

USED ON:
36kV/PCVCB

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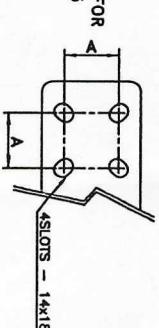
33 kV M&S Feeder

DETAIL OF 'Y'



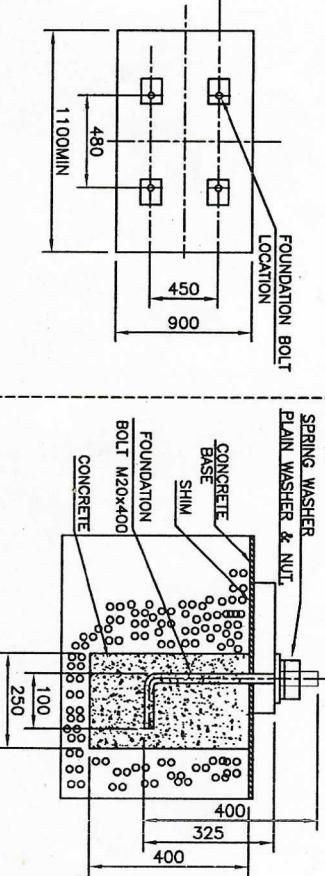
NOTES:-

- 1) TOTAL WEIGHT :- 700KG.(APPROX.)
- 2) PAINT SHADE :- LIGHT GREY 631 OF IS-5, EXTERIOR & INTERIOR.
- 3) TOTAL CREEPAGE DISTANCE :- 25mm/kV.(FOR BUSHING)
- 4) * :- TO INCREASE THE LOWEST LIVE PART TO GROUND CLEARANCE, CHANGE THE PLINTH HEIGHT, IF REQUIRED.
- 5) OPERATION COUNTER, MECHANICAL ON-OFF INDICATOR, SPRING CHARGING HANDLE AND WIPE GAUGE ARE PROVIDED.
- 6) 2.5 Sq.mm PVC WIRE WILL BE USED FOR CONTROL CKT.(CLOSING &- TRIPPING COIL) AND 1.5 Sq.mm FOR OTHER CKT.
- 7) SUPPORTING STRUCTURE FOR BREAKER SHALL BE HOT DIP GALVANISED.
- 8) 10% OF TOTAL QTY. SHALL BE OFFERED FOR INSPECTION.
- 9) CONTROL CABLE GLANDS WILL BE SUPPLIED LOOSE.
- 10) TABLE STICKER SHOWING SCHEMATIC DIAGRAM AS PER PV2292SC WILL BE PROVIDED INSIDE HOUSING.
- 11) RIGID-TWIN PANTHER/MOOSE TERM. CONNECTORS SHALL BE SUPPLIED.
- 12) MECHANICAL(CASTLE LOCK & KEY)INTERLOCK SHALL BE PROVIDED.
- 13) UNDRILLED GLAND PLATE SHALL BE PROVIDED.



GL - GROUND LEVEL
CL - CONCRETE LEVEL

SIDE VIEW.



BREAKER SERIAL Nos. : 35475VP TO 36578VP (QTY : 1104 Nos.)
RATING:-

RATED VOLTAGE :- 36 KV.

RATED CURRENT :- 1250 Amp

BASIC INSULATION :- 70 KV r.m.s./ 170 kVpk

BREAKER CAPACITY :- 25 KA. rms. FOR 1 SEC.

SYSTEM TOLERANCES ON ALL DIMN: +/-10%

L.O.I. NO. : 262-ESDC-(IV)(IV)/ESD-290/CGL DATED :- 10.06.10

THIRD ANGLE PROJECTION

GENERAL ARRANGEMENT

FOR

36kV-OUTDOOR PCVCB

CROMPTON GREAVES LTD.

SZ-MV SWITCHGEAR DIVN.

A-3, MIDC AMBAD, NASHIK-10.

REVSSED AS PER COMMENTS.

