

TECHNICAL SPECIFICATIONS


(A) SYSTEM PARAMETERS		(E) GENERAL NOTES	
1	SYSTEM VOLTAGE	1	ALL ELECTRICAL INSTRUMENT MOUNTING DOORS WILL BE EARTHED BY FLEXIBLE COPPER WIRE.
2	RATED FREQUENCY	2	PANEL WILL BE MADE OF 2 mm(CRCA) SHEET STEEL & HT TANK WILL BE MADE OF 3mm SS SHEET WITH ROBOTIC WELDING
3	SYSTEM NEUTRAL	3	PANEL SHALL BE POWDER COATED INSIDE AND OUTSIDE WITH SHADE RAL7035 (POWDER COATED).
4	FAULT LEVEL	4	DISCONNECTING TYPE TB SHALL BE PROVIDED FOR CT CIRCUIT & SCREW TYPE TB FOR OTHERS.
5	DEGREE OF PROTECTION(HT CHAMBER)	5	MECHANICAL INDICATORS OF CB & DISCONNECTOR ARE PROVIDED AS A PART OF MIMIC DIAGRAM ON FRONT FACIA
6	DEGREE OF PROTECTION(ENCLOSER)	6	5% SPARE TERMINAL BLOCK SHALL BE PROVIDED.
7	TYPE OF SECONDARY GIS	7	RATED(ABSOLUTE) GAS FILLING PRESSURE = 1.4BAR
8	ALTITUDE	8	MINIMUM (ABSOLUTE) GAS FILLING PRESSURE = 1.05BAR
		8	BUSBAR SHALL BE NON -EXTENDABLE FOR FUTURE EXPANSION.
		9	CABLE BOX WITH GLAND PLATE
		10	T-OFF CABLE BOX WITH SPLIT TYPE GLAND PLATE
		11	2.5 SQ.MM FOR CT CIRCUIT & 1.5 SQ.MM FOR OTHER CIRCUIT .PVC INSULATED, STRANDED COPPER CONDUCTOR WIRE SHALL BE USED FOR WIRING.
(B) CIRCUIT BREAKER			
1	RATED CURRENT	630A	
2	APPLICABLE STANDARD	IEC62271-100,IEC62271-200	
3	BREAKING CAPACITY	21KA AT 11 kV	
4	SHORT TIME RATING	21KA FOR 3 SEC	
5	BASIC INSULATION LEVEL (BIL) (PHASE TO EARTH & ACROSS OPEN CONTACT OF VIs)	28kV POWER FREQ.WITHSTAND FOR 1MINUTE	
6	CIRCUIT BREAKER MECHANISM	MANUALLY OPERATED.	
(C) 3 POSITION OFF LOAD DISCONNECTOR SWITCH			
1	RATED CURRENT	630A	
2	APPLICABLE STANDARD	IEC62271-102	
3	SHORT TIME RATING	21KA FOR 3 SEC	
4	BASIC INSULATION LEVEL (BIL)	28kV POWER FREQ.WITHSTAND FOR 1MINUTE	
5	OPERATING MECHANISM	MANUALLY OPERATED.	
(D) LOAD BREAK SWITCH			
1	RATED CURRENT	630A	
2	APPLICABLE STANDARD	IEC62271-103	
3	SHORT TIME RATING	21KA FOR 3 SEC	
4	BASIC INSULATION LEVEL (BIL)	28kV POWER FREQ.WITHSTAND FOR 1MINUTE	
5	OPERATING MECHANISM	MANUALLY OPERATED.	

No	REVISION	DATE	DRAWN	4	5	6	7	8	SCALE- NTS	DRG. NO.	REV
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TECHNICAL SPECIFICATION FOR 11KV 3 WAY OUTDOOR SECONDARY GIS

