

**Atmospheric protection index (W) :** A machine is said to be weather protected when its construction reduces the penetration of rain, snow and airborne particles to a value compatible with the correct running of the machine. This degree of protection is shown by the letter W inserted between IP and the index numbers. The conditions and severity of the tests must be subjected to a specific agreement between the manufacturer and the end user.

#### **Anti-Condensation Heaters :**

Severe Climatic conditions i.e. below 20<sup>0</sup> C, Relative Humidity greater than 95 % etc. may require to heat the windings before use to maintain the average temperature of the motor. This enables trouble free starting and eliminates problems caused by condensation and subsequently loss of insulation.

The heating of the winding can be done either by providing the Anti-Condensation heaters or by directly heating the stator by injecting the direct current into two of the phase wires in series from a D.C. Voltage source.

Anti-Condensation heaters are provided only 112 frame and above. The details of the power requirements are given below.

FRAME	NUMBER & POWER P(W)
112	1 X 20 Watts
132	1 X 20 Watts
160	1 X 40 Watts
180	2 X 40 Watts
200	2 X 40 Watts
225	2 X 40 Watts
250	2 X 40 Watts
280	2 X 65 Watts
315	2 X 65 Watts

Note : The anti-condensation heaters need 240 V , 50 Hz, Single phase supply. However, heaters suitable for 110 V supply can be provided on request. The heaters must be switched off while the motor is in operation.