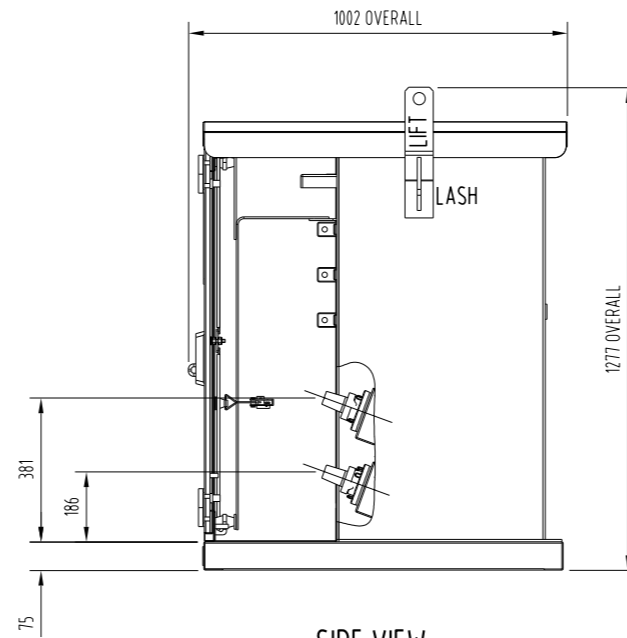
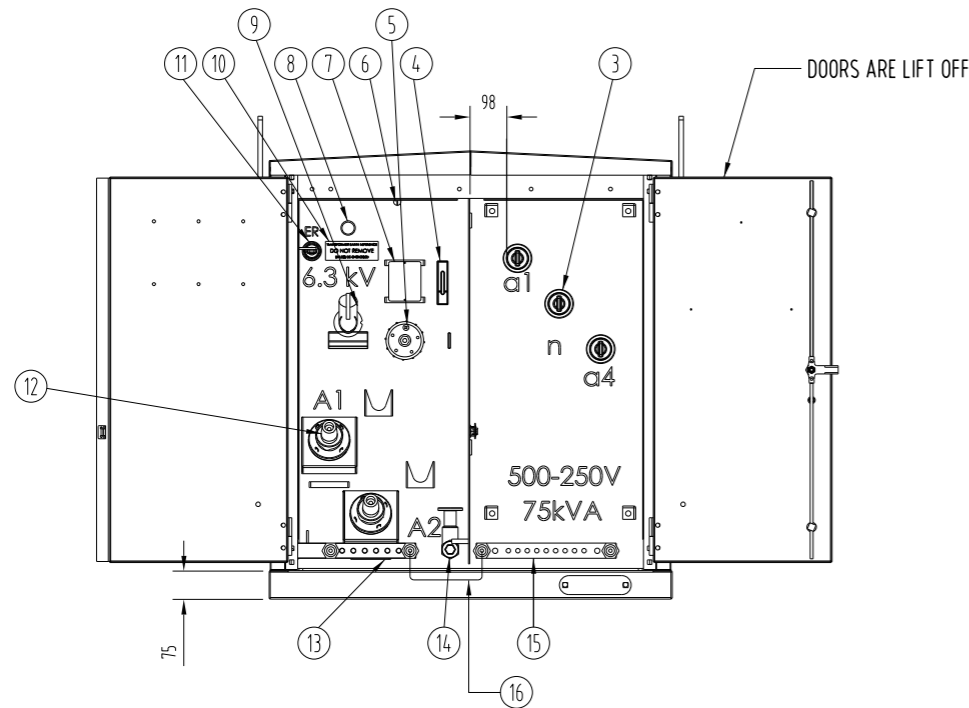


