

# ELECTRICAL EQUIPMENT to be HOUSED within the ENCLOSURE PRINCIPAL REQUIREMENTS

serie  
**CCF**

## ENCLOSURES series CCF Mod. K-KU (NO Intrinsically Safe -I.S.- circuits/apparatus)

- Max Voltage: 1000 V ac/dc
- Max Current: 12÷240 A
- Minimum conductor section: 1.5 mm<sup>2</sup>
- Max Current Density:
  - 3 A/mm<sup>2</sup> for sections up to 10 mm<sup>2</sup>
  - 2 A/mm<sup>2</sup> for sections > 10 mm<sup>2</sup>
- All electrical equipment shall conform their respective IEC/CENELEC Standards concerning the characteristics and the operating mode
- The electric equipment housed within the enclosure shall be such that their dimensions allow, at any cross-section, at least 40% of free surface
- In the of equipment conceived on electronic board the distance between two parallel boards is ≥30 mm.
- Distance between any electronic component is ≥ 15 mm.
- Electrical equipment contained in the enclosure shall not be intrinsically safe, it shall not include capillaries or other non electric connections.
- In case of presence of capacitors, when the voltage goes off they must be discharged within their own circuit in less than one second.

## ENCLOSURES series CCF Mod. KI-KIU (WITH Intrinsically Safe -I.S.- circuits/apparatus)

In case of presence of intrinsically safe circuits and/or I.S. apparatus it is essential to consider the following:

Protection Mode	GAS:	Ex db [ia Ga] IIB+H <sub>2</sub> T6÷T3 Gb
	DUST:	Ex tb IIIC [ia Da] T85°C-T200°C Db IP66
Group / Category		II 2 (1) GD
Ambient Temperature		-20°C ÷ +60°C
Temperature Class		T6 or T6÷T3

### ● ELECTRICAL RATINGS

- Max Voltage: 1000 V ac/dc
- Max Current: 60 A

### ● WIRING

The internal wiring, placed in suitable ducts, shall be made directly on the barriers without interposing terminals, the relevant insulation must have a minimum thickness >0.5 mm and shall include a metallic braid to firmly grounded.

### ● MINIMUM DISTANCES

- Between two different I.S. circuits: >6 mm
- Between an I.S. circuit S.I. and Ground: >3 mm
- Between I.S. and non I.S. circuits: >50 mm

- Max Power Voltage of I.S. circuit: <250 V (with a double insulation cable);
- Presumed power supply short circuit current: <1500 A (unless otherwise specified).

### ● I.S. EQUIPMENT FASTENING

The interface barriers are installed on a metal DIN rail fixed to the bottom of the enclosure by screws and lock washer or, as alternative, on the supporting plate also fixed the bottom of the enclosure by screws and lock washer.

**NOTES:** For information on dissipated power please refer to page B37

For information on dissipated power please refer to page B36 if the enclosure is equipped with an internal thermal probe with maximum threshold equal to: maximum barrier's temperature-5°C)±5°C.