

## Protection Devices & Main Options



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Protection Devices	Main Options
<p>In order to protect the winding of three-phase induction motor against thermal overloads, resulting for example from overloading or operation with only two phases, one of the following devices can be provided :</p> <p><b>1)- Bimetallic type device:</b> It consists of 2 motor protectors connected in series. The contact is normally closed ; the disc opens when the windings temperature reaches limits dangerous for the insulation system. On request normally open device are available .</p> <p><b>2)- PTC temperature sensor</b> (thermistors) : It consists of 3 sensors connected in series embedded in stator windings. Once reached operating temperature, This device quickly changes the resistance; it must be connected to a suitable releasing device.</p> <p><b>3)- PT 100 thermometric resistors</b> (From size 132 and above). The resistance value of this device varies according to the windings temperature. They are particularly suitable for a continuous survey of the windings temperature. For a good survey at least two sets of PT 100 are requested; they must be connected to their proper monitoring equipment. PTC and PT 100 also offer reliable protection for operating modes other than continuous operation, e.g. short-time operation, switching operation, longtime start-up as well as for reduced cooling air flow rates and high ambient temperatures.</p>	<p>Motor for operation with frequency converter are always supplied with PTC thermistor temperature detectors. Above devices have their proper terminal block located inside main box .</p> <ul style="list-style-type: none"> <li>•Non-standard voltages and frequencies.</li> <li>•Special flanges and shafts.</li> <li>•Double ended shafts.</li> <li>•Motors for tropical climates or for low temperature.</li> <li>•Terminal box with special cable entries.</li> <li>•Motors insulated to class H.</li> <li>•Motors with bimetallic detector, thermistor PTC or thermistor PT100.</li> <li>•Motors with heaters.</li> <li>•Motors suitable for frequency inverter drive.</li> <li>•Motors with forced ventilation.</li> <li>•Motors with special electrical design.</li> <li>•Motors with rain cap or sun shield.</li> </ul>

  
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