NAME	DATE
DRN/ SRR	30.07.2021
APPD/ VAC	30.07.2021
SHEET 1 OF 1	
THIRD ANGLE PROJECTION	
ALL DIMENSIONS ARE IN mm	

W.O.NO. SG0045

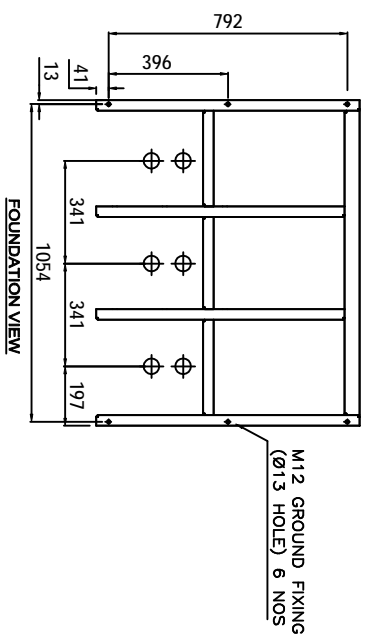
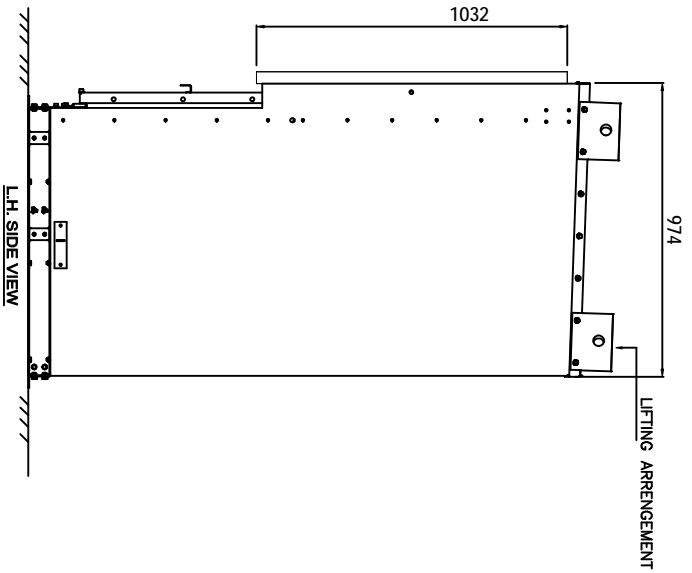
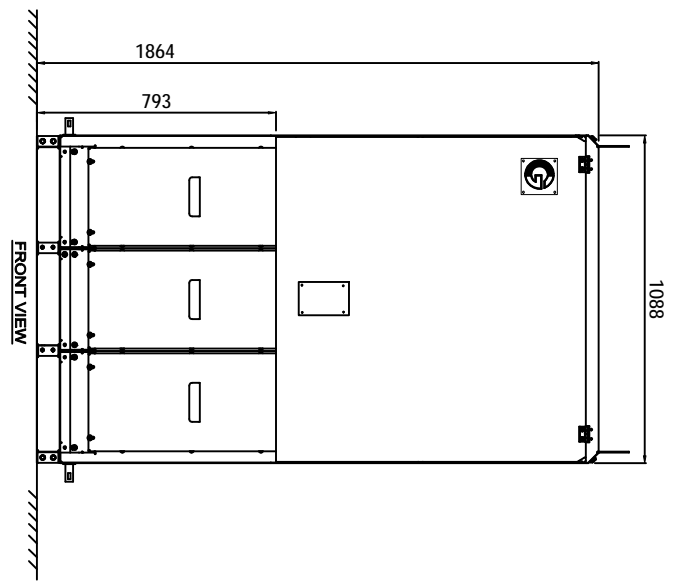


CG Power and Industrial Solutions Limited
MV Switchgear Division
Ambedkar, Nashik, India

IF IN DOUBT, ASK

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GENERAL ARRANGEMENT FOR 11KV, 630A, 3 WAY, OUTDOOR, SF6 INSULATED, MANUAL OPERATED, NON EXTENSIBLE, RMU (2 LBS+1 VCB)



- NOTES :
1. ALL DIMENSIONS ARE SUBJECTED TO MANUFACTURING TOLERANCE $\pm 5\%$ UNLESS OTHERWISE STATED.
 2. UNIT SHALL BE POWDER COATED WITH RAL-7035 SHADE.
 3. STAINLESS STEEL TANK :- DEGREE OF PROTECTION IP67.
 4. STAINLESS STEEL TANK THICKNESS :- 3 mm.
 5. OUTDOOR RMU :- DEGREE OF PROTECTION IP54.
 6. CLADDING MATERIAL SHEET THICKNESS :- 2mm.

