TO 400kV YARD
(SEE DRAWING 0.64/4372)

GENERATOR TRANSFORMER ✱
22/420kV
730 MVA
YNd1
ONAN/ONAF

SURGE ARRESTER

STATION INTERCONNECTOR FROM:
11kV STATION BOARD 1 FOR UNIT 1
11kV STATION BOARD 2 FOR UNIT 2

UNIT 1 11kV UNIT BOARD 1A TO 11kV UNIT BOARD 3A UNIT 3
UNIT 3 11kV UNIT BOARD 3A TO 11kV UNIT BOARD 5A UNIT 5
UNIT 2 11kV UNIT BOARD 2A TO 11kV UNIT BOARD 4A UNIT 4
UNIT 4 11kV UNIT BOARD 4A TO 11kV UNIT BOARD 6A UNIT 6

✱ 0BBT10
UNIT TRANSFORMER ✱ A
22/11,5kV
63 MVA
ONAN

EARTHING TRANSFORMER
EARTHING RESISTOR
EARTHING RESISTOR 20Ω,318A

3 x 1 PHASE SYNCHRONISING & METERING VT's

22kV ISOLATOR
22kV CIRCUIT BREAKER
SURGE ARRESTER
EARTHING SWITCH

GENERATOR
810MVA
0.9 Pf
729 MW
22kV

3 x 1 PHASE TEST & AVR CHECK VT's
3 x 1 PHASE GEN VT's

EARTHING TRANSFORMER Yd1
EARTHING RESISTOR

✱ 0BBT20
UNIT TRANSFORMER ✱ B
22/11,5kV
63 MVA
ONAN

EARTHING TRANSFORMER
EARTHING RESISTOR
EARTHING RESISTOR 20Ω,318A

✱ 1BBA 11kV UNIT BOARD ✱A

✱ 0BFU11	11/0,4kV 1600kVA Dyn 11 AN	525V UNIT FANS BOARD ✱A ✱ 1BFK
✱ 0BFT51	11/0,4kV 1600kVA Dyn 11 AN	380V UNIT ✱ AIR CONDITIONING BOARD ✱ 0BFE
✱ 0BFT41	11/0,4kV 1600kVA Dyn 11 AN	380V FUEL OIL PLANT BOARD ✱A ✱ 1BFD
✱ 0BFT31	11/0,4kV 1600kVA Dyn 11 AN	380V PRECIP.BOARD ✱A ✱ 1BFC
✱ 0BFT11	11/0,4kV 1600kVA Dyn 11 AN	380V UNIT BOARD ✱A ✱ 1BFA
✱ 0BFT13	11/0,4kV 1600kVA Dyn 11 AN	380V UNIT BOARD ✱C ✱ 3BFA
✱ 0BCT10 UNIT TRFR ✱ 11kV/6,6kV 27_MVA Dyn 11 ONAN	EARTHING RESISTOR 12Ω 318A	VARIABLE SPEED DEVICE → MS 12MW BOILER ELECTRIC FEEDPUMP A

11kV UNIT BOARD ✱B ✱ 2BBA

VARIABLE SPEED DEVICE		→ MS 12MW BOILER ELECTRIC FEEDPUMP B
VARIABLE SPEED DEVICE		→ MS 12MW BOILER ELECTRIC FEEDPUMP C
✱ 0BCT20 UNIT TRFR 11kV/6,6kV 27_MVA Dyn 11 ONAN	EARTHING RESISTOR 12Ω 318A	
✱ 0BFT12	11/0,4kV 1600kVA Dyn 11 AN	380V UNIT BOARD ✱B ✱ 2BFA
✱ 0BFT14	11/0,4kV 1600kVA Dyn 11 AN	380V UNIT BOARD ✱D ✱ 4BFA
✱ 0BFT32	11/0,4kV 1600kVA Dyn 11 AN	380V PRECIP.BOARD ✱B ✱ 2BFC
✱ 0BFT42	11/0,4kV 1600kVA Dyn 11 AN	380V FUEL OIL PLANT BOARD ✱B ✱ 2BFD
✱ 0BFT61	11/0,4kV 1600kVA Dyn 11 AN	380V UNIT ✱ FLY ASH BUNKER BOARD ✱ 0BFF
SPARE		
✱ 0BFU12	11/0,55kV 1600kVA Dyn 11 AN	525V UNIT FANS BOARD ✱B ✱ 2BFK
✱ 0BFU71	11/0,55kV 1600kVA Dyn 11 AN	380V UNIT ✱ C.W.PLANT BOARD ✱ 0BFH

✱ 1BCA 6,6kV UNIT SERVICES BOARD ✱A

SPARE		
C.W. PUMP A	1600kW	
CONDENSATE PUMP No 1	1550kW	
BOILER WATER CIRCULATING PUMP A	336,3kW	
MILL A	1850kW	
MILL B	1850kW	
MILL C	1850kW	
F.D. FAN LH	1800kW	
P.A. FAN LH	2500kW	
I.D. FAN LH	4500kW	

6,6kV UNIT SERVICES BOARD ✱B ✱ 2BCA

I.D. FAN RH	4500kW	
P.A. FAN RH	2500kW	
F.D. FAN RH	1800kW	
MILL D	1850kW	
MILL E	1850kW	
BOILER WATER CIRCULATING PUMP B	336,3kW	
BOILER WATER CIRCULATING PUMP C	336,3kW	
CONDENSATE PUMP No 2	1550kW	
C.W. PUMP B	1600kW	
C.W. PUMP C	1600kW	
SPARE		

NOTE:

1) ✱ TO BE SUBSTITUTED BY THE APPROPRIATE UNIT NUMBER.

THIS DRAWING HAS BEEN CREATED ON A C.A.D. SYSTEM. ANY AMENDMENT MUST BE EFFECTED ON THE SAME SYSTEM.
C.A.D. REF:[101,176]Q2048K000.R01

REV	AUTH	DATE	REVISION/REVISIES	BY/DEUR	CHKD/NAGES
1	C.M. RAMOS	5/9/85	ADDED: 380V UNIT C.W. PLANT BOARD, EARTHING TRFR, & RESISTOR ; 525	D. MAY	J.J.L.
	J.D. BULLOCK	4/9/85	ALPHANUMERICS AND CCT No's ADDED.		
	J.G. HATTINGH	29/8/84	REVISED : CCT #1 ON 11kV BOARD A AND CCT #2 ON 11kV BOARD B, C.W. PUMP A,B,C 1BFA,		
0			FIRST ISSUE / EERSTE UITREIKING		

2044	UNIT LV & DC SINGLE LINE
2045	STN. MV,LV & DC SINGLE LINE
2047	UNIT & STN NETWORK

REFERENCE DRAWINGS / VERWYSINGSTEKENINGE: 0.64/

INDEX REF/INDEKSVERW: W1.3 , E2.4 , E2.5

SOUTH AFRICA — ESCOM ● EVKOM

KENDAL POWER STATION

UNIT, MV ELECTRIC SINGLE LINE DIAGRAM

DRG/TEK REGISTR		
CHKD/NAGES	J.D. BULLOCK	6/3/84
DRAWN/GETEKEN	S. CERMENOCK	29/2/84
SCALE/SKAAL	A FORSYTH	FEB 1984

APPROVED: J.W. GOSLING 6/3/84 — GOEDGEKEUR: D.F. HUNT 6/3/84

0.64/2048_ REV 1

SIZE/GROOTTE A0L