

Project No:	-	ABB Design No:	TOA-1600-24XDSQ
Project Name:	-	Refer. Quotation No:	
Customer:		Customer Spec.:	-

Rev.	Issued	Approved	Date	Description
0	Yara Tammam	Ashraf Mobarak	3/17/2022	Issue

General Specification		Oil Immersed Transformer- Distribution	
Transformer Type		IEC60076	
Standard		Outdoor	
Installation		Hermetically Sealed	
Expansion Method		Oil - Mineral - General	
Oil type		3	
Phase		50	
Frequency	[Hz]	Dyn11	
Vector group		ONAN	
Type of cooling		1000	
Altitude (below -)	[m]	A	
Insulation class		40	
Ambient Temperature (Max)	[°C]	60	
Average Oil Temperature rise	[K]	65	
Average Winding Temperature rise	[K]		
Winding		Primary	Secondary
Rated Power	[kVA]	1600	1600
Rated Voltage @ No load	[V]	15000	410
Maximum system Voltage	[kV]	17.5	1.1
BIL (Basic Impulse Withstand Level)	[kV]	95	-
Power Frequency withstand Level	[kV]	38	3
Tapping (Off circuit tap changer)		+2X2.5%,-2X2.5%	-
Connections		DELTA	WYE
Conductor Material		AL	AL
Guaranteed Performance Data	at Nominal Tap, 75@°C		
No load loss	[W]	2500	(+15% Tolerance)
Load loss	[W]	16100	(+15% Tolerance)
Total loss	[W]	18600	(+10% Tolerance)
Impedance	[%]	6	(±10% Tolerance)
Preliminarily Dimensions, approximately			
Length	[mm]	1850	(±10% allowance)
Width	[mm]	1150	(±10% allowance)
Height	[mm]	1900	(±10% allowance)
Oil Weight	[kg]	670	(±10% allowance)
Total Weight	[kg]	3500	(±10% allowance)
Accessories:		Tank: Carbon Steel	
- Rating plate , Lifting Lug , Drain Plug , Tanking Earth , Off-Load Tap Changer		Painting: Electrostatic painting	
- Bi-directional roller-(Diameter,C-C) : 160 / 820		Color: RAL7033,80-120µm , C4	
- High Voltage Bushing : Plug-In Bushing PUG-IN-24--250		Customer termination:	
- Low Voltage Bushing : Porcelain Bushing DT1/3150		Primary	Secondary
-DMCR		IP00	IP00
- Pressure Relief Valve without contact ,T10		via Cable	via Cable
	Terminals IP Type Position	Top	Top

Notes
- Other accessories which are not mentioned in the above statements are not included.
- Cable connection and termination materials are not included. (e.g. cable lug, flexible bus bar)
- 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.