



**EKARAT ENGINEERING PUBLIC CO.,LTD.**  
BANGKOK THAILAND.

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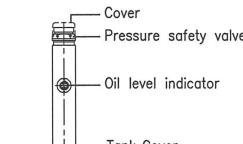
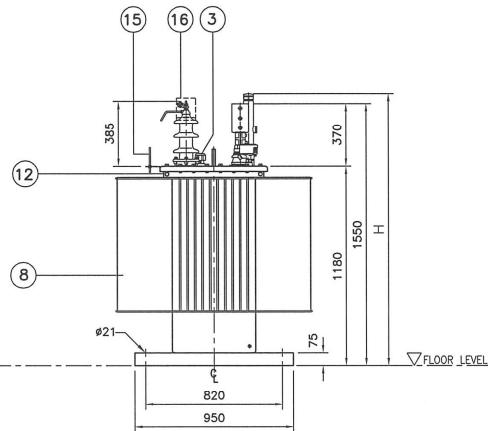
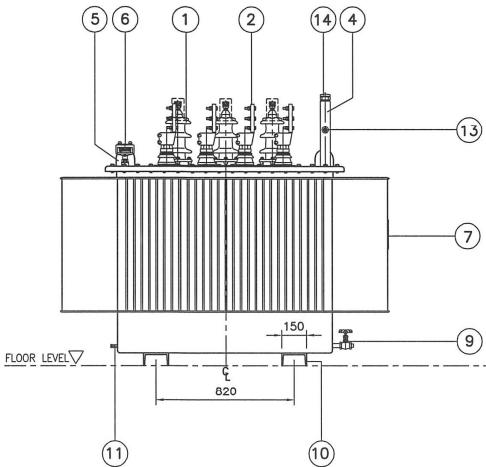
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**LIST OF ACCESSORIES**

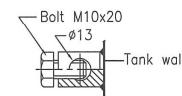
Ref. SPEC. 53412522A8

No.	DESCRIPTION	MODEL/TYPE	DWG.NO. OR CAT.NO.
1	HIGH VOLTAGE BUSHING	DT 20 Nf 250 DIN 42531	RDHVB24311
2	HV. TERMINAL CONNECTOR	35-95 sq.mm.	RDHTC10000
3	BIRD GUARD CAP	Ø115	RDBGC00001
4	LOW VOLTAGE BUSHING	DT 2000 DIN 42530,EE-STD.1T	RDLVB12002
5	LV. TERMINAL CONNECTOR	2000 A. No.15	RDLTC20214
6	OIL FILLING PIPE	D1 1/2"	RDOFP00002
7	PRESSURE SAFETY VALVE	DZ-PS-25/0.25bar	RDPSRDZPS1
8	OIL LEVEL INDICATOR	GLASS BALL (FLOAT)	RDLLG53101
9	THERMOMETER WITH CONTACTS	VIAT/122-23	RDTMMVIA01
10	TAP CHANGER	20KV/335.20/A,EM3-GM02	RDTCHEM302
11	EARTH TERMINAL	For cable 35-70 sq.mm.	RDERTM1000
12	GLOBE VALVE (Oil sampling and drain valve)	1"	RDVAV15002

	NAME	FINAL DRAWING Tr. 1000 kVA. 3 Ph. Dyn11 22000 – 400/230 V. TYPE: HERMETICALLY SEALED TANK	EFF. DATE: 09 APR 2024	
DRN. BY	I.TN 05/04/2024		S/O	
CHK. BY	P.NP 08/04/2024		CHAPTER 0	
APP. BY	K.THAWORN		DESIGN NO. 53410022A7	PAGE 1
			A 4	DWG. NO. 53410022A7
				REV. 0

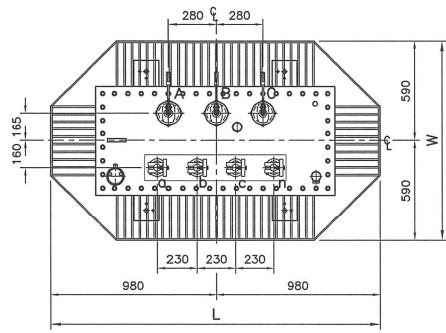


DETAIL OF OIL FILLING PIPE

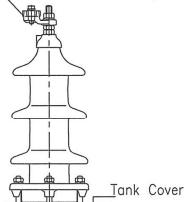


DETAIL OF EARTH TERMINAL

Suitable for Copper cable,  
Galvanized steel wire strands  
Size 35–70 mm<sup>2</sup>

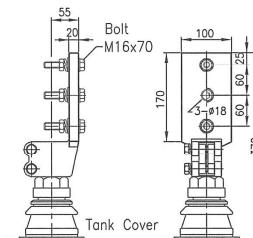


Horizontal take off clamp type  
for ø7.5–12.6 mm.  
(Size 35–95 mm<sup>2</sup>)



