

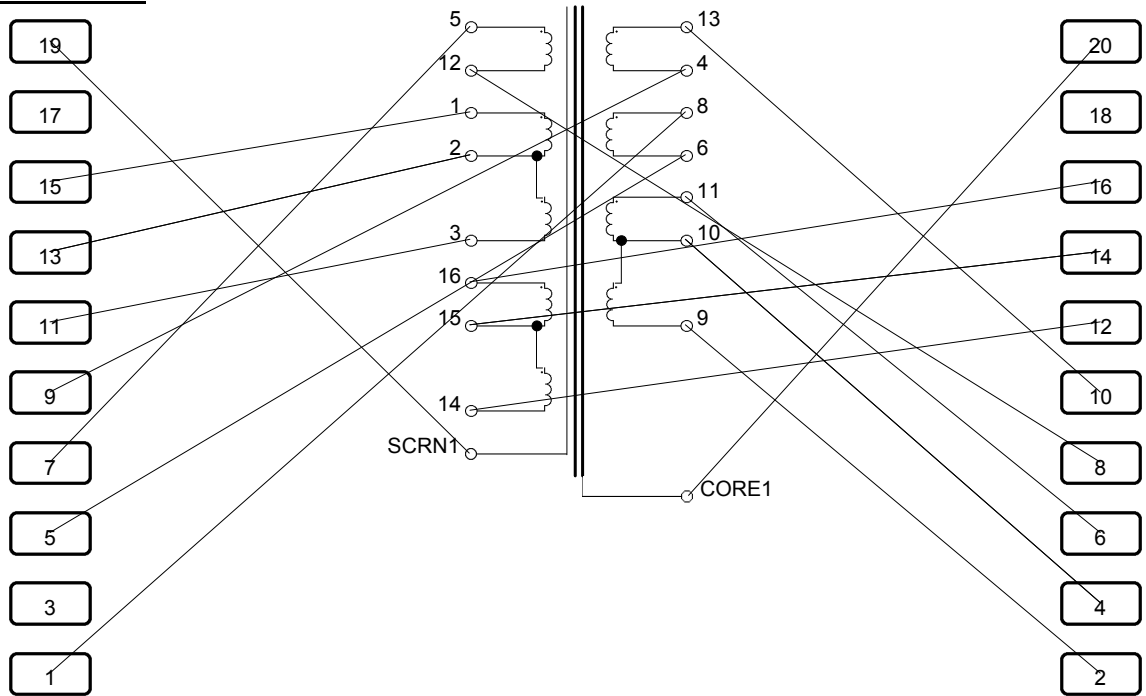
Part Number: 31-067-0-01A ISS 11  
Fixture ID: 91-189 AND 2X78-028

02 Mar 2015 14:59  
Page 1 of 7

Voltech AT Series Test Program Editor v3.30.21

Filename: 31-067-0-01A ISS 11.atp

Schematic



**Options**

Results Printing:	Full Report
Operator Numbering:	Off
Batch Numbering:	Off
Serial Numbering:	Off
Send Results to Server:	On
Send Retry Results to Server:	Off
Stop On Fail:	On
Date and Time on Reports:	On
AQL Number of Parts:	Off
AQL Percentage of Parts:	Off
External Source:	None
Display text on AT:	Off

screen to node 19  
core wire to node 20  
use 78-028 x 2

**Listing**

**1. Continuity**

Maximum Continuity Resistance: 10.000 kOhms

**2. Winding Resistance**

Integration: Medium	
High Terminal: 13	Low Terminal: 4
User Offset: 0.0000 Ohms	
Minimum Value: 10.000 mOhms	Maximum Value: 60.000 mOhms

**3. Winding Resistance**

Integration: Medium	
High Terminal: 12	Low Terminal: 5
User Offset: 0.0000 Ohms	
Minimum Value: 100.00 mOhms	Maximum Value: 200.00 mOhms

**4. Winding Resistance**

Integration: Medium	
High Terminal: 3	Low Terminal: 2
User Offset: 0.0000 Ohms	
Minimum Value: 200.00 mOhms	Maximum Value: 300.00 mOhms

**5. Winding Resistance**

Integration: Medium	
High Terminal: 2	Low Terminal: 1
User Offset: 0.0000 Ohms	
Minimum Value: 200.00 mOhms	Maximum Value: 300.00 mOhms

**6. Winding Resistance**

Integration: Medium	
High Terminal: 14	Low Terminal: 15
User Offset: 0.0000 Ohms	
Minimum Value: 60.000 mOhms	Maximum Value: 110.00 mOhms