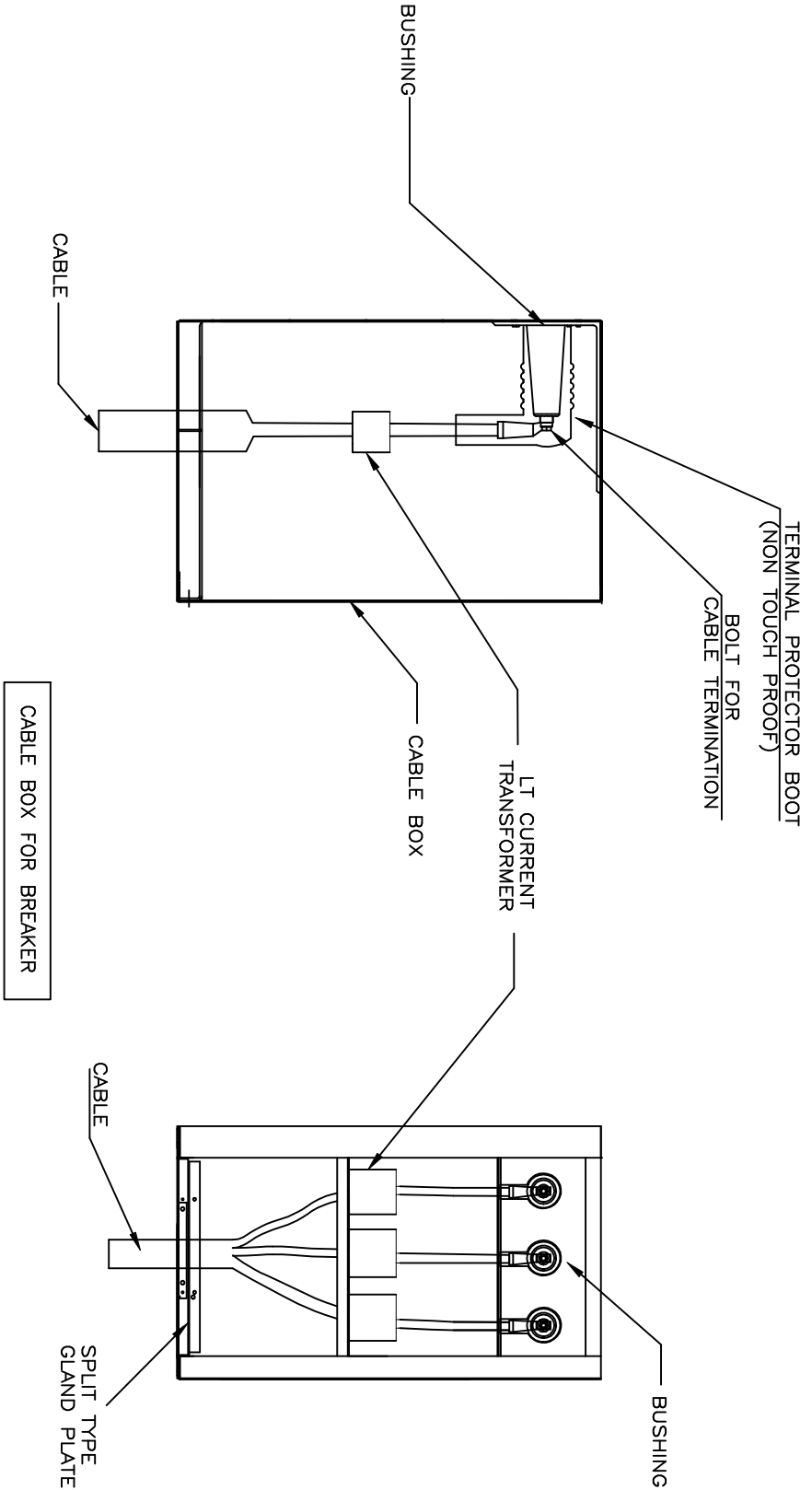
A		B		C		D		E		F									
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<p>GENERAL ARRANGEMENT DRAWING FOR 11KV, 3 WAY NON EXTENSIBLE MANUAL OPERATED RMU</p> <p>DIMENTIONAL TOLERANCE: $\pm 2\%$</p> <table border="1"> <thead> <tr> <th>DRN.</th> <th>SSG</th> <th>NAME</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>APRD</td> <td>VAC</td> <td></td> <td>26/07/21</td> </tr> </tbody> </table> <p>SHEET 1 OF 1 THIRD ANGLE PROJECTION ALL DIMENSIONS ARE IN mm</p> <p>SCALE: NTS DRG. NO. SG0045-GA REV 0</p>												DRN.	SSG	NAME	DATE	APRD	VAC		26/07/21
DRN.	SSG	NAME	DATE																
APRD	VAC		26/07/21																

W.O.NO. SG0045

CG Power and Industrial Solutions Limited
MV Switchgear Division
(Formerly Switchgear Services Ltd)

No	REVISION	DATE	DRAWN	4	5	6	7	8	9	10
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- NOTES :
1. SHEET THICKNESS OF CABLE BOX IS 2 MM CRCA/GI POWDER COATED.
 2. CABLE BOX SUITABLE UPTO CABLE SIZE : 1X3CX300SQ.MM



CABLE BOX DRAWING
FOR 11KV/3 WAY NON EXTENSIBLE
MANUAL OPERATED RMU

NAME	DATE
DRN. SSG	26.07.21
APPD. VAC	26.07.21

SHEET 1 OF 2
THIRD ANGLE PROJECTION
ALL DIMENSIONS ARE IN mm
SCALE: NTS DRG. NO. SG0045-C

W.O.NO. SG0045

CG Power and Industrial Solutions Limited
MV Switchgear Division
MIDCO, INDRAPUR, ANDHERI (WEST), GUANAJATI, GUANAJATI

