



# TorTech

30 Years as Australia's transformer specialist



## TECHNICAL DATA SHEET



**Kiosk Enclosure**

**\*images are of a similar transformer unit.**



## 1. Technical Data

| Item 1 – Dry Type Transformer  |                       | HV Winding 1                       | LV Winding 1     |
|--|-----------------------|------------------------------------|------------------|
| Rated power  | kVA                   | 1250                               | 1250             |
| Rated voltage  | kV                    | 0.415/11/22/33                     | 0-1 kV           |
| Frequency  | Hz                    | 50                                 |                  |
| Off circuit tapping links  | %                     | ±2.5%, +5%                         | Nil              |
| Connection   |                       | Delta                              | Star             |
| Vector group   |                       | Dyn11                              |                  |
| Insulation level<br>(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   |                       | IP00-IP56                          |                  |
| Type of cooling  |                       | ONAN                               |                  |
| Installation altitude  |                       | < 1000 a.m.s.l                     |                  |
| Climatic/environmental<br>and fire behaviour class   |                       | E2-C2-F_ (0/1)                     |                  |
| <b>Indicative values</b>   |                       | <b>Reference Temperature: 75°C</b> |                  |
| Standard tolerances per AS 60076 are applicable to the following values  |                       |                                    |                  |
| No-load loss   | W                     | 1750                               |                  |
| Load loss  | W                     | 12420                              |                  |
| Impedance  | %                     | 4-6%                               |                  |
| Efficiency @ 75degC<br>@ cosφ = 1  | 50% /75%/100%<br>Load | 98.88/99.08/99.23 (MEPS COMPLIANT) |                  |
| Efficiency @ 75degC<br>@ cosφ = 0.8  | 50% /75%/100%<br>Load | 98.60/98.85/99.04 (MEPS COMPLIANT) |                  |
| <b>Insulation Class</b>  |                       |                                    |                  |
| Max.ambient<br>temperature   | °C                    | 45                                 |                  |
|  |                       | HV winding                         | LV winding       |
| Insulation temperature<br>class  |                       | A                                  |                  |
| Temperature rise   | °C                    | 100                                |                  |
| <b>Overall dimensions and weights (Preliminary)</b>  |                       |                                    |                  |
| Width x Depth x<br>Height (IP00)   | mm                    | 2000 x 1350 x 1720                 |                  |
| Mass (IP00)  | Kg                    | 3100                               |                  |
| NOTE: losses dimensions and weights are indicative, to be confirmed following receipt of purchase order and completion of engineering stage. |                       |                                    |                  |
| <b>Accessories</b>   |                       |                                    |                  |
| <b>STANDARD (FOR EA TRANSFORMER)</b>   |                       | <b>UNITS</b>                       |                  |
| HV terminals   |                       | 3                                  | HV bushing       |
| LV terminals   |                       | 4                                  | LV bushing       |
| Rating plate   |                       | 1                                  | Stainless Steel  |



|  |     |  |
|--|-----|--|
| Radiator   | Yes |  |
| Oil Temperature Thermometer                              | Yes |  |
| Pressure Relief Valve                                    | Yes |  |
| Oil Level Indicator                                      | Yes |  |
| Drain & Filling Valve, Earth Terminal                    | Yes |  |
| Lifting Lugs   | Yes |  |
| <b>Routine tests (Included)</b>                          |     |  |
| <b>Winding resistance</b>                                | Yes |  |
| Ratio and phase relationship                             | Yes |  |
| Impedance voltage, short circuit impedance and load loss | Yes |  |
| No load loss   | Yes |  |
| Induced over voltage withstand                           | Yes |  |
| Separate source voltage withstand                        | Yes |  |
| Insulation resistance                                    | Yes |  |
| <b>Type tests (Optional – additional cost)</b>           |     |  |
| 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.