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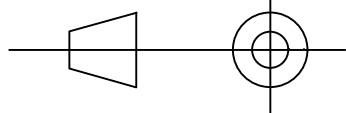
J

DRG. No.

ST15056

REV.

T



WEATHER PROOF MV SYNCHRONIZING PANEL  
WITH SF6 MOTORIZED BREAKERS

1.6 MVA  
Transformer  
11000V/400V

Outside txr, vector group DnY 11

Fuse switch

Auxiliary Power

1650kVA  
Generator

FROM EXISTING  
11kV SWITCHGEAR

TO EXISTING  
1600kVA TXR IN K1  
PLANT ROOM

CB1

CB2

CB3

CB4  
2400A  
ACB  
400V

PROVIDE PROTECTION RELAY WITH THE FOLLOWING FUNCTIONS:

- OVERLOAD
- TEMPERATURE
- SHORT CIRCUIT
- PROTECTION RELAY TO BE ABLE TO TRIP CB1&CB4 DURING FAULTY CONDITIONS

PROVIDE PROTECTION RELAY WITH THE FOLLOWING FUNCTIONS:

- OVERLOAD
- TEMPERATURE
- SHORT CIRCUIT
- BUCHHOLZ RELAY

NEUTRAL BAR

INSULATED EARTH BAR

NORMAL EARTH BAR

NOTES:

- DURING NORMAL OPERATION CB1,CB2,CB3 WILL BE CLOSED AND CB4 OPEN.
- THE TRANSFORMER WILL BE USED TO FEED THE AUXILIARY EQUIPMENT.
- DURING POWER FAILURE CB2 WILL OPEN AND THE GENERATOR WILL START ONCE THE POWER IS STABLE,CB4 WILL CLOSE AND IT WILL FEED TO THE LOAD.
- ON MAINS RETURN THE GENERATOR WILL SYNC TO MAINS AND TRANSFER THE LOAD TO MAINS BEFORE OPENING CB4.

REVISIONS

NO.	DESCRIPTION	DAT.	APPRV.
A	ISSUED FOR INFORMATION	2019.06.21	S.T
T	ISSUED FOR TENDER	10.10.2019	S.T

CABLE DESCRIPTION KEY:

1	CABLE SIZE.
2	EARTH WIRE SIZE.
3	DISTANCE/LENGTH.
4	FAULT LEVEL.

GENERAL NOTES:

- ALL FEEDER EQUIPMENT IS 3-PHASE, 4-WIRE UNLESS OTHERWISE INDICATED.
- ALL TYPE NUMBERS REFER TO ABB EQUIPMENT (or Equivalent), WHERE TYPE NUMBERS ARE NOT INDICATED OR NOT AVAILABLE, SUITABLE ALTERNATIVE ABB EQUIPMENT (or Equivalent) SHALL BE PROPOSED TO THE ENGINEER FOR APPROVAL.  
NO CLAIMS FOR ADDITIONAL COSTS IN RESPECT OF THE ABOVE SHALL BE ENTERTAINED AFTER THE TENDER.
- CABLE LENGTHS INDICATED ON THIS DRAWING ARE FOR FAULT CALCULATION PURPOSES ONLY.
- ELECTRICAL CONTRACTOR TO MEASURE ALL CABLES & BUSBARS PRIOR TO ORDERING.
- EACH DB IS TO BE FITTED WITH A WARNING LABEL AS PER SANS 10142-1.
- EACH DB IS TO BE ALSO FITTED WITH A WARNING LABEL INDICATING THAT IT HAS BEEN DESIGNED FOR CASCADING, AND THAT ONLY CIRCUIT BREAKERS OF THE SAME TYPE & SAME MANUFACTURER AS THE EXISTING SHALL BE INSTALLED IN THIS DB.
- THE DB MANUFACTURER IS TO CHECK, VERIFY & CONFIRM FAULT LEVELS OF ALL DB's WITH CONSULTANT PRIOR TO MANUFACTURING OF DB. NO CLAIMS WILL BE ENTERTAINED IN THIS REGARD.

QTY	ITEM No	PART No.	DESCRIPTION	MANUF.
MATERIAL LIST				
Studio Technology Private Bag X1 Auckland Park 2006		TITLE / TITEL		
<div><div>Studio Technology</div><div>SABC</div><div>Tel: (011) 714-9111 Fax: (011) 714-5885 SABC Copyright © A DIVISION OF THE SABC</div></div>		SABC RADIO PARK MV SYNCHRONIZING PANEL		
ENGINEERING SERVICES		DEPT: DRAWING NO. REV.		
DO NOT SCALE THIS DRG.		DRAWN	T.M	DATE 19-06-21
TOLERANCES		CHECKED		
NO DEC PLACE ±0,5 ONE DEC PLACE ±0,2		ENG.		
		APPVD.	ST	
DETAIL NO.		PART OF	WHERE USED	QTY.
SCALE		N/A		SHEET 6 OF 7