SPS APPD. PWD 05.06.10

SHEET NO. 1 OF 5

DATE 14.07.10

ALL DIMENSIONS IN MM SCALE: NTS DRG. NO. PV 2292 GB REV. 1

9	8	7	6	5	NO ZN
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	B-SHEET NO.	PB2292	REV '2'		
	W.O.NO.:	PV2292			
	CUSTOMER :	THE SUPERINTENDING ENGINEER, U.P. P. C. L.			
	BOARD DESCRIPTION :	33kV O/D PCVCB - QTY. 1104 Nos.			
	L.O.I. No. :	262-ESDC-II(Y)/(T)/ESD-290/CGL DATED :- 10.06.10			
	DATE	06.07.10			
	PREPARED BY :	SPS			
	APPROVED BY :	PVD			
	## CONTROL VOLTAGE BREAK-UP AWAITED.				
REV"1"	REVISED AS PER COMMENTS.	SPS	14.07.10		
REV 2	CONTROL VOLTAGE FOR 3RD LOT ADDED	ARP	05.08.10		
IT	DESCRIPTION	CODE NO.	O/D VCB	TOTAL	
12	CONTACTOR FOR CASTLOCK SWITCH MAKE: SCHNEIDER/ SIEMENS/EQ. 2 NO + 2NC AUX. VOLTAGE - 110V AUX. VOLTAGE - 110V /220V DC - ##		1	600	
			1	504##	
13	TERMINAL CONNECTORS MAKE : EXALT/RAMELEX/EQ. TYPE : RIGID CLAMP TYPE SUITABLE FOR TWIN PANTHER.	190241064	6	3600	
	SUITABLE FOR TWIN PANTHER /MOOSE CONDUCTOR WITH 90MM CENTER SPACING	(QTY BRAKE UP AWAITED)	6	3024 \$\$	
	\$\$ - EXACT QTY. BREAK UP AWAITED FROM CUSTOMER.				
14	CABLE GLANDS Type : single compression				
	1)For 2Cx2.5Sq.mm cable (1619+1615)	190232826	4	4416	
	2)For 4Cx2.5Sq.mm cable (1619+1615)	190232826	5	5520	
	3)For 6Cx2.5Sq.mm cable (2125+2118)	190232825	3	3312	
	4)For 10Cx2.5Sq.mm cable (2925+2921)	190232827	1	1104	
15	CASTLE LOCK a)TYPE-ILLS OR EQ. (WITH L/S 1NO+1N/C)-FOR BREAKER b)TYPE-ILB OR EQ.- FOR ISOLATOR c) KEYS FOR ABOVE LOCKS(ILLS+ILB) ** SHALL BE SUPPLIED LOOSE				
			1	1104	
			2**	2208**	
			1	1104	
	SPARES				
1	CLOSING COIL CONTROL VOLTAGE :- 110V DC	190232812ASLY	1	600	
	CONTROL VOLTAGE :- ##110V DC/ 220V DC		##1	##504	
2	TRIPPING COIL CONTROL VOLTAGE :- 110V DC	190232812ASLY	1	600	
	CONTROL VOLTAGE :- ##110V DC/ 220V DC		##1	##504	

RATING LABLE (STICKER) DETAILS.

PROPERTY OF U.P.P.T.C.L.		CIRCUIT BREAKER TYPE 36PV25A	
RATING TO IEC: 62271-100		SR.NO. ##	
VOLTAGE	36000 V	BREAKING CAPACITY	25 KA
CURRENT	1250 AMP	MAKING CAPACITY	62.5 KA,PK
FREQUENCY	50 Hz	SHORT TIME CURRENT	25 KA FOR 1 SEC
NO OF POLES	3	DC. COMPONENT	50% BIL
SHUNT TRIP	** VDC	MADE IN INDIA	CLOSING COIL ** VDC

WEIGHT : 700Kgs.-APPROX.

L.O.I. NO. : 262-ESDC-II(Y)/(T)/ESD-290/CGL DATED :- 10.06.10

FOR SR. NOS. REFER SHEET NO. 1

◎-MONTH&YEAR OF MANUFACTURING.

**-CONTROL VOLTAGE BRAKE UP AWAITED.

A	B	C	D	E																																											
<table border="1"> <tr> <td colspan="3">L.O.I. NO. : 262-ESDC-II(Y)/(T)/ESD-290/CGL DATED :- 10.06.10</td> <td colspan="2"></td> </tr> <tr> <td colspan="2">CUSTOMER : THE SUPERINTENDING ENGINEER, U.P. POWER CORPORATION LTD.</td> <td colspan="3">THIRD ANGLE PROJECTION G.A.FOR 36KV-OUTDOOR PCVCB</td> </tr> <tr> <td>W.O.No. : PV2292</td> <td colspan="4">RATING PLATE DETAILS</td> </tr> <tr> <td>SIGN</td> <td>NAME</td> <td>DATE</td> <td colspan="2" rowspan="2">  CROMPTON GREAVES LTD. 32-MV SWITCHGEAR DIVN. SWITCHGEAR COMPLEX, A-3, MIDC AMBUD, NASHIK-10. </td> </tr> <tr> <td>DRN.</td> <td>SPS</td> <td>06.07.09</td> </tr> <tr> <td>REVISED AS PER</td> <td>SPS</td> <td>APPD.</td> <td>PVD</td> <td>06.07.09</td> </tr> <tr> <td>COMMENTS.</td> <td colspan="4">14.07.10 SHEET NO. 2 OF 5</td> </tr> <tr> <td>9</td> <td>8</td> <td>7</td> <td>6</td> <td>5</td> </tr> <tr> <td>No. in</td> <td>REVISION</td> <td>DATE</td> <td colspan="2">TOLERANCE ON DIMENSIONS IN mm SCALE:NTS DRG. NO. PV 2292 GB REV.1</td> </tr> </table>					L.O.I. NO. : 262-ESDC-II(Y)/(T)/ESD-290/CGL DATED :- 10.06.10					CUSTOMER : THE SUPERINTENDING ENGINEER, U.P. POWER CORPORATION LTD.		THIRD ANGLE PROJECTION G.A.FOR 36KV-OUTDOOR PCVCB			W.O.No. : PV2292	RATING PLATE DETAILS				SIGN	NAME	DATE	 CROMPTON GREAVES LTD. 32-MV SWITCHGEAR DIVN. SWITCHGEAR COMPLEX, A-3, MIDC AMBUD, NASHIK-10.		DRN.	SPS	06.07.09	REVISED AS PER	SPS	APPD.	PVD	06.07.09	COMMENTS.	14.07.10 SHEET NO. 2 OF 5				9	8	7	6	5	No. in	REVISION	DATE	TOLERANCE ON DIMENSIONS IN mm SCALE:NTS DRG. NO. PV 2292 GB REV.1	
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USED ON:
35KV POCVB

