

#### 1 - GENERALITIES

To obtain reliable refrigeration system test results, it is essential to pay special attention when fixing the thermocouples to the measuring point.

This information bulletin serves as a way of transmitting adequate procedures for conducting a good fixation.

#### 2 - STEP BY STEP PROCEDURE

- a) Welding of the two thermocouple cables must be performed very carefully, as the result obtained through measuring will refer to the last point of contact between the cables, as shown in figure 1. This point must be in contact with the surface on which we wish to measure the temperature, if not, the environmental temperature will interfere with.

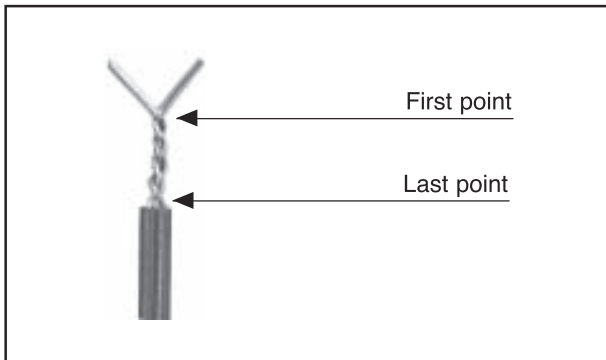


Fig. 1

- b) After joining the cables, they should be coated in a fine layer of tin to improve contact with the surface (fig. 2).



Fig. 2

- c) For facilitating thermocouple welding to the copper pipe, after cleaning and sanding the surface, apply a fine tin deposit, in order to fix the thermocouple according to figures 3a and 3b in the following step.



Fig. 3a

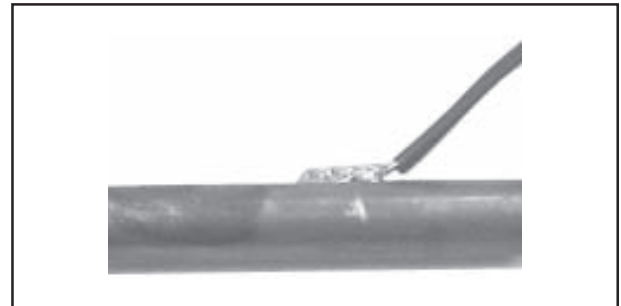


Fig. 3b

- d) The thermocouple must be adjusted to avoid displacement. There is a greater deposit of tin found on the end of it, giving it the appearance of a disc (fig. 4).



Fig. 4

- e) If the thermocouples are exposed to air flow, protection is recommended by using insulating materials for reducing or eliminating the influence of air over the measuring. Normally, the same tools as those used in the suction line are used (fig. 5).

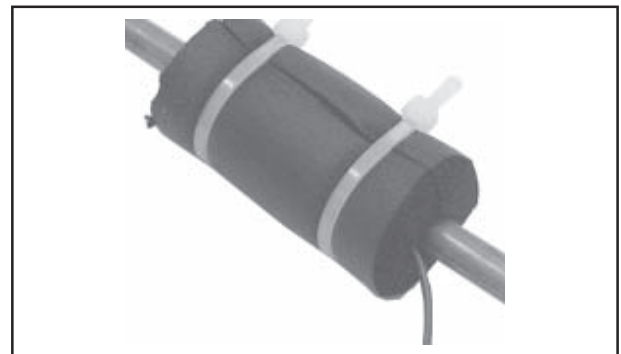


Fig. 5

- f) In some cases, the welding over the evaporating surface can cause damage or be difficult to perform in case the parent material is aluminum. To avoid this, the thermocouples can be fixed over the surface with an aluminum adhesive tape (fig. 6). Make sure the surface is clean so as to allow perfect tape adhesion.

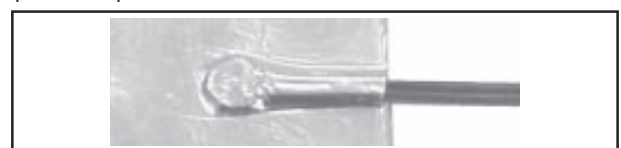


Fig. 6