



## **TECHNICAL DATA SHEET**





**Kiosk Enclosure** 

\*images are of a similar transformer unit.





## 1. Technical Data

Rated powerkVA50005000Rated voltagekV0.415/11/22/330.1 kVFrequencyHz50Off circuit tapping links% $\pm 2.5\%, +.5\%$ NilConnectionDeltaStarVector groupDyn11Insulation levelkV(145-20)/(3-70)(145-20)/(3-70)(Maximum BIL/AC)kV(145-20)/(3-70)(145-20)/(3-70)Winding materialAluminium/CopperAluminium/CopperType of windingOil TypeOil TypeStandardAS 60076-11, AS 2374InstallationIndoor/OutdoorDegree of protectionIP00-IP56Type of coolingONANInstallation altitude< 1000 a.m.s.lClimatic/environmental and fire behaviour class $E^2-C2+F_0(1)$ Indicative valuesKWStandard tolerances per AS 60076 are applicable to the following valuesNo-load lossWStandard tolerances per AS 60076 are applicable to the following valuesLoadSEfficiency @ 75degC50% /75%/100%ge.csp = 0.8LoadInsulation ClassKMax.ambient temperatureCWidth x Depth x Height (IP00)MmMax.ambient temperatureCVidth x Depth x Height (IP00)SMas.ambient temperature rise°CMax.ambient temperature riseCMax.ambient temperature rise2900 x 2500 x 2800Mas.ambient temperature riseCMax.ambient	ltem 1 – Dry Ty	pe Transformer	HV Winding 1	LV Winding 1
Rated voltagekV $0.415/11/22/33$ $0-1 kV$ FrequencyHzS0Off circuit tapping links% $\pm 2.5\%, \pm -5\%$ NilConnectionDeltaStarVector groupDyn11Insulation levelkV $(145-20)/(3-70)$ $(145-20)/(3-70)$ (Maximum BIL/AC)kV $(145-20)/(3-70)$ Aluminium/CopperWinding materialAluminium/CopperAluminium/CopperType of windingOil TypeOil TypeStandardAS 60076-11, AS 2374InstallationIndoor/OutdoorDegree of protectionIPO0-IP56Type of colingONANInstallation altitude< 1000 a.m.s.l			-	
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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 Oll Type   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 coling ONAN   Installation altitude < 1000 a.m.s.1	-		· ·	
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Vector group Dyn11   Insulation level (Maximum BIL/AC) kV (145-20)/(3-70) (145-20)/(3-70)   Winding material Aluminium/Copper Aluminium/Copper   Type of winding Oil Type Oil Type   Standard As 60076-11, AS 2374   Installation Indoor/Outdoor   Degree of protection PP00-IP55   Type of cooling ONAN   Installation altitude <1000 a.m.s.l				
Insulation level (Maximum BIL/AC)kv $(145-20)/(3-70)$ $(145-20)/(3-70)$ Winding materialAluminium/CopperAluminium/CopperType of windingOil TypeOil TypeStandardAS 60076-11, AS 2374InstallationIndoor/OutdoorDegree of protectionIP00-IP56Type of coolingONANInstallation altitude< 1000 a.m.s.l				
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Type of winding Oil Type Oil Type   Standard AS 60076-11, AS 2374   Installation Indoor/Outdoor   Degree of protection IP00-IP56   Type of cooling ONAN   Installation altitude <1000 a.m.s.l	(Maximum BIL/AC)	kV	(145-20) <b>/</b> (3-70)	(145-20) <b>/</b> (3-70)
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InstallationIndoor/OutdoorDegree of protectionIP00-IP56Type of coolingONANInstallation altitude< 1000 a.m.s.l	Type of winding		Oil Type	Oil Type
Degree of protection   IP00-IP56     Type of cooling   ONAN     Installation altitude   < 1000 a.m.s.l	Standard		AS 60076-1	1, AS 2374
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Type of coolingONANInstallation altitude< 1000 a.m.s.l	Degree of protection			
Installation altitude< 1000 a.m.s.lClimatic/environmental and fire behaviour class $E2-C2-F_{-}(0/1)$ Indicative valuesReference Temperature: 75°CStandard tolerances per AS 60076 are applicable to the following valuesNo-load lossNo-load lossWLoad lossWImpedance%99.24/99.36/99.46 (MEPS COMPLIANT) $@ \cos \varphi = 1$ LoadEfficiency @ 75degC50% /75%/100%99.24/99.36/99.46 (MEPS COMPLIANT) $@ \cos \varphi = 0.8$ LoadEfficiency @ 75degC50% /75%/100%98.97/99.21/99.32 (MEPS COMPLIANT) $@ \cos \varphi = 0.8$ LoadInsulation ClassVMax.ambient emperatureC45ImperatureC0HV windingInsulation temperature classATemperature rise°C100Verial dimensions and weights (Preliminary)Width x Depth x Height (IP00)mmMass (IP00)KgMass (IP00)Kg9800NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage.AccessoriesSTANDARD (FOR EA TRANSFORMER)UNITSHV terminals3LV terminals4LV bushingLV terminals4LV bushing	Type of cooling			
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HV terminals3HV bushingLV terminals4LV bushing		TRANSFORMER)	UNITS	
LV terminals 4 LV bushing	HV terminals			HV bushing
				- V
	Rating plate		1	Stainless Steel





Radiator	Yes			
Oil Temperature Thermometer	Yes			
Pressure Relief Valve	Yes			
Oil Level Indicator	Yes			
Dain & Filling Valve, Earth Terminal	Yes			
Lifting Lugs	Yes			
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.