PLAN VIEW - COVER REMOVED

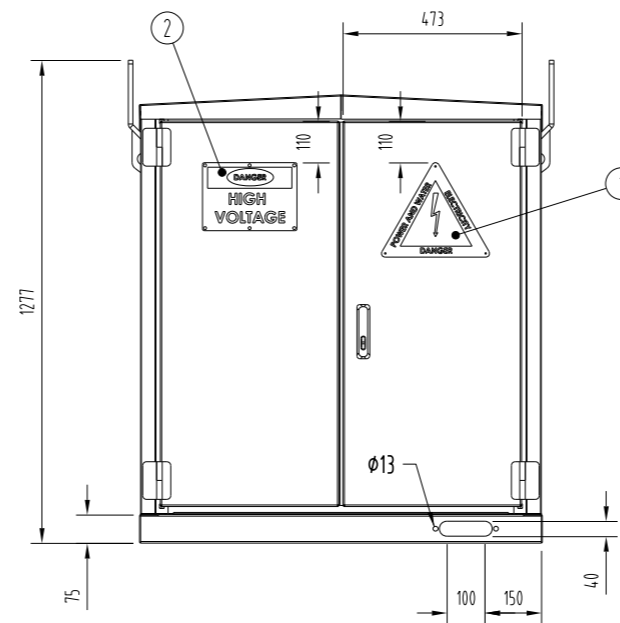


SIDE VIEW

ITEM	Qty	DESCRIPTION
1	1	POWER WATER - DANGER ELECTRICITY
2	1	DANGER - HIGH VOLTAGE
3	1	BUSHING ASSEMBLY 3.6KV 200A
4	1	OIL SIGHT GAUGE ASSEMBLY
5	1	5 POSITION T//SW ASSY 1 PH
6	1	PRESSURE RELIEF VALVE
7	1	RATING PLATE
8	1	25NB FILLER CAP
9	1	BAY-O-NET FUSE
10	1	EARTH WARNING LABEL
11	1	BUSHING ASSEMBLY 0.66KV 167A
12	1	DEADBREAK INSERT, 200A
13	1	350mm LONG 40 X 5 COPPER NEUTRAL BAR
14	1	PLUG 25NB FLANGED BRASS
15	1	EARTH BAR
16	1	70 sq.mm COPPER MEN



FRONT VIEW - DOOR OPEN



FRONT VIEW - DOOR CLOSED

S/No. ○ OIL IS PCB FREE

SINGLE PHASE DISTRIBUTION TRANSFORMER TO AS60076

Rated kVA	75	Winding Temp. Rise °C	65
HV Volts	6350	Top Oil Temp. Rise °C	60
LV Volts	500-250	Impedance at 75 kVA 75°C	
HV Amps	11.8	C & C Mass kg	451
LV Amps	150-300	Oil Vol. litres	280
Frequency Hz	50	Cubicle Mass kg	65
Insul. Levels kV	60/10	Total Mass kg	1305
Cooling	ONAN	Year	201
Press. kPa (abs)	60/150	Plate No.	50-2013-G
LV Winding	Cu		
LV Winding	Cu		

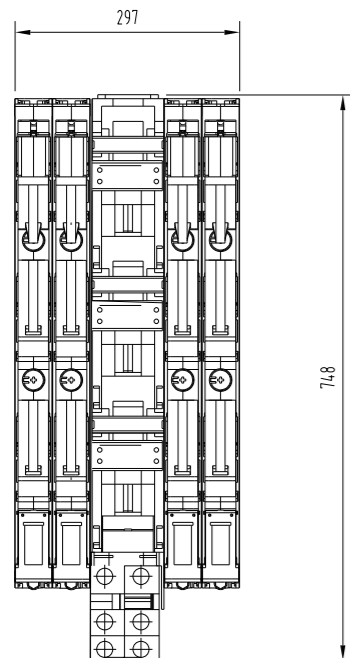
Tap Pos.	Tap Conn.	HV Volts	LV Volts
1	4-5	6668	a1-a4
2	5-3	6509	500
3	3-6	6350	a1-n
4	6-2	6191	n-a4
5	2-7	6033	250