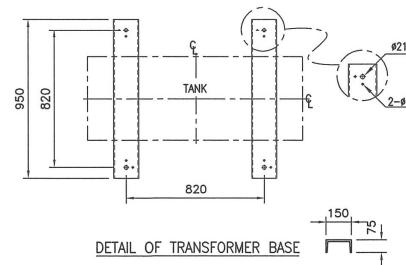
DETAIL OF HV. BUSHING TERMINAL

DT 20 Nf 250 DIN 42531 / CLAMP TYPE



DETAIL OF LV. BUSHING TERMINAL

DT 2000 DIN 42530 / BAR 2000 A. No.15



DETAIL OF TRANSFORMER BASE

No.	DESCRIPTION	Qty.
1	HIGH VOLTAGE BUSHING TERMINAL	3
2	LOW VOLTAGE BUSHING TERMINAL	4
3	TAP CHANGER	1
4	OIL FILLING PIPE	1
5	LIFTING EYES FOR LIFTING TRANSFORMER	2
6	THERMOMETER W/CONTACTS	1
7	NAMEPLATE W/CONNECTION DIAGRAM	1
8	CORRUGATED TANK	1
9	OIL SAMPLING AND DRAIN VALVE WITH PLUG	1
10	SKID BASE	2
11	EARTH TERMINAL	1
12	LUGS FOR LATCHING FOR TRANSPORTATION	4
13	OIL LEVEL INDICATOR	1
14	PRESSURE SAFETY VALVE	1
15	ARCING HORN	3
16	BIRD GUARD CAP	3

#### TECHNICAL DATA

CAPACITY	1000 KVA.
PHASE	3
FREQUENCY	50 Hz.
COOLING TYPE	ONAN
% TAPPING	±2x2.5
CONNECTION	Dyn11
PRI. VOLT.	22000 V.
PRI. AMP.	26.24 A.
SEC. VOLT.	400/230 V.
SEC. AMP.	1443.38 A.

HIGH VOLTAGE	LOW VOLTAGE
① 23100	A <sub>8</sub>
② 22550	
③ 22000	
5 Taps ④ 21450	C <sub>8</sub> B <sub>8</sub>
⑤ 20900	

#### GUARANTEED DATA

TOLERANCE	
NO LOAD LOSS	1600 W. + 15%
LOAD LOSS AT 75 °C	13500 W. + 15%
TOTAL LOSS	15100 W. + 10%
IMPEDANCE AT 75 °C	6.00 % ± 10%
OIL TEMP. RISE	60 K + 0%
POLYURETHANE/RAL 7038	WINDING TEMP. RISE
65 K + 0%	

DRN. BY	NAME	TITLE:	EFF. DATE:	
			Tr. 1000 KVA. 3 Ph. Dyn11	09 APR 2024
CHK. BY	P.NP 08/04/2024	22000 – 400/230 V.		Symbol ISO Dimension in mm.
APP. BY	K.THAWORN	TYPE: HERMETICALLY SEALED TANK	CHAPTER 1	
			SCALE 1 : 30	PAGE 1
			A <sub>3</sub>	DWG. NO. 53410022A7 REV. 0



EKARAT ENGINEERING PUBLIC COMPANY LIMITED

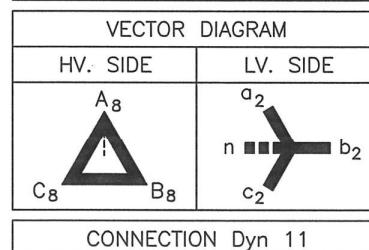
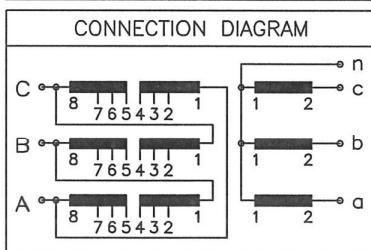
BANGKOK, THAILAND

## THREE PHASE - OIL IMMersed - OUTDOOR USED TRANSFORMER

KVA.	1000	W/O No.	
PHASE	3	FREQUENCY	50 Hz
TYPE	ONAN	CLASS	A
PRI. VOLT.	22000	SEC. VOLT.	400/230
PRI. AMP.	26.24	SEC. AMP.	1443.38
PERCENT IMP.		OIL TEMP. RISE	60 K
OIL QTY.(L)		DRAIN OIL QTY.(L)	
TOTAL WT.(kg)		LIFTING WT.(kg)	
		DATE	

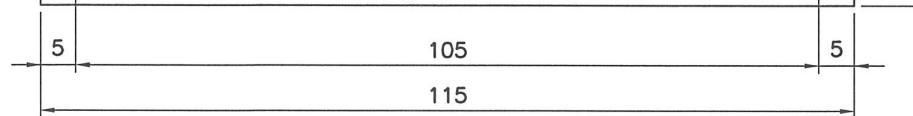
HV. SIDE		
POS.	CONNECT.	VOLTAGE
1	5 - 4	23100
2	5 - 3	22550
3	6 - 3	22000
4	6 - 2	21450
5	7 - 2	20900

LV. SIDE	
TERMINAL	VOLTAGE
a To b	
b To c	400
c To a	
a b c To n	230



ITEM CODE 53410022A7 —  
CONTRACT No. —

— SER. No. 10706055015 —



- Remark
- Percent imp., Oil Qty. and Total wt. shall be filled after test
  - Drain oil Dty. is applied for the manufacturer only.  
If the oil volume is drained after first oil filling by the manufacturer.
  - Material – Stainless steel (Thickness 0.9 mm.)

	NAME	TITLE: NAMEPLATE WITH CONNECTION DIAGRAM Dyn 11	EFF. DATE:	09 APR 2024
DRN. BY	I.TN 05/04/2024			Symbol ISO Dimension in mm. CHAPTER 2
CHK. BY	P.NP 08/04/2024		SCALE N.T.S.	PAGE 1
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