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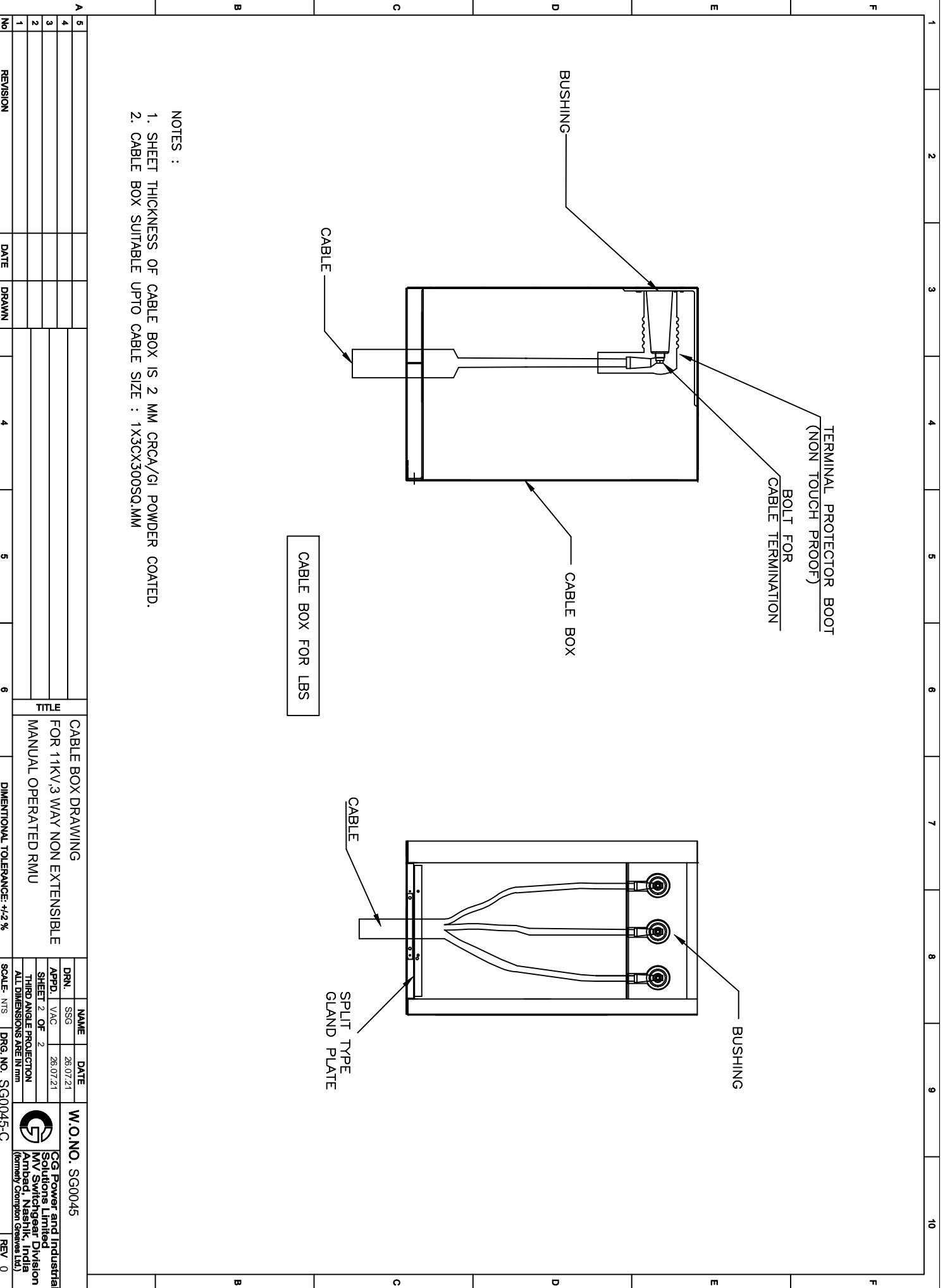
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FILE NAME:

DRG. NO. SG0045-C

REV 0



NOTES :


1. SHEET THICKNESS OF CABLE BOX IS 2 MM CRCA/GI POWDER COATED.
2. CABLE BOX SUITABLE UPTO CABLE SIZE : 1X3CX300SQ.MM

No	REVISION	DATE	DRAWN
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CABLE BOX DRAWING
FOR 11KV/3 WAY NON EXTENSIBLE
MANUAL OPERATED RMU

NAME	DATE
DRN. SSG	26.07.21
APPD. VAC	26.07.21
SHEET 2 OF 2	
THIRD ANGLE PROJECTION	
ALL DIMENSIONS ARE IN mm	

W.O.NO. SG0045



CG Power and Industrial Solutions Limited
MV Switchgear Division
MIDCO, Indraprastha, Gurgaon
(Formerly Sampson Overseas Ltd)

SCALE: NTS DRG. NO. SG0045-C REV 0

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FILE NAME:

DRG. NO. SG0045-RT

REV 0

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No	REVISION	DATE	DRAWN						



CG Power and Industrial Solutions Limited.
Medium Voltage Switchgear Divn.
Ambad, Nashik-422010.
MADE IN INDIA.

