



TECHNICAL DATA SHEET







Kiosk Enclosure

*images are of a similar transformer unit.





1. Technical Data

Rated power RVA 200 200 Rated voltage RV 0.415/11/22/33 0.1 kV Frequency Hz 50 50 50 50 50 50 50 5	Item 1 – Dry Type Transformer		HV Winding 1	LV Winding 1	
Frequency Hz 50 Off circuit tapping links % ±2.5%, +-5% Nill Connection Delta Star Vector group Dyn11 Insulation level (Maximum BIL/AC) kV (145-20)/(3-70) (145-20)/(3-70) Aluminium/Copper Aluminium/Copper	Rated power	kVA	200	200	
Off circuit tapping links % ±2.5%, +-5% Nil Connection Delta Star Vector group Dyn11 Insulation level (Maximum BIL/AC) kV (145-20)/(3-70) (145-20)/(3-70) Winding material Aluminium/Copper Aluminium/Copper Aluminium/Copper Type of winding Oil Type Oil Type Oil Type Standard AS 60076-11, AS 2374 Installation Indoor/Outdoor Degree of protection IP00-IP56 Type of cooling ANAF Installation altitude < 1000 a.m.s.l	Rated voltage	kV	0.415/11/22/33	0-1 kV	
Delta	Frequency	Hz	<u> </u>		
Vector group Novint Insulation level (Maximum Bil/AC) kV	Off circuit tapping links	%	±2.5%, +-5%	Nil	
Insulation level (Maximum BIL/AC)	Connection		Delta	Star	
Maximum BIL/AC KV	Vector group		Dyn	11	
Minding material Aluminium/Copper Aluminium/Copper	Insulation level	LA /	(145.20)/(2.70)	(1.45.20) /(2.70)	
Type of winding	(Maximum BIL/AC)	KV	(143-20) / (3-70)	(143-20) / (3-70)	
Standard AS 60076-11, AS 2374 Installation Indoor/Outdoor	Winding material		Aluminium/Copper	Aluminium/Copper	
Installation	Type of winding		Oil Type	Oil Type	
Degree of protection IP00-IP56 Type of cooling ANAF Installation altitude < 1000 a.m.s.l	Standard		AS 60076-11, AS 2374		
Type of coolling	Installation		Indoor/Outdoor		
Installation altitude	Degree of protection		IP00-IP56		
Climatic/environmental and fire behaviour class Te2-C2-F_(0/1)	Type of cooling		ANAF		
Indicative values Reference Temperature: 75°C Standard tolerances per AS 60076 are applicable to the following values No-load loss W 563 Load loss W 2403 Impedance % 4-6% Efficiency @ 75degC 50% /75%/100% 98.54/98.74/98.85 (MEPS COMPLIANT) @ cosφ = 1 Load Efficiency @ 75degC 50% /75%/100% 98.18/98.43/98.57 (MEPS COMPLIANT) @ cosφ = 0.8 Load Temperature Completion Class Max.ambient temperature °C 45 temperature rise °C HV winding LV winding Insulation temperature class °C 100 Verall dimensions and weights (Preliminary) Width x Depth x Height (IP00) mm 1060 x 710 x 1120 1120 Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) UNITS HV terminals 3 HV bushing LV bushing	Installation altitude		< 1000 a.m.s.l		
Indicative values	Climatic/environmental		F2 C2 F (0/1)		
Standard tolerances per AS 60076 are applicable to the following values No-load loss W 563 Load loss W 2403 Impedance % 4-6% Efficiency @ 75degC 50% /75%/100% 98.54/98.74/98.85 (MEPS COMPLIANT) @ cosφ = 1 Load Efficiency @ 75degC 50% /75%/100% 98.18/98.43/98.57 (MEPS COMPLIANT) @ cosφ = 0.8 Load Temperature Insulation Class HV winding LV winding Insulation temperature class F (155°C) / H (180°C) Temperature rise °C 100 Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) mm 1060 x 710 x 1120 Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) UNITS HV terminals 4 LV bushing	and fire behaviour class		EZ-CZ-F_ (U/1)		
No-load loss W 2403 Impedance % 4-6% Efficiency @ 75degC 50% /75%/100% 98.54/98.74/98.85 (MEPS COMPLIANT) @ cosφ = 1 Load Efficiency @ 75degC 50% /75%/100% 98.18/98.43/98.57 (MEPS COMPLIANT) @ cosφ = 0.8 Load Insulation Class Max.ambient temperature °C 45 Insulation temperature class F (155°C) / H (180°C) Temperature rise °C 100 Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) mm 1060 x 710 x 1120 Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) UNITS HV terminals 3 HV bushing LV terminals 4 LV bushing	Indicative values	dicative values Reference Temperature: 75			
Load loss W 2403 Impedance % 4-6% Efficiency @ 75degC 50% /75%/100% 98.54/98.74/98.85 (MEPS COMPLIANT) @ cosφ = 1 Load Efficiency @ 75degC 50% /75%/100% 98.18/98.43/98.57 (MEPS COMPLIANT) @ cosφ = 0.8 Load ****	Standard tolerances per	AS 60076 are applicabl	e to the following value	es	
$ \begin{array}{ c c c c } \hline \text{Impedance} & \% & 4-6\% \\ \hline Efficiency @ 75 degC & 50\% /75\% /100\% & 98.54/98.74/98.85 (MEPS COMPLIANT) \\ @ \cos \varphi = 1 & Load & \\ \hline Efficiency @ 75 degC & 50\% /75\% /100\% & 98.18/98.43/98.57 (MEPS COMPLIANT) \\ @ \cos \varphi = 0.8 & Load & \\ \hline \textbf{Insulation Class} \\ \hline Max. ambient & ^{\circ}C & 45 \\ \hline \textbf{Insulation temperature class} & HV winding & LV winding \\ \hline \textbf{Insulation temperature rise} & ^{\circ}C & 100 \\ \hline \textbf{Overall dimensions and weights (Preliminary)} \\ \hline \textbf{Width x Depth x} & mm & 1060 x 710 x 1120 \\ \hline \textbf{Mass (IP00)} & Kg & 930 \\ \hline \textbf{NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage.} \\ \hline \textbf{Accessories} \\ \hline \textbf{STANDARD (FOR EA TRANSFORMER)} & UNITS \\ \hline HV terminals & 3 & HV bushing LV bushing} \\ LV terminals & 4 & LV bushing \\ \hline \end{tabular} $	No-load loss	W	563		
