

# TECHNICAL SPECIFICATIONS OF MONO-CABLE RESISTANCES - CDLx

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# **MONO-CABLE RESISTANCES - CDLx**

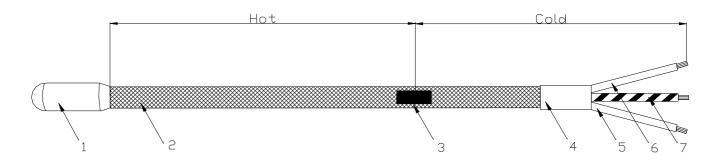
Calorflex mono-outlet heating cables CDLx are single wire electrical resistances specially designed for applications in the sectors of commercial and industrial refrigeration and air conditioning.

They are completely waterproof, extremely flexible and functional thanks to the specific characteristics of their constituent materials and their particular construction technology. The latter consists of a resistive wire made of Nickel/Chromium or Copper/Nickel or similar alloys wound on a support made with a fibre glass filament. The winding thus obtained is externally protected by a special silicone compound that guarantees a high dielectric seal and allows the cable to operate within a wide temperature range: from -60°C to +200°C. The same compound is subsequently used for the manufacture of the outer sheath, permanently enfolding the resistive heating wire and the silicone electric wire that, in this case, works exclusively as a return conductor.

The bipolar cable thus obtained can be possibly clad, by means of special braiding machines, in a multi-wire metal braiding that guarantees a high mechanical protection, a higher temperature dissipation (therefore raising the thermic exchange with the final application) and secures the earthing contact.

Moreover, Calorflex particular technology allows to manufacture resistances with differentiated powers on the heating segments, or with non heating segments distributed on the whole length of the resistance.

### STRUCTURAL SKETCH



- 1 Hermetic seal silicone rubber vulcanization
- 2 Silicone rubber insulation with (optional) multi-wire metal braiding protection
- 3 Coloured spot marking the limit between heating and cold segments
- 4 Rating plate marking (on the whole length of the wire, at intervals of about 20cm or an a special piece of sheath)
- 5 Resistive heating wire insulated with silicone rubber
- 6 Return electrical wire insulated with silicone rubber
- 7 Yellow/green Pvc wire for earthing (optional)

## **GENERAL CHARACTERISTICS**

- Input voltage 1.5÷400 Volt (at request)
- Specific power per metre from 5 to 80 Watt (according top plan)
- Dimensions and lengths according to customer's design or reference homologations
- Operating temperatures from -60°C to +200°C
- $\bullet$  General tolerance on lengths  $\pm 1\%$  or depending on the customer's specific needs

# PROVISIONS AND REFERENCE HOMOLOGATIONS

- Design, manufacture and testing in compliance with harmonized standards EN 60335
- In compliance with 2006/95/EEC DIRECTIVE
- C∈ declaration of conformity on all items

### **GENERAL TESTS AND PACKING**

All Calorflex heating cables are singularly electrically tested before being delivered to the customer using a special packing designed to guarantee the integrity and safety of the material during the handling, transport and storage.