

ETEL's Totalpad is designed to minimise the total cost of owning a distribution substation. Totalpad is a complete kiosk or 'package' substation, consisting of a ring main unit, transformer and optional LV fuse frame in one compact outdoor enclosure.

Installation is simple: the complete kiosk is lowered onto a concrete plinth, and the HV and 415V connections made. The ring main unit is connected to the transformers HV windings in-factory, so that no customer interconnection is required.

Totalpad offers a swift method of supplying a low cost berm substation with maximum flexibility and minimum ongoing maintenance.

An example general arrangement drawing, utilising two popular RMU brands, can be found on the reverse of this brochure.



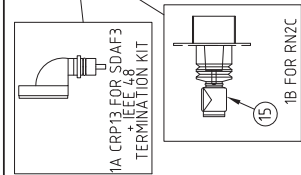
Features

- Customer specified Oil/SF6/Vacuum ring main unit
- All HV switches and brands considered
- Compact size with high performance
- Minimum installation costs
- Minimum maintenance costs
- High level of protection from internal arc
- Full automation options
- Zinc Spray Paint system available
- Standard Transformer oil or Flameproof biodegradable fluid options available

Technical Specifications

Core Type	Distributed gap wound core, core type transformers
Electrical Steel Type	Cold rolled, grain oriented, silicon steel sheets
Tank Sealing	Hermetically sealed
Oil Type	Oil filled to BS148 and AS1767
KVA sizes available	100, 150, 200, 300, 500, 750, 1000, 1250, 1500 3 Phase
HV Volts	11000, 22000, 33000
LV Volts	415 - 240 as standard (others available)
Connection	Dyn11 as standard (others available)
HV Tappings	+5% to -7.5% up to 300kVA +2.5% to -10% 500kVA & above Tapping is steps of 2.5%
Oil / Winding Rises	60 / 65°C
BIL / Power Frequency Levels	95kVpeak / 28kVrms 150kVpeak / 50kVrms
Maximum Operating Pressure	35kPA

ITEM	DESCRIPTION
1	11kV RINGMAIN UNIT, TYPE RNZC OR SDAF3
	OTHERS AVAILABLE ON REQUEST
1A	HV BUSHING CRP13 FOR SDAF3
1B	HV CABLE BOX BUSHING FOR RNZC
2	LV BUSHING 4.5V ESEA No 72 (FOR 100, 200, 300kVA)
	LV BUSHING 4.5V ESEA No 73 (FOR 500, 750, 1000kVA)
3	LV FUSE DISCONNECT (SWITCHBOARD OPTIONAL)
4	MDI AMMETERS (OPTIONAL)
5	STREET LIGHTING RIPPLE CONTROL (OPTIONAL)
6	TAP SWITCH HANDLE & LOCKING BRACKET
7	RATING PLATE / POSITIONED INSIDE LV DOOR
8	OIL LEVEL GAUGE
9	LIFTING LUG, 4-OFF REMOVABLE
10	EARTH STUD M12 STAINLESS STEEL
11	COOLING FINS (WHERE APPLICABLE)
12	HV DOOR ALLEN KEY BOLT & RUBBER PLUG
13	LOCKWOOD NIGHTLATCH (OPTIONAL EXTRA)
14	DRAIN VALVE (OPTIONAL EXTRA)
15	11kV DISCONNECTION CHAMBER C/W RUBBER INSULATION BOOTS FOR RNZC
16A	HINGED ACCESS COVER - SDAF3 UNIT ONLY
16B	ACCESS COVER - BOTH SIDES - RNZC UNIT ONLY
17	RADIATOR COVER (OPTIONAL)



SDAF3 EXTENDED HEIGHT RING MAIN UNIT	
kVA	OIL Litres
100	275
200	350
300	390
500	550
750	765
1000	690

UNTANKING MASS kg	TRANSFORMER MASS kg	SWITCHGEAR MASS kg	DIM "A" mm	DIM "B" mm
370	1180	370	115	200
550	1470	370	115	200
775	1750	370	115	200
1100	2390	370	150	150
1340	2815	370	135	250
1720	3285	370	135	250

RNZC RING MAIN UNIT	
kVA	OIL Litres
100	385
200	350
300	390
500	550
750	730
1000	690

