

TECHNICAL SPECIFICATION FOR THE LT Double feeder Distribution Boxes (SMC)

1. SCOPE:-

The specification covers the design, manufacture, testing at manufacturer's works, supply and delivery at destination stores of LT Distribution Boxes suitable for outdoor applications made up of Sheet Moulded Compound (SMC) with flame retardant properties.

It is not the intent to specify completely herein all the details of the design and construction of material. However the material shall conform in all respects to high standards of engineering, design and workmanship and shall be capable of performing in continuous commercial operation, in a manner acceptable to the purchaser, who will interpret the meanings of drawings and specification and shall have the power to reject any work or material which, in his judgment is not in accordance therewith. The offered material shall be complete with all components necessary for their effective and trouble free operation. Such, components shall be deemed to be within the scope of Bidder's supply irrespective of whether those are specifically brought out in this specification and/or the commercial order or not.

2. LT DISTRIBUTION BOXES (SMC):-

The LT Distribution box shall be weather proof made out of sheet moulded compound (SMC) with flame retardant properties. It shall be capable of withstanding temperatures (150°C) of boiling water for 5 minutes continuously without distortion or softening.

The dimensions of the LT Distribution box shall be (minimum) 900 mm (L) X 275 mm (B) X 475 mm (H) (as per drawings-annexure) made from sheet moulding compound material (Fiber glass reinforced polyester) to IS-13410:1992 – Thickness of box shall be minimum 2 mm. Two lowers shall be provided for ventilation and provision of 4 nos. 38 mm dia holes on either side for take off arrangement for 2 nos. out going feeder. All the holes are to be provided with suitable PVC glands.

Doors are to be provided for the box with concealed hinges and 1 no. pad lock and 4 nos. magnets lock as locking arrangements. 2 nos. SMC mounting plate, shall be fitted inside the box with GI Bolts & Nuts etc. 12 nos. holes of dia 25 mm shall be provided on doors for ventilation.

6 nos. 300A, 500V knife type porcelain fuse units of best quality with isolating mechanism of porcelain size 215 mm length & 70 mm width with extension strip of 32 mm X 5 mm copper along with 2 nos. fixing bolts (3/8" X 2" & nuts with washers). All copper parts made out of 32 x 5 mm copper strip with tin coated and all screws and bolts and nuts are GI

2 Nos. MS Flat, 200x50x6 mm pieces in full length shall be mounted at the back of the Box and 2 Nos. MS Flat from inside with larger holes for better grip to facilitate fixing of the whole box to the D.P. Structure

All iron parts of the box should be painted with two coats of red oxide paint of best quality. The box shall be with good workmanship.

Busbars to be positioned with bottom one turned towards lower, middle one straight, top one turned towards upper to maintain clearances of in coming cables.

3. GUARANTEED TECHNICAL PARTICULARS.:

Technical particulars shall be guaranteed and a statement of guaranteed technical particulars shall be furnished in the format along with the bid.

4. DRAWINGS & LEAFLETS:

Before proceeding with the manufacture of the material, the drawings shall be got approved by this office. Three sets of drawings showing details of your offer should be furnished along with the tender.

5. DEVIATION FROM SPECIFICATION:

Usually no deviation from specification will be considered. If the tenderer wishes to deviate from this specification in any respect he shall explain fully the reason thereof for the departure otherwise the requirements of this specification will be deemed to be accepted in every respect.

6. TESTS AND TEST CERTIFICATES:

The tests shall be carried out as per relevant IS for both SMC box and Fuse Unit before dispatch and the test certificates shall be furnished for approval.

7. GUARANTEE:

The distribution box should be guaranteed for satisfactory operation for a period of 5 years from the date of receipt at destination stores by the consignee in good condition. During the guarantee period if the distribution box while in its normal operation is found defective, it shall be replaced by the supplier with a new distribution box free of cost within 15 days of its intimation. If the distribution box is not replaced within 30 days of intimation the supplier should note that the guarantee period will be extended to that extent by the number of days delayed for replacement with new distribution box. If the bidder does not replace within 60 days the cost of the distribution box will be recovered from the existing bills / future bills/ bank guarantee available with APEPDCL. For the purpose of ensuring five years guarantee the manufacturer may provide his seal to the distribution box at manufacturer's premises and dispatch in sealed condition after inspection by the APEPDCL's representatives.