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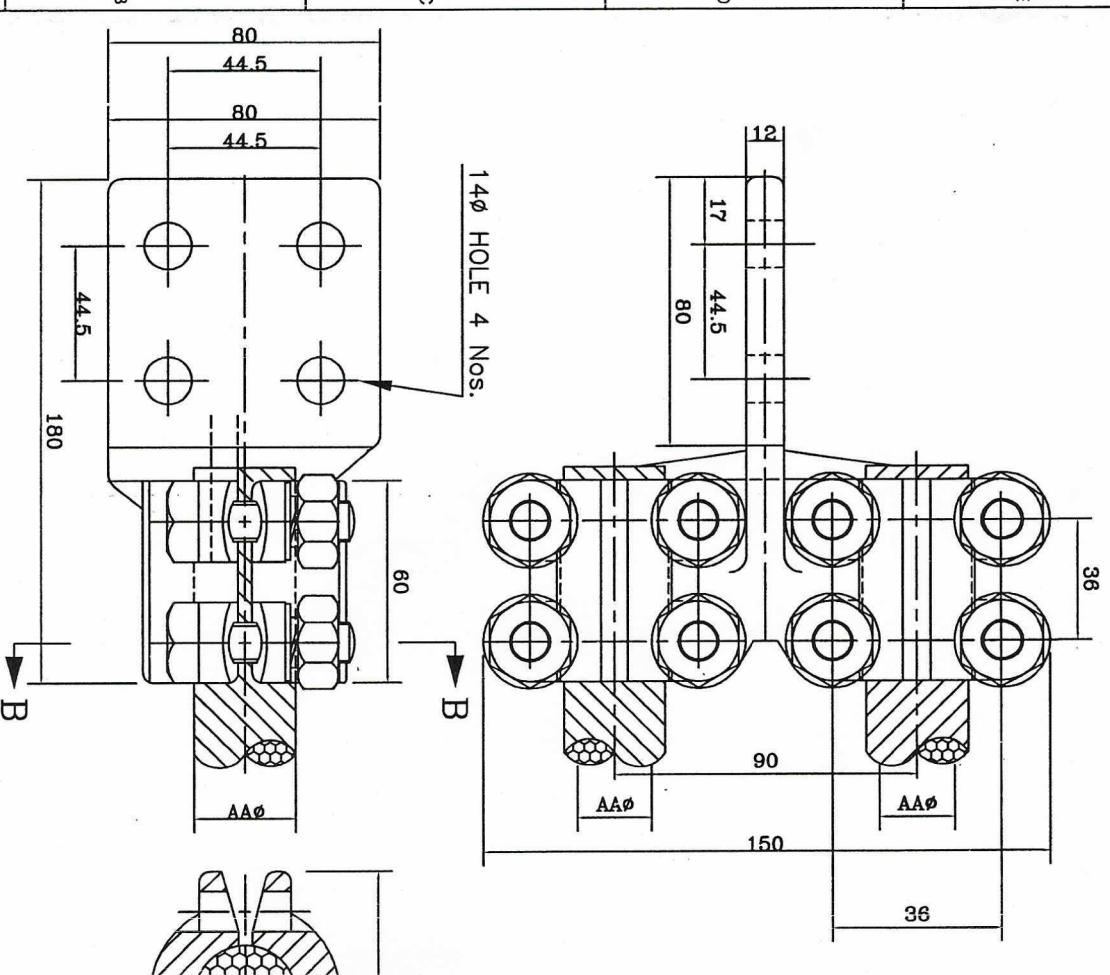
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NOTES:-

- 1) REFERENCE IS 5561-1970
- 2) ALL NUTS,BOLTS,PLAIN WASHERS WILL BE M.S. HOT DIP GALVANISED. SPRING WASHERS WILL BE ELECTRO GALVANISED.
- 3) BOLT TIGHTENING TORQUE FOR M10-35Nm & M12-48Nm.
- 4) MIN. THK. OF ANY CURRENT CARRYING PART WILL NOT BE LESS THAN 10MM.
- 5) CONTINUOUS CURRENT RATING - 1250 Amps.
- 6) TEMPERATURE RISE AS PER IS.
- 7) ALL SHARP CORNERS WILL BE ROUNDED OFF.
- 8) NOMINAL SYSTEM VOLTAGE-35KV
- 9) THE SHAPE IS ONLY REPRESENTATIVE IT MAY CHANGE FROM MAKE TO MAKE.
- 10) TERMINAL CONNECTOR'S QTY BRAKE UP FOR PANTHER/MOOSE SHALL BE AS PER CUSTOMER'S REQUIREMENTS.
- 11) EQUIPMENT - CIRCUIT BREAKER
- 12) SHORT TIME CURRENT RATING - 25 KA rms- 1 sec.

REFER NOTE NO.10 → → →

PANTHER	21.00
MOOSE	31.77
CONDUCTOR AA Ø	



SECTION B - B

TOLERANCE ON ALL DIMENSIONS +10%

LO. NO. : 202-ESDC-(107)(1)/ESD-200/VGL DATED :- 10.06.10

CUSTOMER : THIRD ANGLE PROJECTION

THE SUPERINTENDING ENGINEER,
U.P. POWER CORPORATION LTD.

WD NO. : PV2292

SIGN NAME DATE
PANTHER & MOOSE CONDUCTOR.

REVISSED AS PER
COMMENTS:

SPS APPD. PVD. 05.06.10

14.07.10 SHEET NO. 3 OF 5

DATE

ALL DIMENSIONS IN mm

SCALE: NTS DRG. NO. PV 2292 GB

REV.1

No Zn



CROMPTON GREAVES LTD.