	Load loss	W	2403		
@ cosφ = 1 Load Efficiency @ 75degC 50% /75%/100% 98.18/98.43/98.57 (MEPS COMPLIANT) @ cosφ = 0.8 Load Insulation Class Max.ambient temperature temperature class °C 45 Insulation temperature class °C 100 Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) mm 1060 x 710 x 1120 Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) UNITS HV terminals 3 HV bushing LV terminals 4 LV bushing	Impedance	%	4-6%		
		50% /75%/100%	98.54/98.74/98.85 (MEPS COMPLIANT)		
Insulation Class Max.ambient temperature °C 45 Insulation temperature class HV winding LV winding Temperature rise °C 100 Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) mm 1060 x 710 x 1120 Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) UNITS HV terminals 3 HV bushing LV terminals 4 LV bushing	$ \cos \varphi = 1 $	Load			
Insulation Class Max.ambient temperature °C 45 Insulation temperature class F (155°C) / H (180°C) Temperature rise °C 100 Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) mm 1060 x 710 x 1120 Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) UNITS HV terminals 3 HV bushing LV terminals 4 LV bushing	Efficiency @ 75degC	50% /75%/100%	98.18/98.43/98.57 (MEPS COMPLIANT)		
Max.ambient temperature°C 45 Insulation temperature classHV windingLV windingTemperature rise°C 100 Overall dimensions and weights (Preliminary)Width x Depth x Height (IP00)mm $1060 \times 710 \times 1120$ Mass (IP00)Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage.AccessoriesSTANDARD (FOR EA TRANSFORMER)UNITSHV terminals3HV bushingLV terminals4LV bushing	$@\cos\varphi = 0.8$	Load			
temperature MV winding LV winding					
Insulation temperature class Temperature rise OC Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) Mass (IP00) Kg NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals UNITS HV terminals 4 LV bushing LV terminals	Max.ambient	°C	45		
Insulation temperature class Temperature rise °C 100 Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals 3 HV bushing LV terminals 4 LV bushing	temperature				
Class Temperature rise C C 100 Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals J HV bushing LV terminals 4 LV bushing			HV winding	LV winding	
Temperature rise C Temperature rise C Temperature rise C Too Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) Mass (IP00) Kg P30 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals Too 100 1060 x 710 x 1120 HV bushing the properties of the properties of the purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals Tubel to the properties of the properties of the purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV bushing LV terminals LV terminals	Insulation temperature		F (155°C) / H (180°C)		
Overall dimensions and weights (Preliminary) Width x Depth x Height (IP00) Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals UNITS HV terminals 4 LV bushing LV terminals			(100 0)		
Width x Depth x Height (IP00) Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals LV terminals 4 LV bushing	Temperature rise	$^{\circ}\! \mathbb{C}$	100		
Width x Depth x Height (IP00)mm1060 x 710 x 1120Mass (IP00)Kg930NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage.AccessoriesSTANDARD (FOR EA TRANSFORMER)UNITSHV terminals3HV bushingLV terminals4LV bushing					
Height (IP00) Mass (IP00) Kg 930 NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals UNITS HV bushing LV terminals 4 LV bushing				0 1120	
Mass (IP00)Kg930NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage.AccessoriesSTANDARD (FOR EA TRANSFORMER)UNITSHV terminals3HV bushingLV terminals4LV bushing	_	mm	1060 x 710 x 1120		
NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals J HV bushing LV terminals 4 LV bushing		Kg	930		
purchase order and completion of engineering stage. Accessories STANDARD (FOR EA TRANSFORMER) HV terminals LV terminals 4 LV bushing					
Accessories STANDARD (FOR EA TRANSFORMER) HV terminals LV terminals 4 LV bushing LV bushing					
STANDARD (FOR EA TRANSFORMER)UNITSHV terminals3HV bushingLV terminals4LV bushing					
HV terminals3HV bushingLV terminals4LV bushing		TRANSFORMER)	UNITS		
LV terminals 4 LV bushing	·	,		HV bushing	
C	LV terminals			· ·	
	Rating plate		1	Stainless Steel	





Routine tests (Included)				
Winding resistance	Yes			
Ratio and phase relationship	Yes			
Impedance voltage, short circuit impedance	Yes			
and load loss				
No load loss	Yes			
Induced over voltage withstand	Yes			
Separate source voltage withstand	Yes			
Insulation resistance	Yes			
Type tests (Optional – additional cost)				
Temperature rise test	Yes			
Impulse test	Yes			
Noise pressure level test	Yes			

Drawings issued 1 week after the order.

Project timeline issued 2 weeks after order.

Inspection and Test Plan, Operation and Maintenance manuals submitted 4 weeks prior to delivery.