8. INSPECTION:

The inspection may be carried out by the purchaser at any stage of manufacture. The manufacturer shall grant free access to the purchaser's representative at a reasonable time when the work is in progress. Inspection and acceptance of any equipment under this specification by the purchaser shall not relieve the supplier of his obligation of furnishing the equipment in accordance with the specification and shall not prevent subsequent rejection if the equipment is found to be defective.

All acceptance tests and inspection shall be made at the place of manufacturer unless otherwise especially agreed upon by the Bidder and purchaser at the time of purchase. The bidder shall afford the inspector representing the purchaser all reasonable facilities without charge, to satisfy him that the equipment is being furnished in accordance with this specification.

The supplier shall keep the purchaser informed in advance, about the manufacturing programme so that arrangements can be made for inspection.

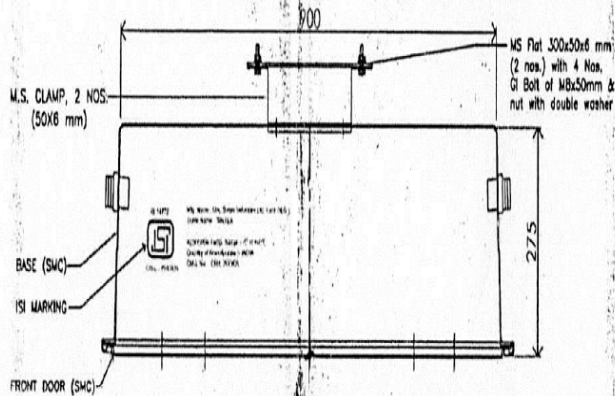
The purchaser reserves the right to insist for witnessing the acceptance/routine testing of the bought out items. The supplier shall give 15 days for local supply / 30 days in case of foreign supply advance intimation to enable the purchaser to depute his representative for witnessing the acceptance and routine tests.

9. SAMPLES:

One number non returnable distribution box as per specification has to be supplied along with the tender.

10. MARKING:

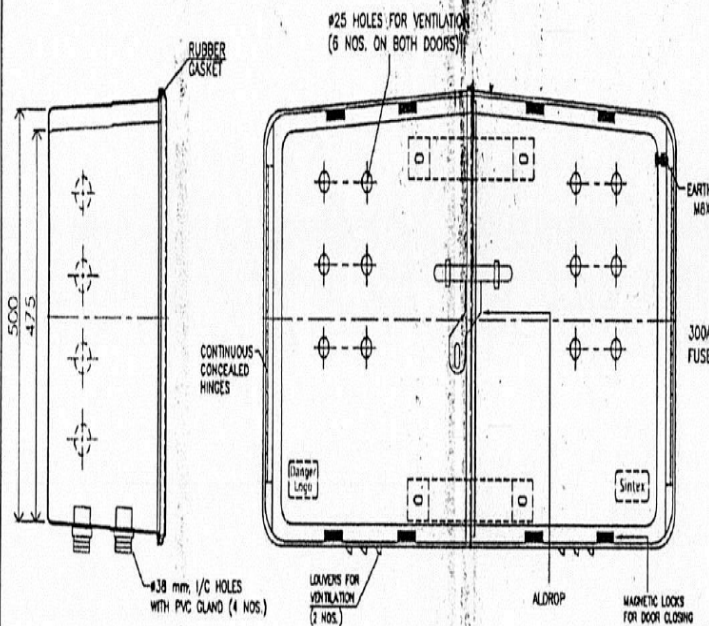
- a) The Name plate shall be adequate weather and corrosion proof and should be fitted in a position where it can be visible in normal service and installation.
- b) The name plate shall be marked with the following
 - a. Name of manufacturer
 - b. Name of the product
 - c. EPDCL Purchase Order Number & Date
 - d. Manufacturers month & Year
 - e. EPDCL logo shall be embossed on plate.
 - f. ISI Mark