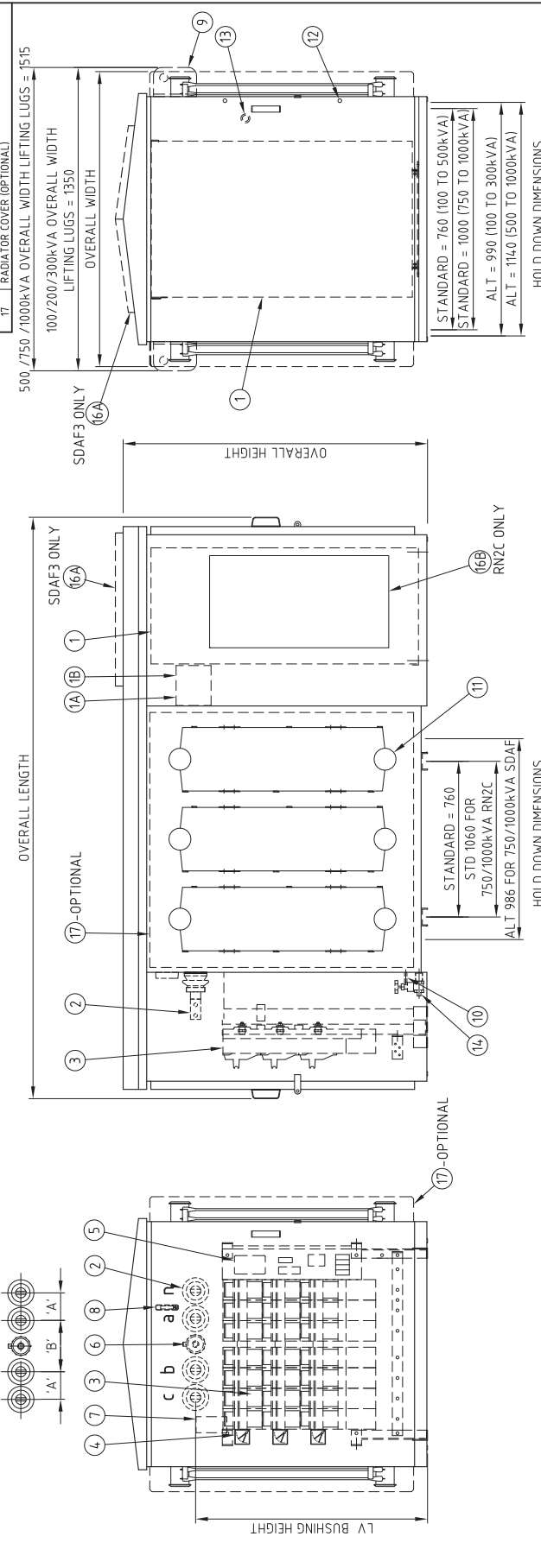
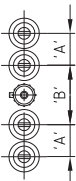
UNTANKING MASS kg	TRANSFORMER MASS kg	SWITCHGEAR MASS kg	DIM "A" mm	DIM "B" mm
400	1250	300	115	200
550	1470	300	115	200
775	1775	300	115	200
1100	2450	300	150	150
1440	3020	300	135	250
1720	3300	300	135	250

OVERALL LENGTH	OVERALL WIDTH	OVERALL HEIGHT	LV BUSHING HEIGHT	LV CUBICLE DEPTH
2290	1070	1510	1175	410
2370	1070	1510	1175	410
2490	1070	1510	1175	410
2500	1230	1510	925	410
2800	1350	1600	1135	520
2800	1470	1600	1135	520

OVERALL LENGTH	OVERALL WIDTH	OVERALL HEIGHT	LV BUSHING HEIGHT	LV CUBICLE DEPTH
2330	1070	1320	1025	410
2410	1070	1320	1025	410
2530	1070	1320	1025	410
2550	1230	1410	925	410
2860	1350	1520	1135	520
2860	1470	1520	1135	520

APPROXIMATE VALUES

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REV	DESCRIPTION	DRAWN	DATE	APPROD.	M. STOREY	DRAWN	DATE	CHECKED	SCALE	TOLERANCE
.	23 MAY 2011	B.H.H.	.	.
.	24 MAY 2011	.	.	.
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Distribution Transformers	
DRAWING No.	039.904.0641
REV	A

GENERAL ARRANGEMENT - TOTALPAD PADMOUNT PACKAGE SUBSTATION 100kVA to 1000kVA SUITS RNZC or SDAF3 RINGMAIN UNIT	
HOLD DOWN DIMENSIONS	