

Calorflex RCCx cartridge heaters have been specifically designed for the heating of oil in refrigerating compressors exploiting the behaviour of certain particular ceramic compounds subjected to temperature variations. In fact, the component provides a heating power which is a function of temperature, thus emitting the maximum power at the lowest temperature and reducing the power emission gradually as the temperature rises.

The optimization of performance and the life of the compressor depend on the capability of the system to reduce the mixing of lubricant oil and liquid refrigerant to the minimum. 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 this process, 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).

Standard range

Cartridge heater - type Copeland



Type of heater	RCCC0001	RCCC0002	RCCC0003
Medium power	70W	70W	100W
Voltage (V)	220/260	220/260	220/260
Total length (mm.)	68	112	125
Length of wires (mm.)	900	900	750
AISI connector	3/8" 18 NPTF		1/2" 14 NPTF
AISI tube diam. (mm.)	11	11	11

Cartridge heater - type Danfoss / Maneurop



Type of heater	RCCM0010	RCCM0011
Medium power	27W	35W
Voltage (V)	220/260	220/260
Total length (mm.)	32,5	32,5
Length of wires (mm.)	700	700
Diam. (mm.)	19,3	19,3

Cartridge heater - type Dorin



Type of heater	RCCD0020	RCCD0021
Medium power	100W	200W
Voltage (V)	220/260	220/260
Total length (mm.)	76	76
Length of wires (mm.)	1000	1000
Diam. (mm.)	12,7	12,7

Cartridge heater - type Frascold



Type of heater	RCCF0030	RCCF0031	RCCF0032
Medium power	50W	70W	150W
Voltage (V)	220/260	220/260	220/260
Total length (mm.)	78	93	220
Length of wires (mm.)	1100	1100	1100
Diam. (mm.)	9,6	9,6	9,6

Cartridge heater - type Bitzer



Type of heater	RCCB0040	RCCB0041	RCCB0042
Medium power	60W	120W	140W
Voltage (V)	220/260	220/260	220/260
Total length (mm.)	95	113	162
Length of wires (mm.)	1000	1000	1000
Diam. (mm.)	11	11	11