TOP VIEW

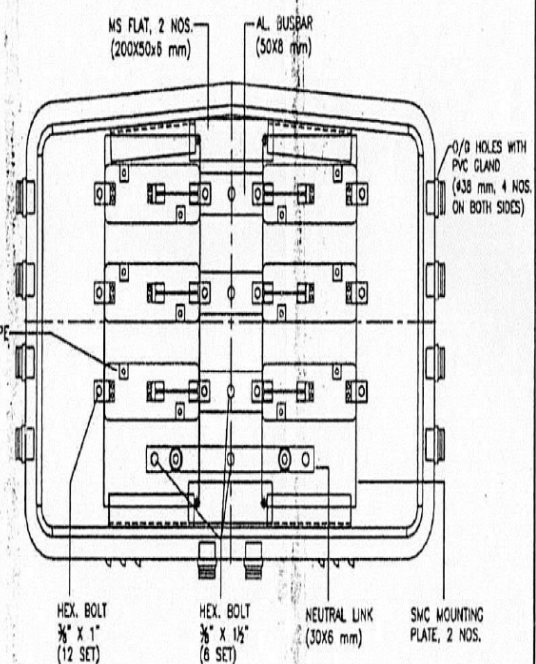
NOTES :-

- (1) MADE OUT OF (THERMOSETTING PLASTIC) SHEET MOULDING COMPOUND BY THE PROCESS OF HOT PRESS COMPRESSION MOULDING, CONFIRMING TO IS : 13410.
- (2) SMC BASE OR DOOR SHALL NOT SOFTEN OR BEND ON HEATING.
- (3) DOOR FITTED TO BASE BY HINGES.
- (4) COLOUR :- GREY/OFF WHITE
- (5) DIMENSIONS (INSIDE) :- 475 X 900 X 275 mm, Thickness = 2.5 mm

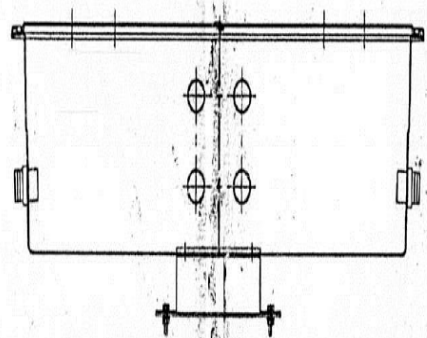


SIDE VIEW


FRONT VIEW



DOOR OPEN VIEW



BOTTOM VIEW

TITLE : SMC LT DISTRIBUTION BOX (HORIZONTAL TYPE, GSD8 - 9047)				MATERIAL :			
				S.A. (M ²) :			
				WEIGHT (Kg.) :			
DRAWING NO.	CLASS. NO.	SCALE	DRAWN	T.N.L.	09-10-2014		
2014/SMC LT DB/GSD8-9047	E/11/1	-	CHECKED	S.C.U.		REVSD	DATE
			APPROVED			smc/ml/cust/ icmtr-2822	
UNLESS AND OTHERWISE SPECIFIED ALL DIMENSION		TOLERANCE					
<div></div>							
FROM SINTEX INDUSTRIES LTD. KALOL (N.G.)							

TITLE :- 'A' TYPE (SPECIAL) SMC LT DISTRIBUTION BOX (475X900X275 mm) TOL ±2%

FOR DOUBLE FEEDER (HORIZONTAL)

Sl.No.	Description	Particulars
1	Material	
2	Grade of material	
3	Thickness of base / door (Min)	
4	Properties of material of construction of distribution box	
a	Heat deflection temperature (Ref: std.IS: 13411)	
b	Exposure to flame (Ref: std.IS: 4249)	
c	Melting property (Ref: std.IS: 13360)	
5	Clear inside dimensions of meter box	
a	Height	
b	Width	
c	Depth	
6	Holes for ventilation	
7	Earthing arrangements	
a	No. of earth bolts	
b	Material of earthing bolts	
c	Size of earth bolt	
8	Facility for lock	
9	Colour of SMC box	
10	Suitable for out door installation	
11	Hinges	
12	Pole mounting arrangement	
13	Cable entry exit arrangements	
a	Incoming	
b	Outgoing	
14	Knif type (ISI marked)	
15	Al. bus bar for phase link	
16	Al. bus bar for neutral link	
17	Fuse mounting arrangement	