

## KME ITALY SpA

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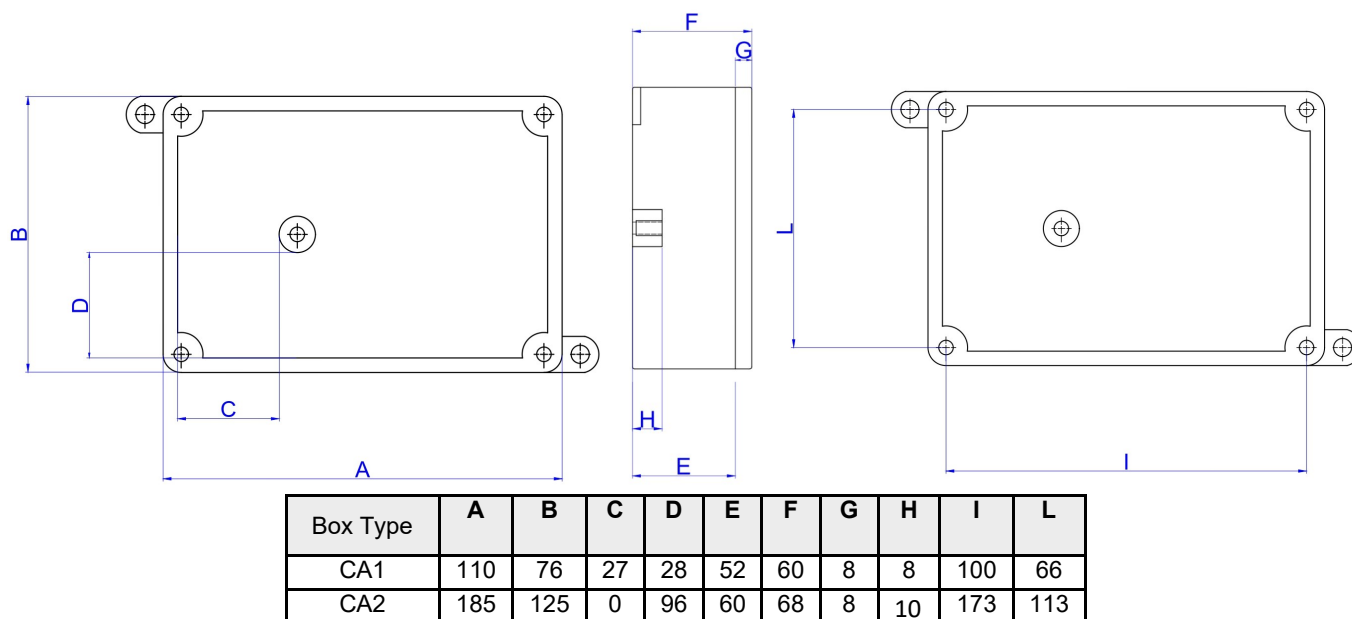
## JUNCTION BOXES

### 1 GENERAL INFORMATION

The series of junction boxes CA consists of two models made of copper alloy (CuZn38Al), whose dimensions are given in the table below.









The boxes are equipped with a lid fixed with brass countersunk head screws and a gasket in EPDM 300/100. The boxes are equipped with special perforated fins for wall mounting both indoors and outdoors. The device for the ground connection for protection against indirect contacts, is present on the bottom of the box. The outside of the box is finished up by shot peening.

The junction boxes comply with the Directive 2014/35/UE and are built according to European standards EN 60670-1:2005 (CEI 23-48) e EN 60670-22:2006 (CEI 23-94).







### 2 RESIDUAL RISKS

Here is a list of residual risks in the event of incorrect transport, installation, use or maintenance of the junction boxes.

- **Eletrocution** due to incorrect execution of the grounding, for example by connecting one of the cable phases to the boxes earthing device, in the event of incorrect execution of cable terminations or loss of cable insulation for damage during transport, handling or installation.  
- **Impact** due to drop of the box in case of incorrect handling or installation.  
- **Cutting / Shearing / Puncture** during manual operations required for the installation of the boxes and the realization of electrical connections within the same.   
- **Generic hazard** for transportation, installation, use or maintenance performed by unqualified and non trained or incorrectly equipped personnel. 