Part Number: 31-067-0-01A ISS 11  
Fixture ID: 91-189 AND 2X78-028

02 Mar 2015 14:59  
Page 3 of 7

Voltech AT Series Test Program Editor v3.30.21

Filename: 31-067-0-01A ISS 11.atp

**7. Winding Resistance**

Integration: Medium  
High Terminal: 15 Low Terminal: 16  
User Offset: 0.0000 Ohms  
Minimum Value: 200.00 mOhms Maximum Value: 400.00 mOhms

**8. Winding Resistance**

Integration: Medium  
High Terminal: 11 Low Terminal: 10  
User Offset: 0.0000 Ohms  
Minimum Value: 5.5000 Ohms Maximum Value: 7.0000 Ohms

**9. Winding Resistance**

Integration: Medium  
High Terminal: 10 Low Terminal: 9  
User Offset: 0.0000 Ohms  
Minimum Value: 5.5000 Ohms Maximum Value: 7.5000 Ohms

**10. Inductance (Series Circuit)**

Test Voltage: 100.00 mV  
Test Frequency: 1.0000 kHz  
Integration: Medium  
High Terminal: 6 Low Terminal: 8  
User Offset: 0.0000 H  
Minimum Value: 1.6000 mH Maximum Value: 2.0000 mH

**11. Turns Ratio**

Test Voltage: 1.0000 V  
Test Frequency: 10.000 kHz  
Integration: Medium  
Terminals:  
Energised High: 6 Energised Low: 8  
Primary High: 6 Primary Low: 8  
Secondary High: 13 Secondary Low: 4  
User Offset: 0.0000  
Turns Ratio: 52:5  
Minimum Error: -03.00% Maximum Error: 03.00%  
Polarity Test: Positive

**12. Turns Ratio**

Test Voltage: 1.0000 V  
Test Frequency: 10.000 kHz  
Integration: Medium  
Terminals:  
Energised High: 6 Energised Low: 8  
Primary High: 11 Primary Low: 10  
Secondary High: 13 Secondary Low: 4  
User Offset: 0.0000  
Turns Ratio: 174:5  
Minimum Error: -03.00% Maximum Error: 03.00%  
Polarity Test: Positive

>>>

Part Number: 31-067-0-01A ISS 11  
Fixture ID: 91-189 AND 2X78-028

02 Mar 2015 14:59

Page 4 of 7

Voltech AT Series Test Program Editor v3.30.21

Filename: 31-067-0-01A ISS 11.atp

### 13. Turns Ratio

Test Voltage: 1.0000 V  
Test Frequency: 10.000 kHz  
Integration: Medium  
Terminals:  
    Energised High: 6  
    Primary High: 10  
    Secondary High: 13  
User Offset: 0.0000  
Turns Ratio: 174:5  
Minimum Error: -03.00%  
Polarity Test: Positive

Energised Low: 8
Primary Low: 9
Secondary Low: 4

Maximum Error: 03.00%

### 14. Turns Ratio

Test Voltage: 1.0000 V  
Test Frequency: 10.000 kHz  
Integration: Medium  
Terminals:  
    Energised High: 6  
    Primary High: 12  
    Secondary High: 13  
User Offset: 0.0000  
Turns Ratio: 11:5  
Minimum Error: -05.00%  
Polarity Test: Positive

Energised Low: 8
Primary Low: 5
Secondary Low: 4

Maximum Error: 05.00%

### 15. Turns Ratio

Test Voltage: 1.0000 V  
Test Frequency: 10.000 kHz  
Integration: Medium  
Terminals:  
    Energised High: 6  
    Primary High: 2  
    Secondary High: 13  
User Offset: 0.0000  
Turns Ratio: 17:5  
Minimum Error: -02.00%  
Polarity Test: Positive

Energised Low: 8
Primary Low: 1
Secondary Low: 4

Maximum Error: 02.00%

### 16. Turns Ratio

Test Voltage: 1.0000 V  
Test Frequency: 10.000 kHz  
Integration: Medium  
Terminals:  
    Energised High: 6  
    Primary High: 15  
    Secondary High: 13  
User Offset: 0.0000  
Turns Ratio: 16:5  
Minimum Error: -05.00%  
Polarity Test: Positive