TYPE REFERENCE: ARISTA S : SSV
SERIAL NO. #
MONTH & YEAR OF MANUFACTURE

RATED VOLTAGE: KV 12
FREQUENCY: HZ 50
IMPULSE WITHSTAND VOLTAGE KV 75
DEGREE OF PROTECTION: IP IP54

NORMAL CURRENT	A	630	630
SHORT CIRCUIT PEAK MAKING CURRENT	KA	52.5	52.5
SHORT CIRCUIT BREAKING CURRENT	KA	-	21
3 SECOND SHORT TIME CURRENT	KA	21	21
EARTH SWITCH PEAK MAKING CURRENT	KA	52.5	52.5

LOAD BREAK SWITCH C.B.

TESTING STANDARDS: IEC 62271-100, IEC 62271-210, IEC 62271-103, IEC 60094, IEC 60529

MATERIAL : 1.0 MM THK. ANODISED AL.
FINISH : NATURAL
QUANTITY : 1/JOB.

RATING PLATE DRAWING FOR 11KV,3 WAY NON EXTENSIBLE MANUAL OPERATED RMU

DIMENSIONAL TOLERANCE: +/-2 %

DRN.	NAME	DATE	W.O.NO.
VAC		09.11.2020	SG0045
APPD.	SPS	09.11.2020	
SHEET 1 OF 1			
THIRD ANGLE PROJECTION			
ALL DIMENSIONS ARE IN mm			
SCALE: NTS	DRG. NO.	REV	
	SG0045-RT	0	

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MV Switchgear Division
Ambad, Nashik, India
(Formerly Chomson Greenlee Ltd.)

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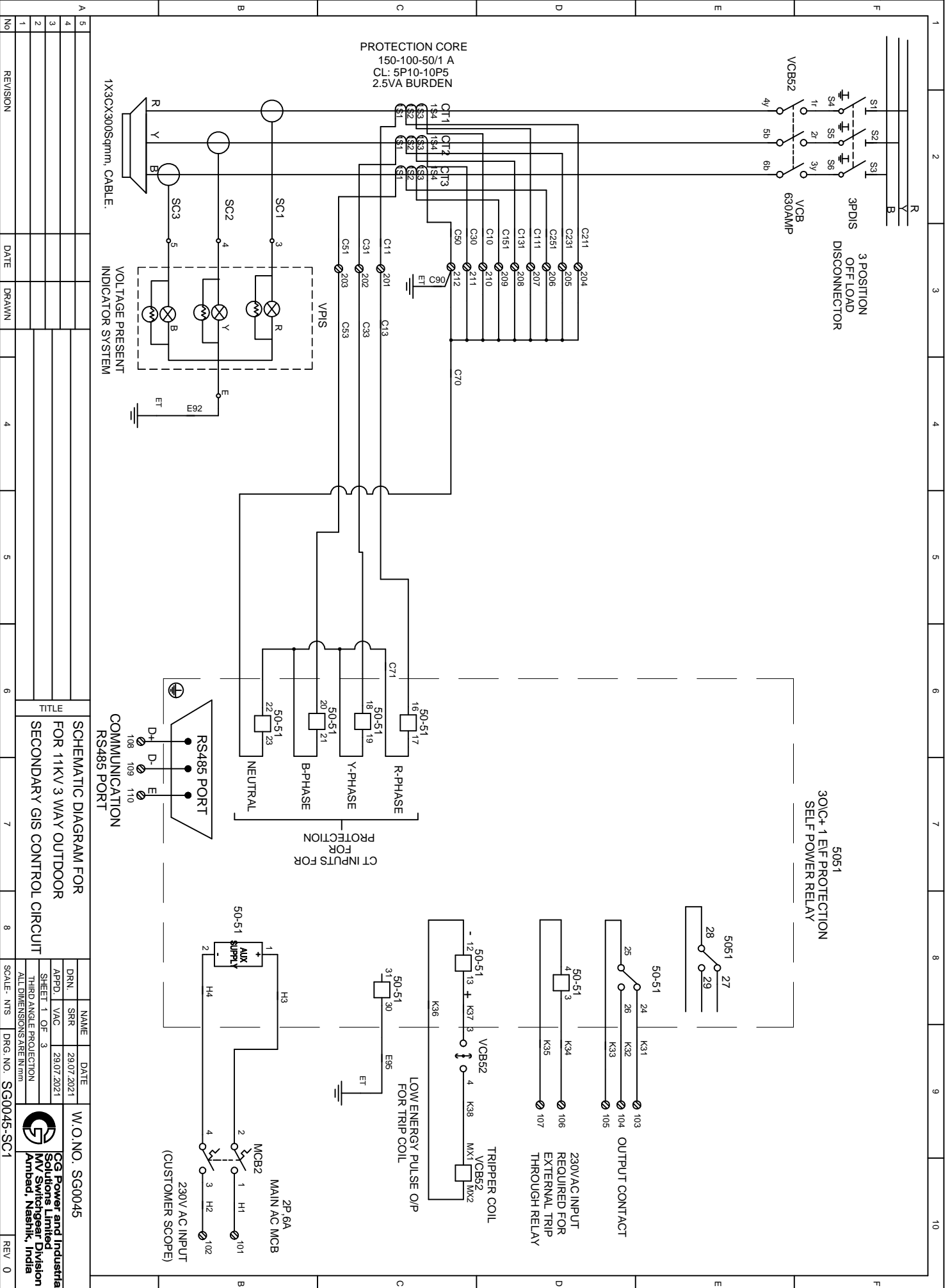
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FILE NAME:

