W. Uniform motor running at all speeds.

X. Power factor close to unity regardless of the speed of the motor.

Y. High overall system efficiency.

Z. No increase of noise in the motor.

AA. Prevents nuisance tripping due to failure of supply for a short duration.

NOTE:- For motors above 111.9 kW, ADDC approval should be obtained and the Contractor should provide relevant diagrams, operation philosophy, protection details, starting method, voltage drop calculation etc.

1.3.15.4 Starter Compartment

A. Each starter shall be housed in a separate compartment equipped with the following:

a. 1 No. Triple pole ACB/MCCB externally operated through door mounted handle interlocked with the cubicle door, with built in shunt trip coil

b. 1 No. Thermal Overload Relay or Digital Electronics Motor Protection Relay (EMPR) to provide protection of motors against under voltage, over voltage, undercurrent, over current, phase sequence, phase imbalance, phase loss, earth leakage etc.

c. If thermal relay is provided, phase protection relay and earth leakage protection shall be provided.

d. Digital electronics motor protection relays (EMR) shall be provided to a motor having a capacity more than 3.73 kW.

e. 1 No. Set of AC3 duty contactors as required according to starter type and configuration or otherwise as per drawings.

f. 1 No. Set of auxiliary relays required for providing the necessary indication and control logic sequence.

g. 1 No. Set of timers required to providing the necessary delayed action to meet specific functional requirements.

h. 1 No. 230/110V 50 Hz double wound single phase centre tap transformer with earth screen of suitable capacity to supply all control circuit and pilot devices requirements.

i. 1 No current transducer.