REFERENCE DRAWINGS AND DOCUMENTS	
DOCUMENT No.	DOCUMENT TITLE

NO	DESCRIPTION	DRN	DATE	CKD	APPD
0	ISSUED FOR CONSTRUCTION	SHW	NOV 17	IB	BC
AMENDMENTS					

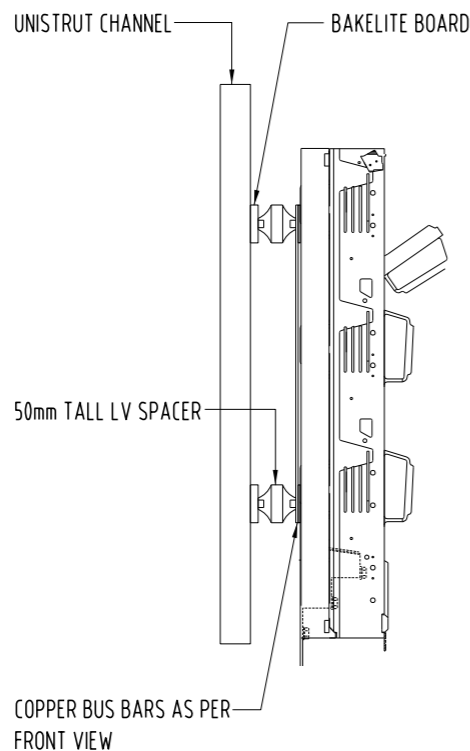
DES	PWC	POWER STANDARD DRAWING	
DRN	SHW	SUBSTATION	
CKD	IB	75kVA 11kV SINGLE PHASE SUBSTATION	
APPD	BC	GENERAL ARRANGEMENT - SHEET 1 OF 3	
SCALE	AS SHOWN	A3	DRAWING NUMBER S02-1-7-19_1
ISSUED	NOV 2017		
ALL DIM. IN mm		DRAFTING STANDARD TO A.S.1100	
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY	



