

SCHEDULE OF SPECIFICATION & TECHNICAL DETAILS OF 60 H.P. DIRECT-ON-LINE STARTER

Direct-ON –Line starter for 60 H.P. 3 phase motor in IP-55 enclosure made from 14SWG sheet steel cubical in design, dust & vermin proof suitable for underground mines use. The starter shall be suitable for 415 volts, 3 phase, 3 wire 50 Hz, A.C. Supply, the bus-bar of adequate rating (25mm x 6mm) made of E.C. grade copper with DMC support. All bus-bars shall be sleeved or taped for high insulation purpose.

The general dimensions shall be width: 500mm x Depth: 350mm x Length: 850mm. The starter shall be floor mounted type.

List of Components:

1)	L&T / Schneider make 200 Amps MCCB	-	1 No.
2)	110 Amps, triple pole AB contactor with 2 NO + 2 NC Aux. contacts, 415 volts type ML-6, L&T make.	-	1 No.
3)	Thermal overload relay, (63-80) Amps Schneider make Type – LRE363/ Siemens, Type:3UAZ58-Z2.	-	1 No.
4)	Core balance current transformer suitable for earth Leakage CBCT dia- 100mm, Prok dv's - make	-	1 No.
5)	Earth leakage relay 415 volts, 50Hz A.C. with Matching CBCT Range – (0.1 A to 0.75 mA) Prok dv's make – (Flush mounting solid state type)	-	1 No.
6)	Ammeter (0-100) Amps with extended scat to 500 Amps, CT ratio 100/5A 96 Sq.mm size Flush type-AE/MECO make	-	1 No.
7)	Ammeter selector switch R,Y,B, OFF Kaycee make	-	1 No.
8)	Measuring CT's – 100/5A Ratio, 5VA burden	-	3 Nos.
9)	Terminal Block – 4 ways, 250 Amps DMC moulded	-	2 Nos.
10)	HRC Control Fuse with Base, 10 Amps rating having 2 Amps fuse link, EE make.	-	3 Nos.
11)	Start/Stop Push Button, 6 Amps with Element – L&T/EASBEE make, (1 NO + 1 NC).	-	2 Nos.
12)	ON/OFF LED Indicating Lamp with Holder 415V A.C Easbee / C & S make.	-	2 Nos.
13)	Earthing Bolts of suitable size.	-	2 Nos.

Wiring :

All power supply system shall be of copper Bus-Bar, E.C. grade – size – 25mm x 6mm. All control wiring shall be of 2.5 Sq.mm PVC Copper Cable 1.1 KV grade and properly dressing with flexible sleeves. All wires shall be identified at both ends with ferrules in accordance with wiring circuit.

Painting :

One coat of primer and 2 coats of stove enameled in light grey finish.

Gasket :

Synthetic soft Rubber Gasket without discontinuity shall be provided

Doors :

Front doors shall be hinged type with locking arrangement. Door interlocking with MCCB shall be provided.

Danger Board :

Suitable Danger Board, 440 volts in Hindi and English shall be provided.