DRG. NO. SG0045-SC1

REV 0



NO	REVISION	DATE	DRAWN
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NAME	DATE
DRN.	29.07.2021
SRR	
APPD	29.07.2021
VAC	

W.O. NO.
SG0045

CG Power and Industrial Solutions Limited
11KV Switchgear Division
Ambedkar, Nashik, India

SCALE	DRG. NO.	REV
NTS	SG0045-SC1	0

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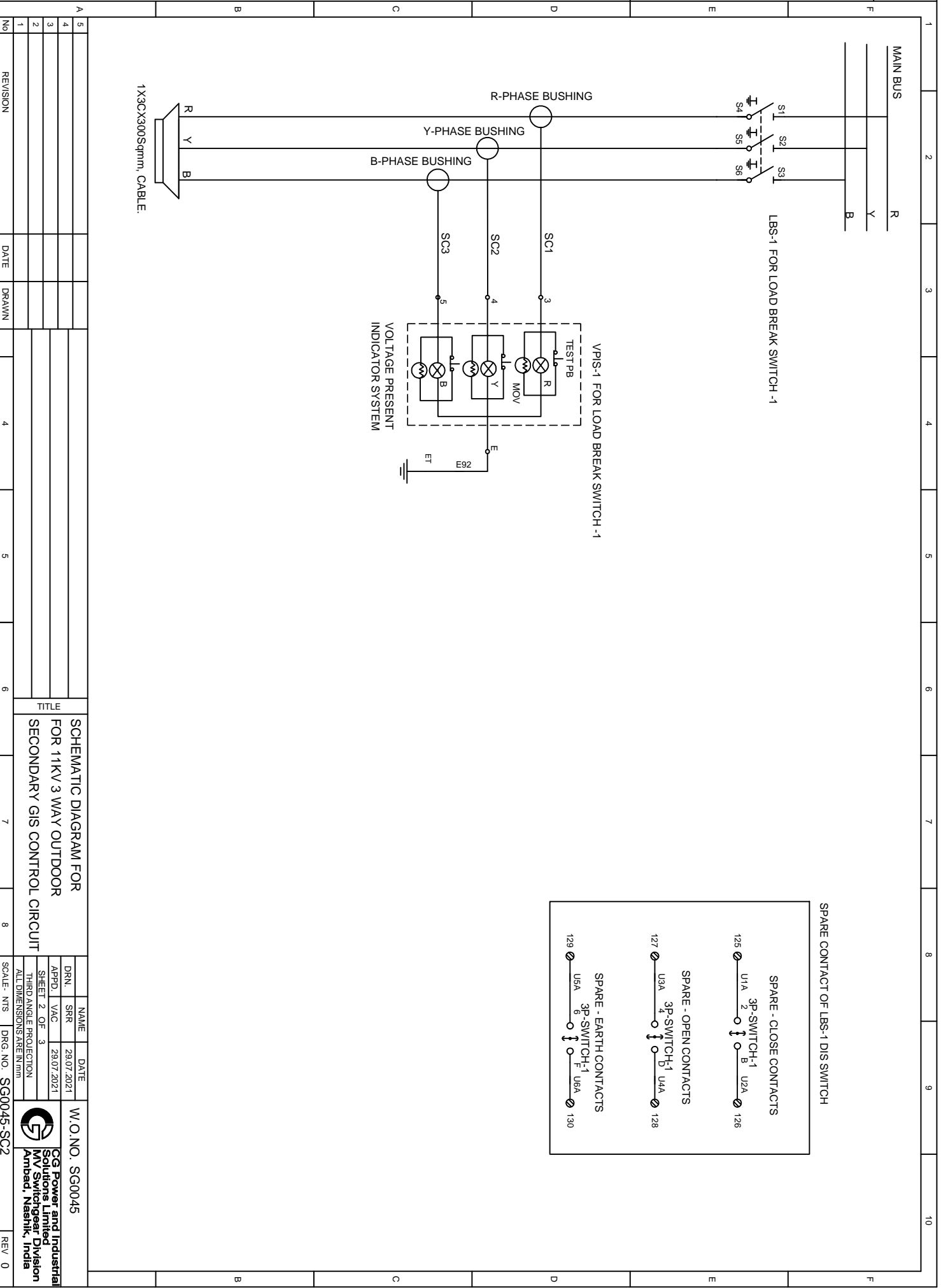
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REV 0