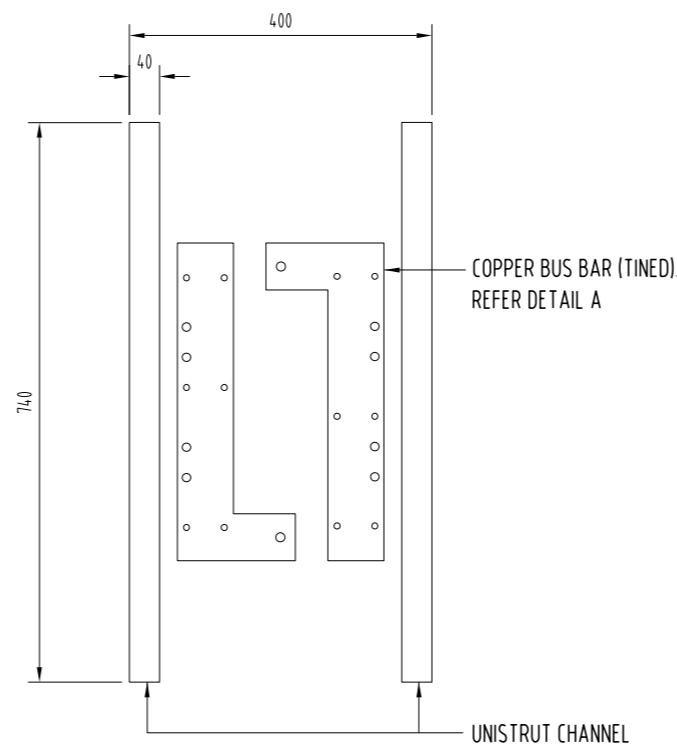


LV PANEL - FRONT VIEW

- LV SWITCHGEAR LEFT TO RIGHT
- 2 x 160A FUSE STRIP
- 1 x 1000A ISOLATOR STRIP
- 2 x 160A FUSE STRIP

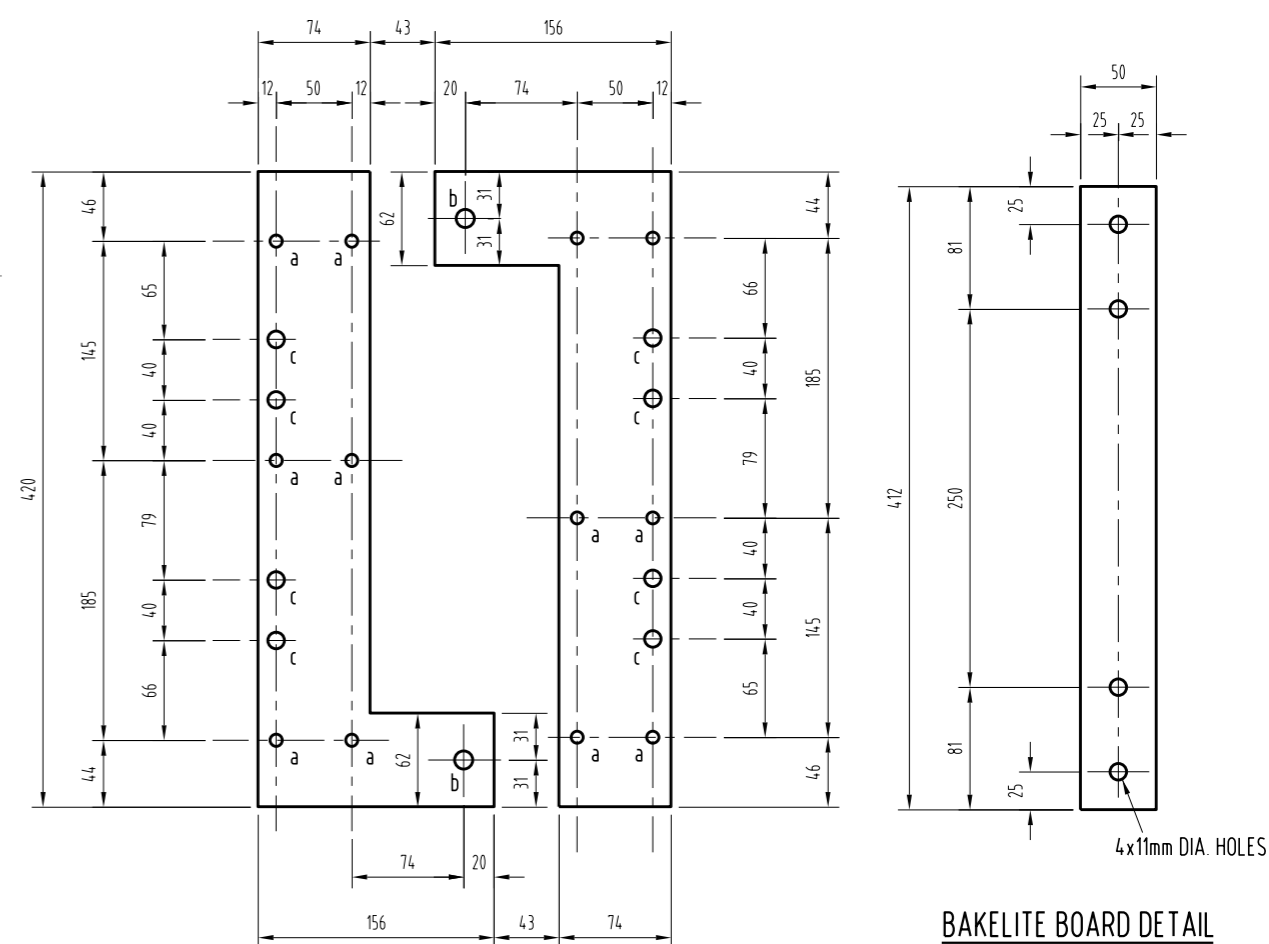


LV PANEL - SIDE VIEW



BUS BARS - FRONT VIEW

- BAKELITE BOARD NOT SHOWN



DETAIL A - BUS BAR DETAIL

LEGEND:-

- a - 8mm FERRULE, 8 x 1.25
- b - 12mm FERRULE, 123 x 1.75
- c - 11mm DIA. HOLE BOBBIN MOUNT

