



Accreditation No. 179

Accredited for compliance with ISO/IEC 17025 - Calibration  
The results of the tests, calibrations and/or measurements included  
in this document are traceable to Australian/national standards.  
Reference equipment has been calibrated by the National  
Measurement Institute or NATA Accredited Laboratories.  
This document shall not be reproduced, except in full.

### TEST REPORT ON An Isolating Transformer Reference No: 41382

Report Number: 179/20/4253N

Report Date: 24 September 2020

Calibrated by:

Lech Bartnik  
Telephone:

*J. Bartnik*  
08 8292 0172

Checked by:

Lech Bartnik  
Authorised Signatory

*J. Bartnik*

Page: 1 of 3

W/O: 20200835e

Doc Code: TAD6kVA  
Authorised by: K.Vu

Contact:

Street Address:

Postal Address:

Telephone:

Calibration and Testing Services

41-55 Barnes Avenue, Marleston SA 5033

GPO Box 77, Adelaide SA 5001

(08) 8292 0166

**CLIENT DETAILS**

Reference: 76/071018  
Name: Middendorp Electric Co Pty Ltd  
Address: 12 Susan Street, Hindmarsh SA 5007  
Attention: Scott Quaini

**ITEM DETAILS**

Date Received: 7 September 2020  
Manufacturer: T.A.D Transformers Pty Ltd  
Model: 6kVA Isolation Transformer.

**TEST DETAILS**

Work Order: 20200835e  
Date of Test: 22 September 2020  
Test site: Enerven Marleston  
Conditions of Test: 20°C ±1°C.  
50Hz essentially sinusoidal input unless specified otherwise.  
Reference Equipment: Power Meter; C3UF20004E  
Results of Tests: Refer to following pages.  
Uncertainty of Measurement: Voltage: ±(0.1%rdg +1dgt)  
Current: ±(0.2%rdg +1dgt) up to 1kHz  
Power Factor: ±0.005  
Power: ±(0.5%rdg/cosφ +1dgt) 1Ph-1W  
Reactive Power: ±(1.0%rdg/sinφ +1dgt) 1Ph-1W  
Temperature\*: ±0.5C  
Estimated for 95% confidence.

**Uncertainty**

The stated uncertainties have been estimated for 95% confidence limits. Unless stated otherwise in the report a coverage factor of k=2 has been used.

The uncertainties apply at the time of measurement and at the stated 'Conditions of Test'. They do not consider drift after the calibration date nor do they take into account the environment and the conditions in which the instrument may be used.

---

\*Note: Temperature readings are not NATA endorsed.

**1.No Load Tests**

Primary Supply Voltage [V]	242.78
Secondary Output Voltage [V]	253.90
Primary Input Current [A]	0.829
Power [kW]	0.066
Reactive Power [kVAR]	0.194
Apparent Power [kVA]	0.205

**2.Rated Power Test, duration 2hrs, PF=1.0**

Parameter	@Start	@End
Time	4:06PM	6:07PM
Primary Supply Voltage [V]	239.45	238.46
Primary Input Current [A]	25.239	25.278
Primary Power [kW]	6.033	6.022
Primary Reactive Power [kVAR]	0.308	0.296
<b>Primary Apparent Power [kVA]</b>	<b>6.042</b>	<b>6.028</b>
Primary Power Factor	0.9986	0.9988
Secondary Output Voltage [V]	246.38	244.98
Secondary Output Current [A]	23.881	23.917
Secondary Power [kW]	5.882	5.858
Secondary Reactive Power [kVAR]	0.056	0.051
Secondary Apparent Power [kVA]	5.884	5.859
Secondary Power Factor	1.0000	1.0000
Primary Winding Temperature [°C]	21.8	45.2
Secondary Winding Temperature [°C]	21.9	45.8

**3.Rated Power Test, duration 2hrs, PF=0.8**

Parameter	@Start	@End
Time	9:27AM	11:28AM
Primary Supply Voltage [V]	240.74	242.40
Primary Input Current [A]	25.148	25.083
Primary Power [kW]	4.968	5.037
Primary Reactive Power [kVAR]	3.458	3.404
<b>Primary Apparent Power [kVA]</b>	<b>6.054</b>	<b>6.082</b>
Primary Power Factor	0.8209	0.8287
Secondary Output Voltage [V]	246.88	248.44
Secondary Output Current [A]	24.003	24.067
Secondary Power [kW]	4.738	4.784
Secondary Reactive Power [kVAR]	3.571	3.585
Secondary Apparent Power [kVA]	5.926	5.979
Secondary Power Factor	0.7995	0.8003
Primary Winding Temperature [°C]	22.1	42.5
Secondary Winding Temperature [°C]	22.2	43.4