### 3 SAFETY INSTRUCTIONS

- Always wear PPE required for transportation, installation and use (gloves, goggles, helmets, shoes).    
- Installation and maintenance operations must be carried out only by qualified personnel.
- Installation and maintenance operation must be carried out only after the mains voltage has been disconnected from electrical apparatus or systems to which the cable glands are fitted.
- The national safety rules and accident prevention regulations and the prescriptions specified in this document must be strictly observed.
- The following instruction must be strictly followed to obtain a perfect installation.
- Use only terminations (cable glands and seals) and spare parts manufactured by KME.

#### 4 INTENDED USES

The boxes are particularly suitable for the realization of electrical systems made with MICO® mineral insulation cables, whose box entry and termination is made by waterproof glands of the serie RNG. The product, due to its aesthetic characteristics, is especially suitable for installation in civil environments or places of artistic, historical or monumental interest.

The boxes as supplied, closed, without entries and with EPDM 300/100 gasket, guarantee the watertight seal with protection degree IP 65/IP 67.

Maintaining a watertight IP 65 / IP 67 execution, following the realization of flat holes for the housing of the waterproof glands, is subordinated to the correct realization of the holes by the installer.

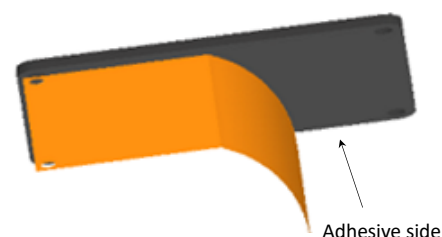
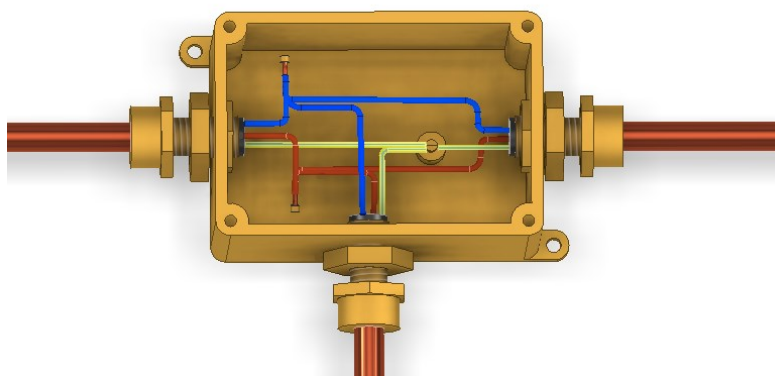
The junction boxes are not guaranteed for use with housing of passive elements with energy dissipation.

#### 5 ASSEMBLING INSTRUCTIONS

The junction boxes consist of a body, the lid and an adhesive gasket (see figure on the side) pre-glued to the lid. The boxes are supplied without holes, the execution of the holes is responsibility of the installer, the number of holes that can be performed is shown in the table below. We recommend the execution of holes of the diameter suitable for the housing of the waterproof glands, without burrs, countersinks or deformations of the hole that prevent the seal of the gland-box coupling.

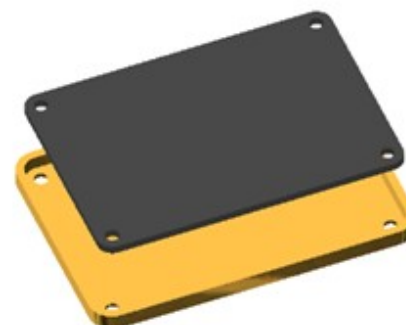
| Box Type | Gland                          | Executable holes |            |           |
|----------|--------------------------------|------------------|------------|-----------|
|          |                                | Long side        | Short side | Perimeter |
| CA1      | RNG 1/2"<br>RNG 3/4"           | 1                | 1          | 4         |
| CA2      | RNG 1/2"<br>RNG 3/4"<br>RNG 1" | 2                | 1          | 6         |

The connection of the mineral insulated cable with the junction boxes must be carried out by means of the RNG connections and the relative locknut (see figure below). The boxes are equipped with appropriate pre-drilled fins for wall mounting, which must be carried out with appropriate screws and dowels not supplied in the package.



If it is necessary to replace the gasket, proceed as follows;

- open the box paying attention to follow the safety instructions in point 3;
- remove the old gasket;
- clean the inner part of the lid from the glue residue of the old gasket;
- remove the protection of the adhesive side of the new gasket and paste it inside the lid (see picture on the side);
- close the box by screwing the four tightening screws in a uniform way.



#### 6 UNINSTALLING AND DISPOSAL

Before proceeding to final dismantling of the product, it is necessary to separate the various parts that could cause pollution, selecting the materials in order to facilitate their recycling and assigning them to differentiated disposal.