

Cooling methods for motors

Classification of the cooling methods (IC code) acc. to DIN EN 60034-6

<p>IC 01</p>		<p>Enclosure IP 21- IP 23 (type G...)</p> <p><u>Self-ventilated with integral fan cooling (DP)</u> Cooling air is blown through the motor by a fan mounted on the shaft.</p>
<p>IC 06</p>		<p>Enclosure IP 21- IP 23 (type G...I)</p> <p><u>Separate ventilation with radial fitted fan unit (FV)</u> Cooling air is blown through the motor by a separately excited fan motor. The inlet side may be equipped with an air filter.</p>
<p>IC 17</p>		<p>Enclosure IP 21- IP 23 (type G..)</p> <p><u>Single pipe ventilated (FV)</u> Cooling air is blown across the motor through the pipe connection with a separate customer provided external blower fan and discharges on the other side to open space.</p>
<p>IC 410</p>		<p>Enclosure IP 44 - IP 55 (type G..Z)</p> <p><u>Totally-enclosed nonventilated (TENV)</u> Cooling without using a fan, only by natural ventilation and radiation on the totally enclosed motor surface.</p>
<p>IC 411</p>		<p>Enclosure IP 44 - IP 55 (type G..ZE)</p> <p><u>Totally-enclosed fan-cooled (TEFC)</u> Cooling air is blown over the totally enclosed motor surface by a fan mounted on the shaft.</p>
<p>IC 416</p>		<p>Enclosure IP 44 - IP 55 (type G..ZO)</p> <p><u>External surface cooling (TEFV)</u> Cooling air is blown over the totally enclosed motor surface by an separately excited fan motor.</p>
<p>IC 37</p>		<p>Enclosure IP 44 - IP 55 (type G..Z)</p> <p><u>Double pipe ventilated (TEPV)</u> Cooling air is blown across the motor through a pipe connecting by means of a separate customer provided external blower fan and discharges on the other side's pipe connecting.</p>