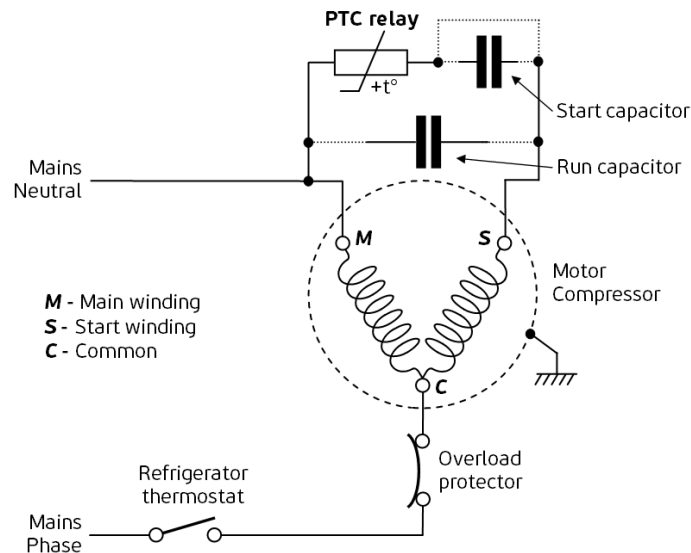


The **PTC relay** is the device responsible for switch on starting winding of the compressor motor, for a short time, providing the necessary torque to make the motor to go out of inertia to the proper rotation for refrigerator operation.



The PTC relay is composed by a PTC (Positive Temperature Coefficient) pill, connection terminals and plastic housing.

The PTC pill is a semiconductor ceramic component and due to the physical concepts involved, it is natural that while the compressor is running it remains warm.

In order to guarantee a safe and reliable application of the PTC relay some cares must be taken:

- The component can't be applied on oxidant and/or corrosive environments so elements such as Cl₂, H₂S, SO_x, NO_x, etc. must be kept far from it.
- It is not allowed the contact of PTC relay with any kind of oil
- Environments with high humidity shall be avoided
- Aggressive chemical elements and solvents can't be in touch with PTC relay housing.
- Halogenated materials (with fluorine, chlorine, bromine, iodine or astatine in the composition) can't be applied inside the fence cover near or in contact with PTC relay.
 - The maximum allowed temperature in the PTC relay housing is 200°C. Care must be taken during refrigerator pipes brazing in order to avoid contact of welding gun flame with PTC relay.
 - The protective cover (electrical components protection cover) must be correctly assembled over compressor fence to avoid the contact of PTC relay with dust and water.
 - The maximum allowed voltage over PTC relay is 180V for 120V compressors and 350V for 240V compressors.