NOTE:- BUSBAR IS DESIGNED TO WORK FOR BOTH THE LEFT AND RIGHT SIDE MOUNTING ARRANGEMENT

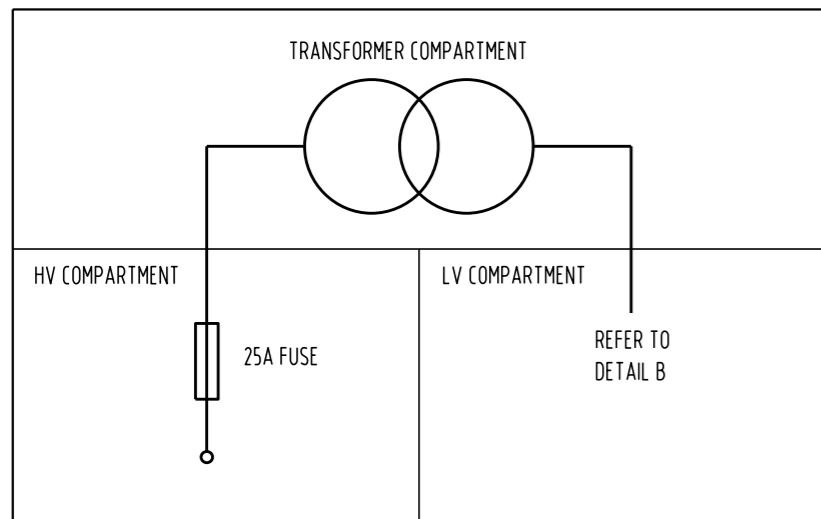
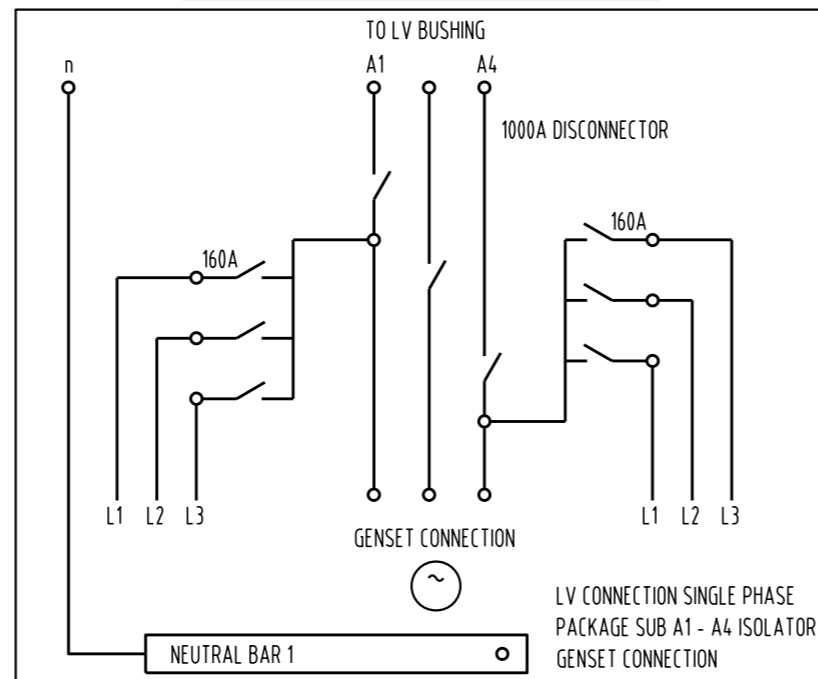
UNISTRUT

740mm x 2

BAKELITE BOARD DETAIL

INSULATING MOUNTING PANEL x 2

DETAIL B - LV PANEL SINGLE LINE DIAGRAM



EXAMPLE SHOWN IS FOR KKTK SUBSTATION WITH STRIPPLE FUSE UNIT

REFERENCE DRAWINGS AND DOCUMENTS								DES PWC		POWER STANDARD DRAWING					
DOCUMENT No.	DOCUMENT TITLE							DRN	SHW	SUBSTATION					
								CKD	IB	75kVA 11kV SINGLE PHASE SUBSTATION					
								APPD	BC	GENERAL ARRANGEMENT - SHEET 2 OF 3					
								SCALE	AS SHOWN	ISSUED	NOV 2017	A3	DRAWING NUMBER	S02-1-7-19_2	AMDT
								ALL DIM. IN mm							
								DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY					
0	ISSUED FOR CONSTRUCTION	SHW	NOV 17	IB	BC										
NO	DESCRIPTION	DRN	DATE	CKD	APPD										
AMENDMENTS															



DES	PWC	POWER STANDARD DRAWING				
DRN	SHW	SUBSTATION				
CKD	IB	75kVA 11kV SINGLE PHASE SUBSTATION				
APPD	BC	GENERAL ARRANGEMENT - SHEET 2 OF 3				
SCALE	AS SHOWN	ISSUED	NOV 2017	A3	DRAWING NUMBER	S02-1-7-19_2
ALL DIM. IN mm						
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY				