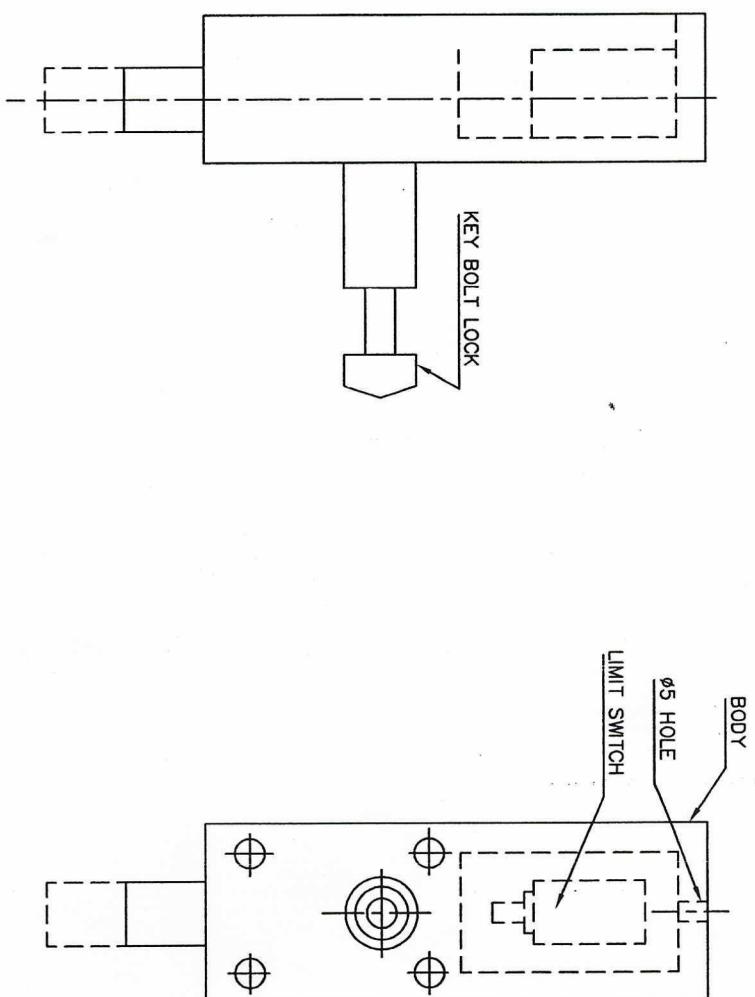
S2-MV SWITCHGEAR DIVN.

SWITCHGEAR COMPLEX.

A-3, MIDC AMBAD, NASHIK-10.

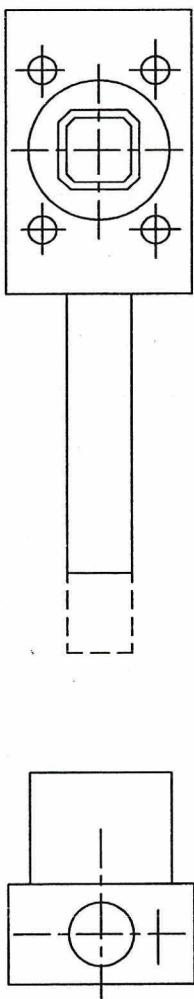
USED ON: 35kV PCVCB

- 1) LOCATION-1
AT CLOSING
MECHANISM
OF PCVCB



CASTEL LOCK TYPE : ILB OR EQ.
ANGLE OF ROTATION : 90 Deg.
DIRECTION OF ROTATION : CLOCKWISE
TRAVEL OF BOLT : 18mm±2mm

- 2) LOCATION-2
AT ASSOCIATED
ISOLATOR



NOTE : ILLS OR EQ.(1no.)+ILB OR EQ.(2nos.)+COMMON KEY(1no.)

L.O.I. NO. : 262-ESDC-(IV)/(V)/ESD-250/2GL DATED :- 10.08.10

CUSTOMER : THE SUPERINTENDING ENGINEER,
U.P. POWER CORPORATION LTD.

THIRD ANGLE PROJECTION
GENERAL ARRANGEMENT FOR

35kV-OUTDOOR PCVCB

W.O.NO. : PV2292

CASTEL LOCK DETAILS

DRN. SIGN NAME DATE

SPS PWD 06.07.09

APPD. SHEET NO. 2 OF 5

TURNOFF ON DISCONNECTOR

ALL DIMENSIONS IN mm SCALE:NTS DRG. NO. PV 2292 GB REV.0

CASTEL LOCK TYPE : ILLS OR EQ.
ANGLE OF ROTATION : 90 Deg.
DIRECTION OF ROTATION : CLOCKWISE
TRAVEL OF BOLT : 18mm±2mm

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NO. ZN.

REVISION

DATE

ALL DIMENSIONS IN mm

SCALE:NTS

DRG. NO.