Energised Low: 8
Primary Low: 16
Secondary Low: 4

Maximum Error: 05.00%

Part Number: 31-067-0-01A ISS 11  
Fixture ID: 91-189 AND 2X78-028

02 Mar 2015 14:59

Page 5 of 7

Voltech AT Series Test Program Editor v3.30.21

Filename: 31-067-0-01A ISS 11.atp

### 17. Turns Ratio

Test Voltage: 1.0000 V  
Test Frequency: 10.000 kHz  
Integration: Medium  
Terminals:  
Energised High: 6                      Energised Low: 8  
Primary High: 3                        Primary Low: 2  
Secondary High: 13                     Secondary Low: 4  
User Offset: 0.0000  
Turns Ratio: 17:5  
Minimum Error: -05.00%                Maximum Error: 05.00%  
Polarity Test: Positive

### 18. Turns Ratio

Test Voltage: 1.0000 V  
Test Frequency: 10.000 kHz  
Integration: Medium  
Terminals:  
Energised High: 6                      Energised Low: 8  
Primary High: 14                       Primary Low: 15  
Secondary High: 13                     Secondary Low: 4  
User Offset: 0.0000  
Turns Ratio: 16:5  
Minimum Error: -05.00%                Maximum Error: 05.00%  
Polarity Test: Positive

### 19. Stress Test - Surge

Test Voltage: 1.5000 kV  
Test Impulses: 10  
Test Inductance: 22.000 mH  
High Terminal: 11                      Low Terminal: 10  
User Offset: 0.0000 Vs  
Minimum Area: 100.00 mVs

### 20. Insulation Resistance

Test Voltage: 500.00 V  
Integration: Medium  
Terminals:  
High Terminals:                        Low Terminals:  
16      15      14      8                      5      12      1      2  
6      11      10      9                     3      13      4  
User Offset: 0.0000 Ohms  
Minimum Resistance: 100.00 MOhms

### 21. Insulation Resistance

Test Voltage: 500.00 V  
Integration: Medium  
Terminals:  
High Terminals:                        Low Terminals:  
1      2      3      8                     5      12      16      15  
6      11      10      9                     14      13      4  
User Offset: 0.0000 Ohms  
Minimum Resistance: 100.00 MOhms

>>>

Part Number: 31-067-0-01A ISS 11  
Fixture ID: 91-189 AND 2X78-028

02 Mar 2015 14:59  
Page 6 of 7

Voltech AT Series Test Program Editor v3.30.21

Filename: 31-067-0-01A ISS 11.atp

**22. Insulation Resistance**

Test Voltage: 500.00 V

Integration: Medium

Terminals:

High Terminals:

5 12 16 15

14 8 6

Low Terminals:

1 2 3 13

4 11 10 9

User Offset: 0.0000 Ohms

Minimum Resistance: 100.00 MOhms

**23. Insulation Resistance**

Test Voltage: 500.00 V

Integration: Medium

Terminals:

High Terminals:

SCRN1 CORE1

Low Terminals:

5 12 1 2

3 16 15 14

13 4 8 6

11 10 9

User Offset: 0.0000 Ohms

Minimum Resistance: 100.00 MOhms

**24. High Potential AC**

Test Voltage: 1.5000 kV

Test Frequency: 60.000 Hz

Ramp Up Time: 200.00 ms

Dwell Time: 1.0000 s

User Offset: 0.0000 A

Terminals:

High Terminals:

10

Low Terminals:

14

Maximum Current: 20.000 mA

**25. High Potential AC**

Test Voltage: 3.0000 kV

Test Frequency: 60.000 Hz

Ramp Up Time: 200.00 ms

Dwell Time: 5.0000 s

User Offset: 0.0000 A

Terminals:

High Terminals:

5 12 1 2

3 16 15 14

13 4 8 6

11 10 9

Low Terminals:

SCRN1

Maximum Current: 20.000 mA

Part Number: 31-067-0-01A ISS 11  
Fixture ID: 91-189 AND 2X78-028

02 Mar 2015 14:59  
Page 7 of 7

Voltech AT Series Test Program Editor v3.30.21

Filename: 31-067-0-01A ISS 11.atp

**26. High Potential AC**

Test Voltage: 3.0000 kV  
Test Frequency: 60.000 Hz  
Ramp Up Time: 200.00 ms  
Dwell Time: 5.0000 s  
User Offset: 0.0000 A

Terminals:

High Terminals:  
8        6

Low Terminals:  
5        12        1        2  
3        16        15        14  
13       4        11        10  
9

Maximum Current: 20.000 mA