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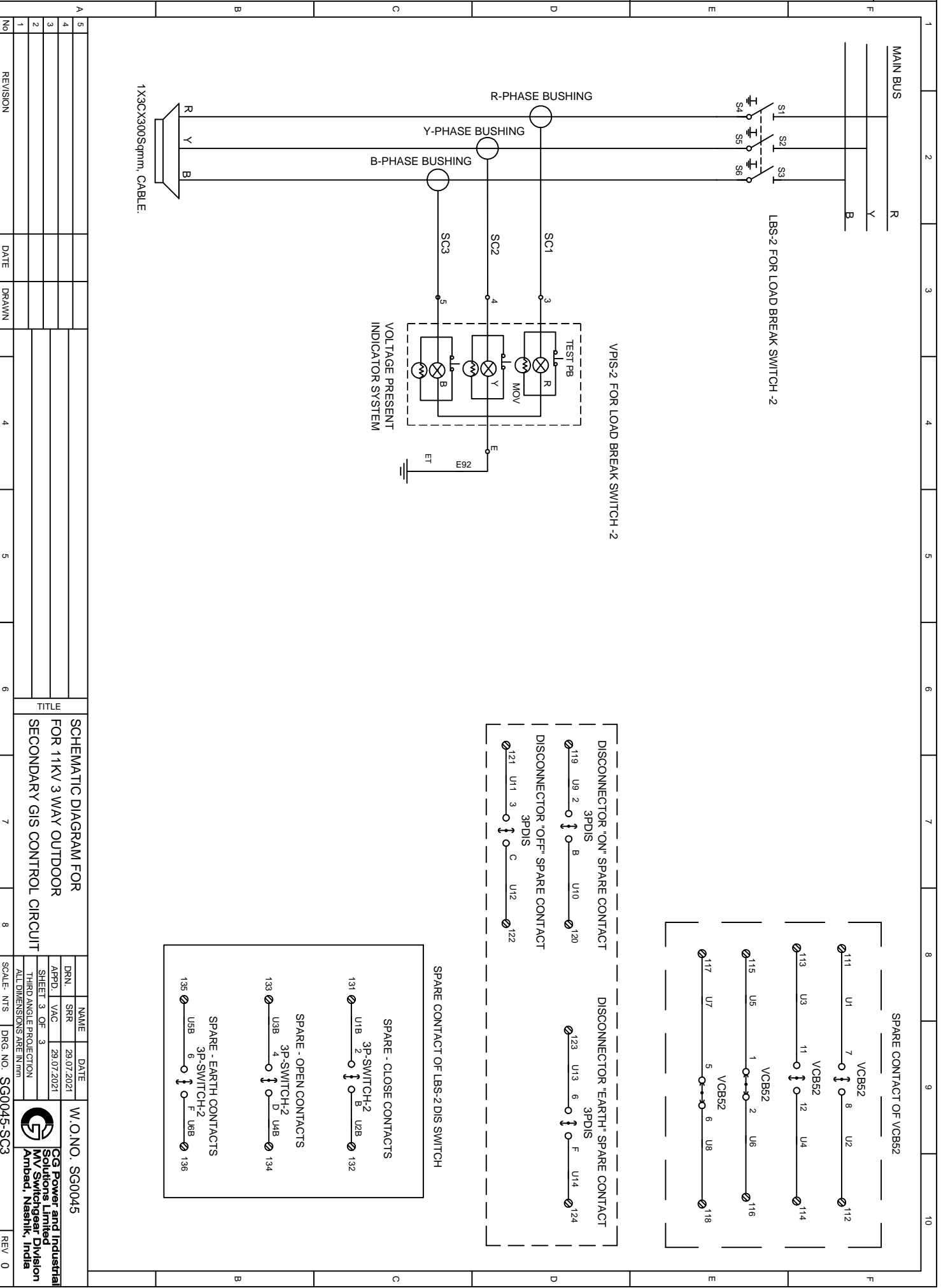
SCHEMATIC DIAGRAM FOR
FOR 11KV 3 WAY OUTDOOR
SECONDARY GIS CONTROL CIRCUIT