PV 2292 GB

REV.0

USED ON: **36kV PCVCB**

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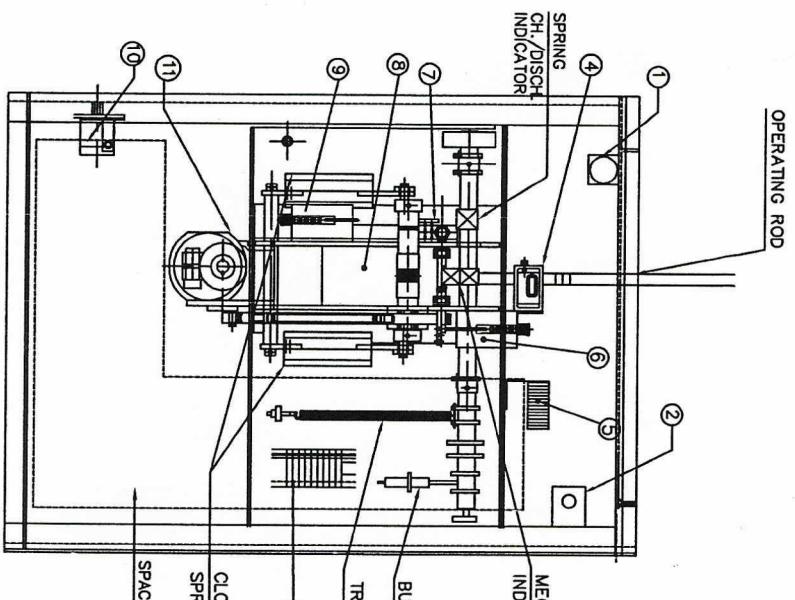
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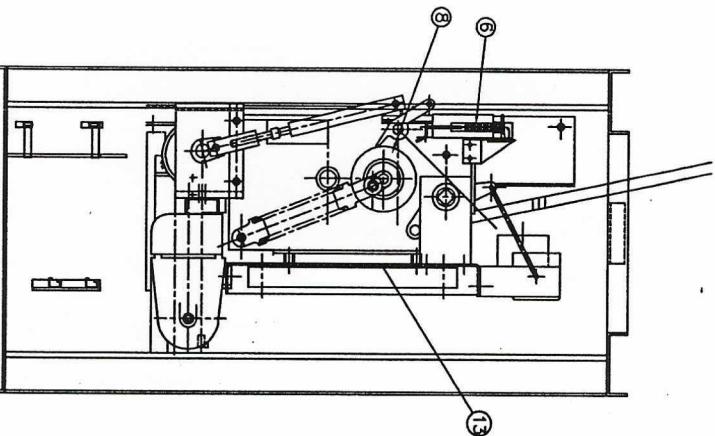
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1

MECH. HOUSING ASSLY-GENERAL ARRGT.DRG.



FRONT VIEW



SIDE VIEW

NOTE: MOUNTING POSITIONS OF
ACCESSORIES SHOWN ABOVE ARE
TENTATIVELY SHOWN. THEY MAY
CHANGE DURING DETAILED DESIGN.

NOTE: * - MARKED ITEMS ARE LOCATED ON ACCESSORIES MOUNTING PLATE.

L.O.I. NO.: 262-ESDC-(K)(1)/ESD-280/0.GL DATED :- 10.06.10

CUSTOMER : THE SUPERINTENDING ENGINEER,
U.P. POWER CORPORATION LTD.

THIRD ANGLE PROJECTION

W.O.NO. : PV2292

GENERAL ARRANGEMENT FOR
36KV-OUTDOOR PCVCB

HOUSING INTERNAL DETAILS

DRN. SPS 06.07.09

APPD. PWD 06.07.09

SHEET NO. 5 OF 5

CROMPTON GREAVES LTD.

S2-MV SWITCHGEAR DIVN.
SWITCHGEAR COMPLEX,
A-5, MIDC AMBAD, NASHIK-40.

REFERENCE DRAWING NO. DRG. NO. PV 2292 GB
ALL DIMENSIONS IN mm SCALE: NTS DRG. NO. PV 2292 GB
REV. 0

B	
Sr.No	DESCRIPTION
1	ILLUMINATION LAMP
2	DOOR OPERATING SWITCH
3	ANTI-RUMPING DEVICE-*
4	COUNTER
5	AUX. SWITCH
6	CLOSING COIL
7	LIMIT SWITCH (MOTOR)
8	MECHANISM
9	TRIPPING COIL
10	SPACE HEATER
11	SPRING CHARGE MOTOR
12	TERMINAL BLOCKS FOR TRIP/CLOSE&MOTOR CKT.
13	MECH. MOUNTING PLATE
14	BREAKER CONTROL SWITCH-*
15	LOCAL/REMOTE SELECTOR SWITCH-*
16	HEATER SWITCH-*
17	3 PIN SOCKET & SWITCH-*
18	M.C.Bs./FUSES-*
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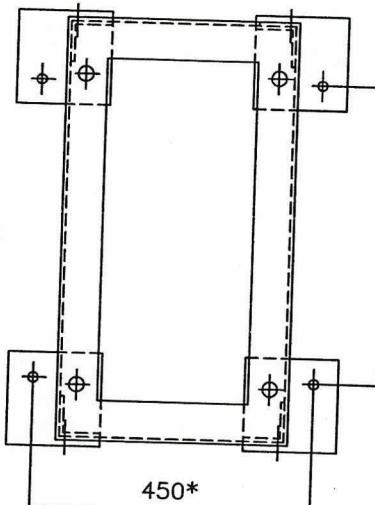
B	
1	REVISION
2	DATE
3	NO/Zn
4	REVISION
5	DATE
6	NO/Zn
7	REVISION
8	DATE
9	NO/Zn

USED ON: PCVVCB

HANDWARES SET FOR BREAKER SUPPORT STRUCTURE ASSLY. CONTAINS
SHALL BE SUPPLIED IN ACCESSORIES BOX IN KIT FORM.

d) M12x40mm-HEX.SCREWS - 18 Nos.
 b) M12-PLAIN WASHERS - 36 Nos.
 c) M12-spring WASHERS - 18 Nos.
 d) M12-Hex Head nut - 16 Nos.