HV CABLE TERMINATION DETAILS

SINGLE CORE CABLE TYPE	LOAD-BREAK ELBOW
11KV 35mm ² ALUMINIUM	8235
11KV 95mm ² ALUMINIUM	412441

FUSE DETAILS

1Ø PACKAGE SUB	HV CURRENT (ITEM NUMBER)	LV FUSE 63A
50kVA	15A (500771)	286211
75kVA	25A (9845)	286211

Single phase package substation LV panel - BOM		
Item number	Qty	Item Description
406808	1	DISCONNECTOR, FEEDER, TRANSFORMER GENERATOR SET, 1000A, BACK CONN TYPE, C/W BUSBAR, PWC DWG S02-1-4-17
407050	4	FUSEBASE, STRIPPLE, 160A, 500V, BOTTOM CONN, PWC DWG S02-1-4-18
300368	AR	WIRE,ELEC, SDI, 150MM2, CU, SGL MULTISTRAND COND
-	AR	Uni Strut (fibre glass)
12047	4	LV standoff insulator - Bobbins
8094	AR	Bakelite, insulator sheet
-	2	Custom copper busbar back plate - detail A
412440	2	HV bushings to be replaced
114017	36	M12 x 40 bolts with Nuts
114280	64	M12 flat washer
114249	64	M12 spring washer
-	4	Uni strut "Z" Bracket
-	8	Uni strut M12 spring nut
300368	AR	LV Cable 150mm copper flex
4184	AR	Red heat shrink
4424	AR	Black heat shrink

NOTES:-

1. COMPRESSION LUGS ARE TO BE USED ON ALL LV CABLE CONNECTIONS FOR XLPE AND OTHER ALUMINIUM CONDUCTORS. CABLE LUGS WITH FINAL COMPRESSION OVER INSULATION TO EXCLUDE MOISTURE ARE ESSENTIAL. REFER TO S02-2-2-10.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE PWC SPECIFICATIONS STS 001.
3. EACH CABLE ENTERING/LEAVING SUBSTATION IS TO HAVE A DESTINATION TAG REFER TO S2-1-8-25.
4. UNLESS SPECIFIED OTHERWISE, PACKAGE SUBSTATIONS SHALL BE SUPPLIED WITH LV PANEL INCLUDING STRIPPLE SWITCH FUSE UNITS.
5. ALL HV CABLE TERMINATIONS SHALL BE VIA 200A TYPE A LOAD-BREAK ELBOW CONNECTIONS.REFER TO DRAWING S02-1-2-21.
6. LARGEST CABLE TO BE TERMINATED TO HV SWITCHGEAR IS 95SQMM ALUMINIUM.
7. ALL HV CABLE EARTH SCREENS SHALL BE CONNECTED TO THE HV EARTH BAR.
8. REFER TO S02-2-6-35 FOR FOUNDATION DETAILS AND S02-2-5-## FOR EARTHING ARRANGEMENTS.
9. STREETLIGHTS SHALL BE SUPPLY BY 160A FUSE BASE ALONG WITH DESTINATION TAGS.
10. ALL CURRENT CARRYING BOLTED CONNECTIONS SHALL BE VIA CLASS 8.8 STAINLESS STEEL BOLTS TO THE FOLLOWING TORQUE SPECIFICATIONS
 M8: 10-15NM
 M10: 30-35NM
 M12: 35-40NM
 ALL CONNECTION SHALL USE A SPRING WASHER BETWEEN A FLAT WASHER AND THE NUT. WHERE CAPTIVE NUTS ARE USED THE SPRING WASHER SHALL BE ON THE BOLT SIDE OF THE CONNECTION.
 ALL STAINLESS STEEL BOLTS REQUIRE A COSTING OF ANTI-SEIZE BEFORE INSTALLATION. WHERE MULTIPLE BOLTS ARE USED TO MAKE A CONNECTION, DO NOT APPLY FULL TORQUE TO BOLTS ON THE FIRST PASS.

REFERENCE DRAWINGS AND DOCUMENTS		NO	DESCRIPTION	DRN	DATE	CKD	APPD	DES	PWC	POWER STANDARD DRAWING			
DOCUMENT No.	DOCUMENT TITLE									SHW	NOV 17	IB	BC
		0	ISSUED FOR CONSTRUCTION	SHW	NOV 17	IB	BC	DES	PWC	SUBSTATION 75kVA 11kV SINGLE PHASE SUBSTATION GENERAL ARRANGEMENT - SHEET 3 OF 3			
								ISSUED	NOV 2017	A3	DRAWING NUMBER	S02-1-7-19_3	AMDT
								ALL DIM. IN mm					
AMENDMENTS								DRAFTING STANDARD TO A.S.1100			CAD PRODUCT - DO NOT AMEND MANUALLY		

