25/32
RIGHT: 1xM25/32



**1x8 modules
BV8PO**

TOP: 4xM25-3xM25/32
BOTTOM: 4xM25-3xM25/32
LEFT: 1xM25/32
RIGHT: 1xM25/32



IP40 surface distribution boxes. With neutral and earth bars

| Reference No. | | No. of modules | Dimensions | Weight | Power dissipation according to temperature increase °C P(W)* | | | | | Type |
|------------------|------------------|--------------------|------------|--------|--|------|------|------|------|-------|
| OPAQUE WINDOW | TRANSP. WINDOW | | | | HEIGHT X WIDTH X DEPTH | KG | 20 | 25 | 30 | |
| BV4PO/RR | BV4PT/RR | 1x4 DIN rail | 228x120x99 | 0.49 | 6.7 | 8.4 | 10.0 | 11.7 | 13.4 | 40S04 |
| BV8PO/RR | BV8PT/RR | 1x8 DIN rail | 228x191x99 | 0.70 | 9.0 | 11.2 | 13.4 | 15.7 | 17.9 | 40S08 |
| BV12PO/RR | BV12PT/RR | 1x12 DIN rail | 228x264x99 | 0.91 | 11.3 | 14.1 | 17.0 | 19.8 | 22.6 | 40S12 |
| BV24PO/RR | BV24PT/RR | 2x12 (24) DIN rail | 353x264x99 | 1.45 | 16.1 | 20.1 | 24.1 | 28.2 | 32.2 | 40S24 |
| BV36PO/RR | BV36PT/RR | 3x12 (36) DIN rail | 497x264x99 | 2.04 | 21.6 | 27.0 | 32.4 | 37.8 | 43.2 | 40S36 |

HALOGEN-FREE PLASTIC MATERIALS

Ref. BV4PO/RR sealable by ordering the 25975 kit.

Frame, base and opaque window in white ABS RAL 9003.

Transparent window in tinted PC, with UV protection.

IP40 - Surface.

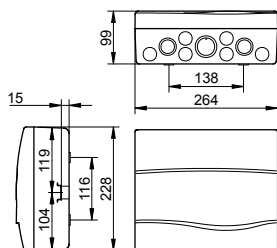
/RR: With neutral and earth bars.

* Calculations obtained according to the CEI 890:1997 standard (including Corrigendum 1998). Method of temperature-rise assessment by extrapolation for partially type-tested assemblies (PTTA) of low-voltage switchgear and control gear.



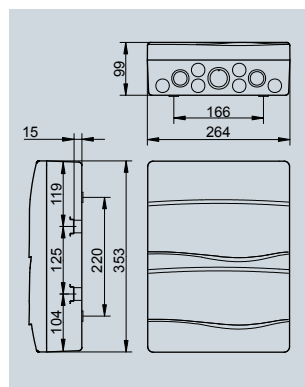
1x12 modules BV12PO

TOP: 6xM25-2xM25/32-1xM32/40
 BOTTOM: 6xM25-2xM25/32-1xM32/40
 LEFT: 1xM25/32
 RIGHT: 1xM25/32



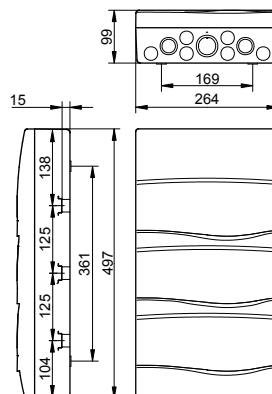
2x12 (24) modules BV24PO

TOP: 6xM25-2xM25/32-1xM32/40
 BOTTOM: 6xM25-2xM25/32-1xM32/40
 LEFT: 2xPG16/21
 RIGHT: 2xPG16/21



3x12 (36) modules BV36PO

TOP: 6xM25-2xM25/32-1xM32/40
 BOTTOM: 6xM25-2xM25/32-1xM32/40
 LEFT: 2PG16/21
 RIGHT: 2xPG16/21



COMBI ACCESSORIES

IP40 surface distribution boxes

COMBI Accessories



CLOSING SCREWS.



WHITE MODULE COVER.



BAR SUPPORT.



HERMETIC CAPS.



SEALABLE KIT FOR 4-MODULE BOX.

Neutral and earth bars

In some markets, the technical regulations governing installation require neutral and earth conductors to be connected to a common busbar. The base of these boxes has specific supports for this purpose. The neutral and earth bars are assembled to the base by means of the guides located on the top and bottom walls by pressing slightly, with no need for screws.

They may be supplied as an accessory or they can be supplied already assembled by ordering the /RR references.

Neutral and earth bar structure

| Ref. | Terminal | | Connectors | |
|--------------|----------|------|--|--|
| | N | E | NEUTRAL | EARTH |
| 22016 | 4+2 | 4+2 | 2x(4-10 mm ²)+4x(2.5-6 mm ²) | 2x(4-10 mm ²)+4x(2.5-6 mm ²) |
| 22017 | 8+2 | 8+2 | 1x(10-25 mm ²)+1x(4-10 mm ²)+8x(2.5-6 mm ²) | 1x(10-25 mm ²)+1x(4-10 mm ²)+8x(2.5-6 mm ²) |
| 22018 | 12+2 | 12+2 | 1x(10-25 mm ²)+1x(4-10 mm ²)+12x(2.5-6 mm ²) | 1x(10-25 mm ²)+1x(4-10 mm ²)+12x(2.5-6 mm ²) |

COMBI Accessories

| Miscellaneous | Ref. |
|-------------------------------|--------------|
| Sealable kit for 4-module box | 25975 |
| White module cover (6 mod.) | 77600 |
| Hermetic caps | 77650 |
| 4x13 frame-base closing screw | 92611 |

| Neutral and earth bars | Ref. |
|---|--------------|
| Support + neutral and earth bars (4+2 entries) | 22016 |
| Support + neutral and earth bars (8+2 entries) | 22017 |
| Support + neutral and earth bars (12+2 entries) | 22018 |

| Opaque windows | Ref. |
|------------------|--------------|
| 4 modules | 76420 |
| 8 modules | 76440 |
| 12-24-36 modules | 76460 |

| Transparent windows | Ref. |
|---------------------|--------------|
| 4 modules | 76790 |
| 8 modules | 76800 |
| 12-24-36 modules | 76760 |