DIMENSIONS FOR FOUNDATION HOLES.

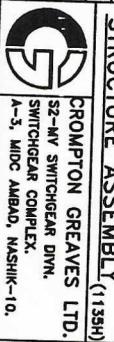
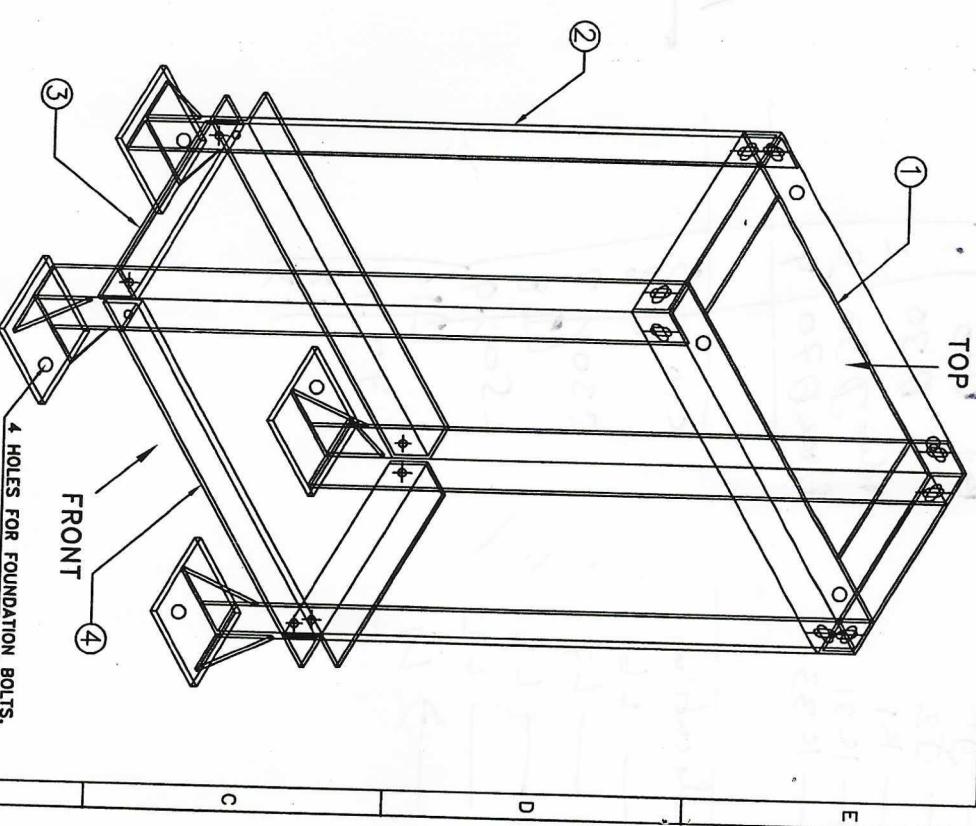


FRONT VIEW

RH SIDE VIEW

The diagram shows a structural frame labeled A at the top left and B at the top right. The frame consists of vertical columns and horizontal beams. A dashed line indicates an alternative height for the top beam. Labels include '+', 'S', and 'Z' with circled numbers 5 and 2. A dimension of 1135 is shown between two points. The bottom part of the diagram shows a similar frame structure.

