

# **ELECTRIC RESISTANCES FOR COMPRESSORS-CCCx**

An extremely important parameter to consider in refrigeration and air conditioning systems is the correct flux of the refrigerant within the plant.

The optimization of performance and the life of compressor depend on the capability of the system to reduce the mixing of lubricant oil and liquid refrigerant to the minimum. This is not always possible, if the oil temperature is too low, the two components start to mix up and migrate within the system.

If the percentage of refrigerant diluted in oil is high, the lubricant properties of the oil are dramatically changed, and its viscosity is reduced.

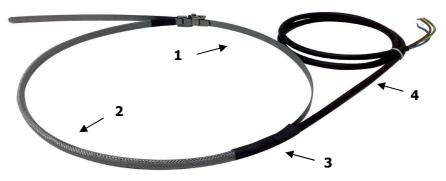
A method frequently used to contrast the solubilization of the refrigerant in oil, is that of heating the oil contained in the compressor by means of an electric resistance heating element provided with adequate power.

The oil is kept at a constant temperature of about 30/35°C, it is therefore kept at a temperature which is higher than that of the refrigerating circuit, so that the refrigerant is forced to remain within the evaporator and/or condenser.

It is advisable to start the heating element before activating the compressor, in order to allow the oil to reach the adequate temperature (usually 8/10 hours earlier).

Despite being relatively cheap and easy to use, this component plays a significant role in the correct functioning and life of hermetic and/or semi-hermetic compressors.

## STRUCTURAL SKETCH



- 1 Steel clamp with screw fastening head.
- 2 Multi-wire metal braiding external protection.
- 3 Sealing and insulating thermoshrinking sheath.
- 4 Power cable with earth connection; standard length: 1 m, or upon request, according to availability.

#### **GENERAL CHARACTERISTICS**

- Input voltage: 230 Volt standard, other options available upon request.
- Standard power, dimensions and length as indicated in the table. Other models are available upon request.

Standard models	CCCx0001	CCCx0002	CCCx0003	CCCx0004	CCCx 0005	CCCx0006	CCCx0007
Power (W)	35	40	45	55	65	75	130
Min. diameter (mm)	110	130	150	170	210	230	315
Max. diameter (mm)	180	185	290	295	330	380	380

## **PROVISIONS AND REFERENCE HOMOLOGATIONS**

- Design, manufacture and testing in compliance with harmonized standards EN 60335.
- In compliance with 2006/95 EEC DIRECTIVE.
- CE 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.