



Transformer Technical Data Sheet

EGTRA/TEC/01/02
10th RAMADAN CITY - EGYPT

Date	: Sunday, October 11, 2020	Registration No	: ORN_200116
Customer / Project Name	: Cote d'Ivoire	ABB Design Code	: TOC-160-36XDSR

General Specification

Transformer Type	3-Phase Distribution Oil Immersed Transformer		
Oil Filling	Class A Mineral Oil acc. To IEC 296		
Standard	IEC 60076		
Installation	Outdoor		
Type Of Oil Sealing	Hermetically-Sealed		
Phase	3		
Frequency [Hz]	50		
Vector group	Dyn11		
Type of cooling	ONAN		
Terminals Protection degree	IP00		
Altitude (below -) [m]	1000		
Ambient Temperature [°C]	40		
Average Oil Temperature rise [K]	60		
Average Winding Temperature rise [K]	65		
Winding	Primary	Secondary	
Rated Power [kVA]	160	160	
Rated Voltage [V]	33000	410	
Maximum systgem Voltage [kV]	36	1.1	
BIL (Basic Impulse Withstand Level) [kV]	170	-	
Power Frequency withstand Level [kV]	70	3	
Tapping (Off circuit tap changer)	+2/-2 steps X 2.5 %	-	
Connections	DELTA	WYE	
Insulation class	A	A	
Conductor Material	Copper	Copper	

Guaranteed Performance Data @75°C

No load loss [W]	590	(+15% Tolerance)
Load loss [W]	2820	(+15% Tolerance)
Total loss [W]	3410	(+10% Tolerance)
Impedance [%]	4.5	(±10% Tolerance)

Overall Dimension & Weight

Length [mm]	1269	(±10% allowance)
Width [mm]	794	(±10% allowance)
Height [mm]	1407	(±10% allowance)
Oil Weight [kg]	215	(±10% allowance)
Total Weight [kg]	835	(±10% allowance)

Accessories

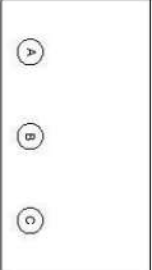
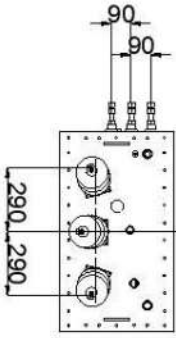
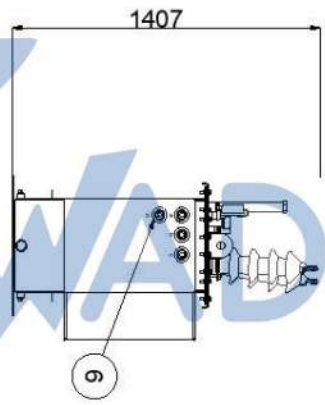
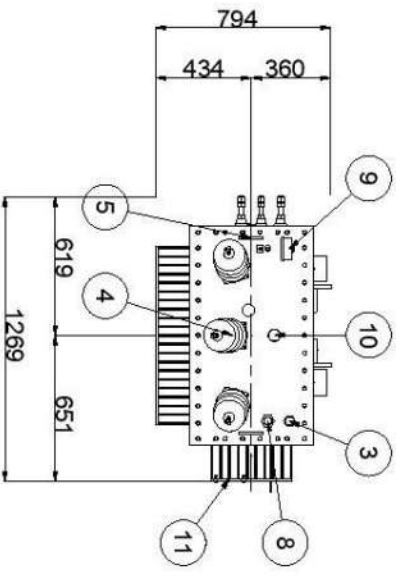
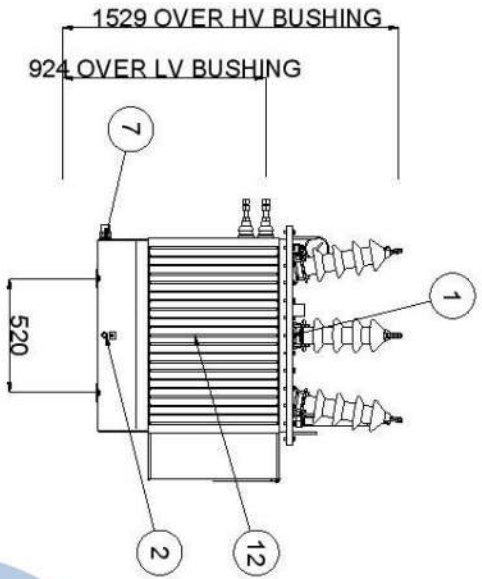
- Rating plate , Lifting Lug , Drain with sampling device , Tanking Earth , Off-Load Tap Changer	
- Bi-directional Roollers-(Diameter,C-C)	: Pole mounted / 520 mm
- High Voltage Bushing	: Porcelain Bushing - DT30NF/250A
- Low Voltage Bushing	: Porcelain Bushing - DT1/250A
- OIL Level Idicator	
- Dial Type Thermometer with max. Pointer	
- Pressure Relief Valve	

Notes

- Other accessories which are not mentioned in the above statements are not included.
- Tests: Routine tests according IEC standard.
- The tolerances for all guaranteed values are subject to IEC standard.
- If no other standards or rules are specified, transformers are manufactured according to IEC standard.

Issued by : Ashraf Mobarak

Signature :



Description	
1	- COVER
2	- EARTHING TERMINAL
3	- FILLING PIPE
4	- HV BUSHINGS DT 30NF/250A
5	- LIFTING LUG
6	- LV BUSHINGS DT 1/250A
7	- OIL DRAIN DEVICE
8	- OIL LEVEL INDICATOR
9	- OIL TEMPERATURE
10	- PRESSURE VALVE
11	- RATING PLATE
12	- TRANSFORMER TANK

160 kVA - 33000/410 Volts		VECTOR GROUP
APPROXIMATE MASSES (kg)		Dyn11
OIL MASS (kg)	OIL VOLUME (LITER)	
215	252	
ACTIVE PART MASS	TOTAL MASS	
367	835	

Prepared	ARM 9/03/2020	Responsible Department	
Approved	AEA 9/03/2020	Transfer Department	
Rev.	Scale	Mass	Based On
0.044		825.1 kg	FA000009
Title		Classification	
CUSTOMER OUTLINE		367	
TOA-160-36XFSR		835	
Document No.	1LEG000036A160	Lang.	EN
		Cont.	1
		Sheet	1

Zone	Rev.	Description	Date	Approved