TOP VIEW

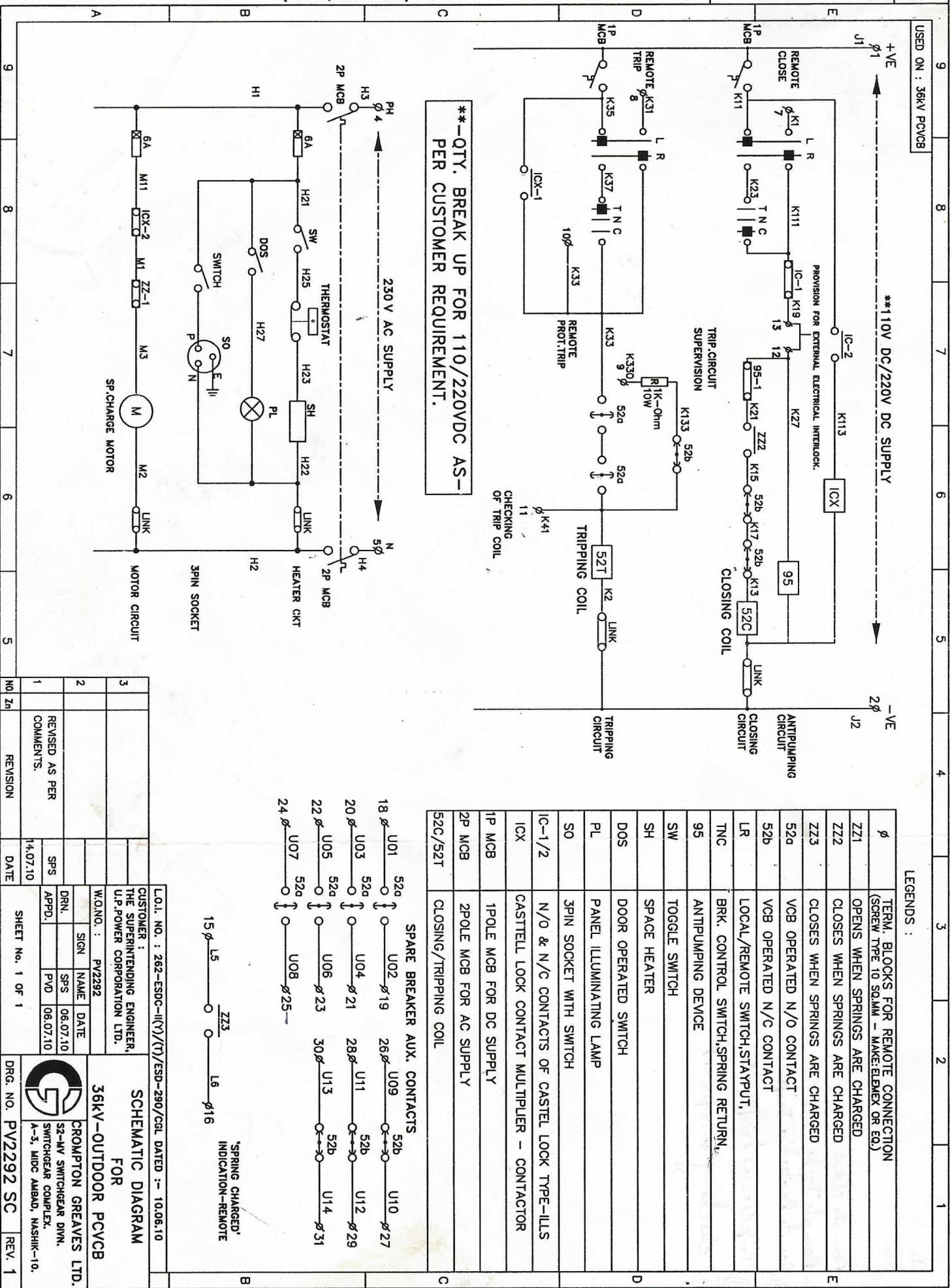


IF IN DOUBT, ASK

CROMPTON GREAVES LIMITED

(REF.DRG.NO.PV1511SC1)

DRG. NO. PV2292SC REV. 1



LEGENDS :

ϕ TERM. BLOCKS FOR REMOTE CONNECTION
(SCREW TYPE 10 SQA MM - MAKE ELEMEX OR EQ.)

ZZ1 OPENS WHEN SPRINGS ARE CHARGED

ZZ2 CLOSES WHEN SPRINGS ARE CHARGED

ZZ3 CLOSES WHEN SPRINGS ARE CHARGED

52a VCB OPERATED N/O CONTACT

52b VCB OPERATED N/C CONTACT

LR LOCAL/REMOTE SWITCH, STAYPUT,

TNC BRK. CONTROL SWITCH, SPRING RETURN

95 ANTIPUMPING DEVICE

SW TOGGLE SWITCH

SH SPACE HEATER

DOS DOOR OPERATED SWITCH

PL PANEL ILLUMINATING LAMP

SO 3PIN SOCKET WITH SWITCH

IC-1/2 N/O & N/C CONTACTS OF CASTEL LOCK TYPE-ILLS

ICX CASTELL LOCK CONTACT MULTIPLIER - CONTACTOR

1P MCB 1POLE MCB FOR DC SUPPLY

2P MCB 2POLE MCB FOR AC SUPPLY

52C/52T CLOSING/TRIPPING COIL

SPARE BREAKER AUX. CONTACTS

18 ϕ	U01	52a	↑	O	U02	ϕ 19	26 ϕ	U09	52b	O \leftrightarrow O	U10	ϕ 27
20 ϕ	U03	52a	↓	O	U04	ϕ 21	28 ϕ	U11	52b	O \leftrightarrow O	U12	ϕ 29
22 ϕ	U05	52a	↓	O	U06	ϕ 23	30 ϕ	U13	52b	O \leftrightarrow O	U14	ϕ 31
24 ϕ	U07	52a	↑	O	U08	ϕ 25						