DRN.	SRR	DATE
APPD.	VAC	29/07/2021
SHEET 2 OF 3		
THIRD ANGLE PROJECTION		
ALL DIMENSIONS ARE IN mm		

W.O. NO. SG0045

CG Power and Industrial Solutions Limited
Solutions Limited Division
Ambad, Nashik, India

SCALE: NTS DRG. NO. SG0045-SC2 REV 0



No	REVISION	DATE	DRAWN	4	5	6	7	8	REV
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NAME	DATE	W.O.NO. SG0045
DRN.	SRR	29.07.2021
APPD.	VAC	29.07.2021
SHEET 3 OF 3		
THIRD ANGLE PROJECTION		
ALL DIMENSIONS ARE IN mm		
SCALE- NTS	DRG. NO. SG0045-SC3	REV 0



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Strong relationships.

	B-SHEET NO: SGB0045		
	W.O.NO: SG0045		REV'0'
	CUSTOMER :		
	DESCRIPTION: BILL OF MATERIAL FOR 11KV, 3WAY OUTDOOR,MANUAL OPERATED, RMU		
	PREPARED BY : SRR		
	APPROVED BY : VAC		
	DATE: 29.07.2021		
	TOTAL QTY.: 18		Nos.
SR.	DESCRIPTION	QTY./UNIT (NOS)	TOTAL QTY
1	SELF POWERED OVERCURRENT & EARTH FAULT RELAY 30/C + 1E/F CGI 14S Relay MAKE - CGPISL COMMUNICATION- Front Port & Rear Port both IEC 60870-5-103 CASE -NON DRAWOUT FUNCTIONS -PHASE FAULT I> (51) PHASE FAULT I>> (50) EARTH FAULT Io> (51N) EARTH FAULT Io>> (50N) SETTINGS - PF I>: 10-250% (IN STEPS OF 1%) PF I>>: 50-3200% STEP 1% (IN STEPS OF 1%) EF Io>: 5-250% STEP 1% (IN STEPS OF 1%) EF Io>>: 10-3200% STEP 1% (IN STEPS OF 1%) TIME CHARACTERISTIC- PROGRAMMABLE WITH 5 IEC SELECTABLE CURVES INSTANTANEOUS DELAY - 0.0SEC TO 2.0SEC (IN STEPS OF 10mS) INDICATIONS - 4 LED INDICATIONS : POWER, ALARM, TRIP, FAULT OUTPUT RELAY CONTACTS 2 RELAY OUTPUTS RL1 & RL2 :TRIP CONTACTS (SR OR HR) 2 COIL OUTPUTS DIGITAL INPUTS- 1 DIGITAL INPUTS 24VDC DI1:FAST TRIP DIGITAL INPUT 230VAC for REMOTE TRIP RATED CURRENT- 1A AUXILIARY AC INPUT - 230VAC	1	18
2	CAPACITIVE VOLTAGE INDICATION (VPIS) MAKE -CGPISL SUITABLE FOR 12KV SYSTEM	3	54
3	RIGHT ANGLE BOOTS - SET MAKE- 3M/KD JOSHI/EQ. SUITABLE FOR 12KV SYSTEM PER LBS/BREAKER QUANTITY REQUIRED: 3 NOS 1 SET - 3 NOS BOOTS	3	54
	CT		
1	LT CURRENT TRANSFORMER TYPE-RESIN CAST /TAPE WOUND TYPE MAKE- G&M/ECS/PRAGATI/EQ. CTR : 150-100-50/ 1 A CORE : Protection; ACC. CLASS 5P10, BURDEN – 2.5VA ACC. CLASS : 5P10 FOR 150 & 100A RATIO 10P5 FOR 50A RATIO BURDEN:2.5VA SHORT TIME CURRENT- 21KA/3SEC P1 AT TOP SIDE & P2 AT BOTTOM SIDE SECONDARY TERMINALS SHALL BE LOCATED ON P2 SIDE. CT DIMENSION- ID: 50MM/48MM OD: 110MM Dia MAX AXIAL HEIGHT : 100 MM M5X10 MOUNTING INSERT SHALL BE PROVIDED	3	54