'SPRING CHARGED'
INDICATION-REMOTE

15 ϕ L5 $\frac{ZZ3}{O}$ L6 ϕ 16

No	Zn	REVISION	DATE
9	8	7	6
8	7	6	5

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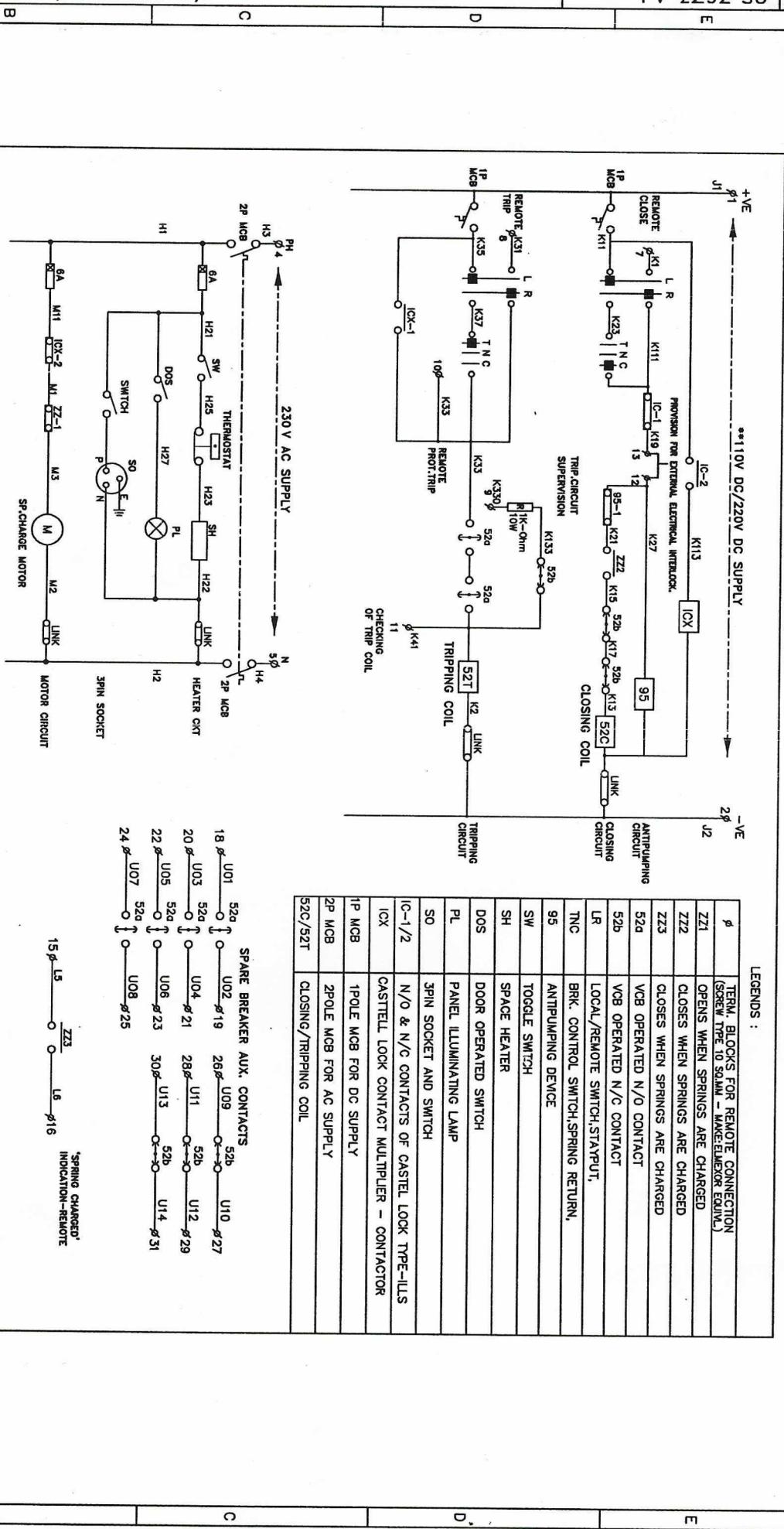
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A	9	8	7	6	5
B	No	Zn	REVISION	DATE	SHEET No. 2 OF 4

	B-SHEET NO.	PB2292	REV '2'		
	W.O.NO.:	PV2292			
	CUSTOMER :	THE SUPERINTENDING ENGINEER, U.P. P. C. L.			
	BOARD DESCRIPTION :	33KV O/D PCVCB - QTY. 1104 Nos.			
	L.O.I. No.:	262-ESDC-II(Y)/(T)/ESD-290/CGL DATED :- 10.06.10			
	DATE	06.07.10			
	PREPARED BY :	SPS			
	APPROVED BY :	PVD			
	## CONTROL VOLTAGE BREAK-UP AWAITED.				
REV"1"	REVISED AS PER COMMENTS.	SPS	14.07.10		
REV 2	CONTROL VOLTAGE FOR 3RD LOT ADDED	ARP	05.08.10		
IT	DESCRIPTION	CODE NO.	O/D VCB	TOTAL	
1	BASIC UNIT 33kV/1250A/25kA, AUX.CONTACTS:6N/O+6N/C SP.CH.MOTOR : 230V AC AUX. DC SUPPLY : 110 DC		1	600	
	AUX. DC SUPPLY : 110/220V DC ##		1	504	
2	ANTI PUMPING DEVICE MAKE : EAPL/SELECTRON/EQUIV.		1	1104	
3	TNC SWITCH W/O BELL ALARM CONTACT TYPE - NON-LOCKABLE MAKE - SHIRKE/KAYCEE/EQUIV. CONTACTS:1N/O IN EACH POSITION		1	1104	
4	LOCAL/REMOTE SELECTOR SWITCH TYPE - NON-LOCKABLE MAKE - SHIRKE/KAYCEE/EQUIV. CONTACTS:2N/O IN EACH POSITION		1	1104	
5	HEATER/SOCKET ON-OFF TOGGLE SWITCH RATING:-6A,230V AC	460232136	2	2208	
6	DOOR OPERATED SWITCH RATING : 0.25A,230V AC	190232489	1	1104	
7	SPACE HEATER RATING : 80W,240V AC	190232501	1	1104	
8	3PIN SOCKET RATING : 5A,230V AC	190232606	1	1104	
9	PANEL LAMP RATING : 40W,230V AC	190232511	1	1104	
10	THERMOSTAT-RIGID PROBE TYPE SETTING/RATING : 30-90DEG.CENT./AUX.SUPPLY:230V AC	460232350	1	1104	
11	MCB MAKE : SCHNEIDER/INDOKUPP/SIEMENS/EQ. a) RATING : 2 POLE, 6A,230VAC-FOR AC SUPPLY b) RATING : 1 POLE, 6A, 110V DC- FOR DC SUPPLY. c) RATING : 1 POLE MCB, 4A, 250V DC- FOR DC SUPPLY. - ##	460232357 (QTY BRAKE UP AWAITED)	1 2 2 ##	1104 1200 1008 ##	