

The Complete Analysis of a Coil-Wrapped, Surge Arrester Shorted, Konzen Circuit Simulation

How does it all add up?



VINYASI

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The complete analysis of:

An Alternative Method of Regulating the Escalation of a Konzen Surge by Wrapping a Coil around its Surge Arrester ...

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I always suspected that at least one of the purposes behind Tesla’s use of wire — when he went to an electronics shop immediately upon arriving in Buffalo, New York, to conduct his private demonstrat...

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The Raw Data

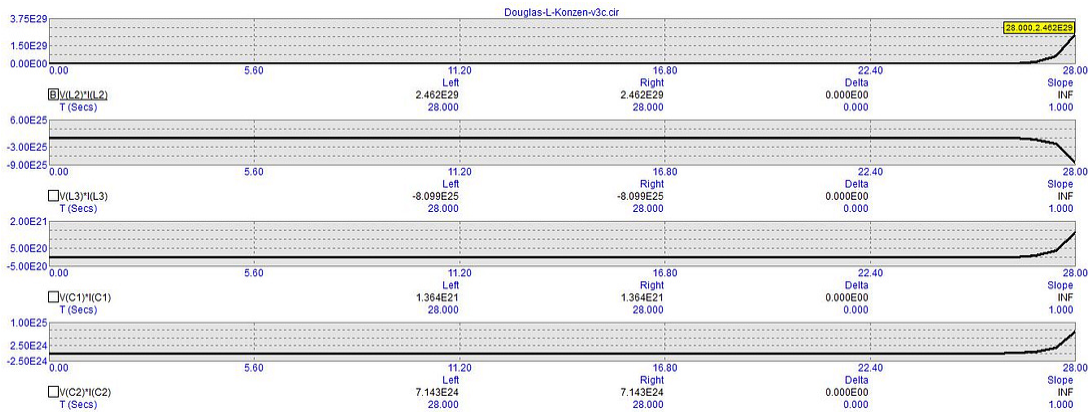


Fig. # 1

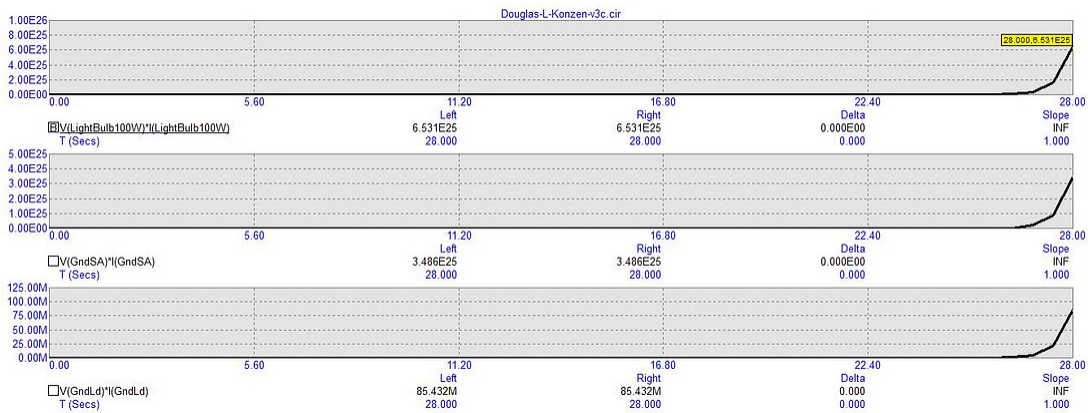


Fig. #2

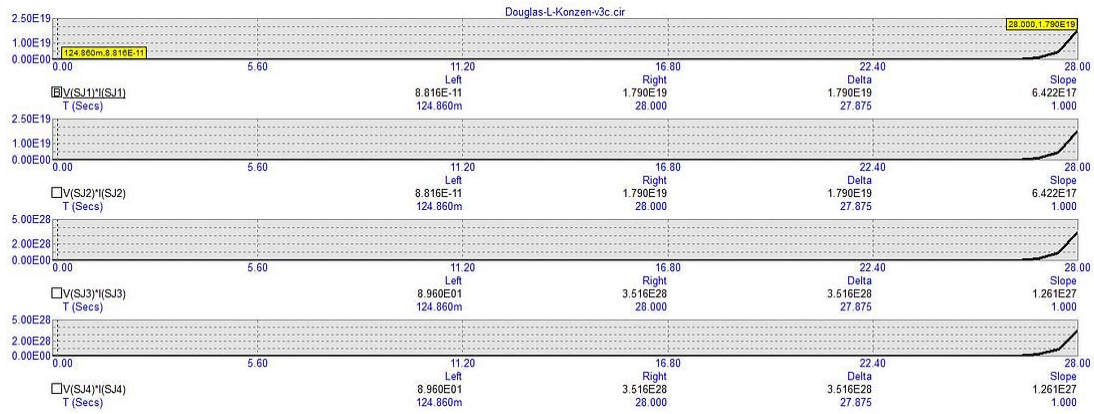


Fig. #3

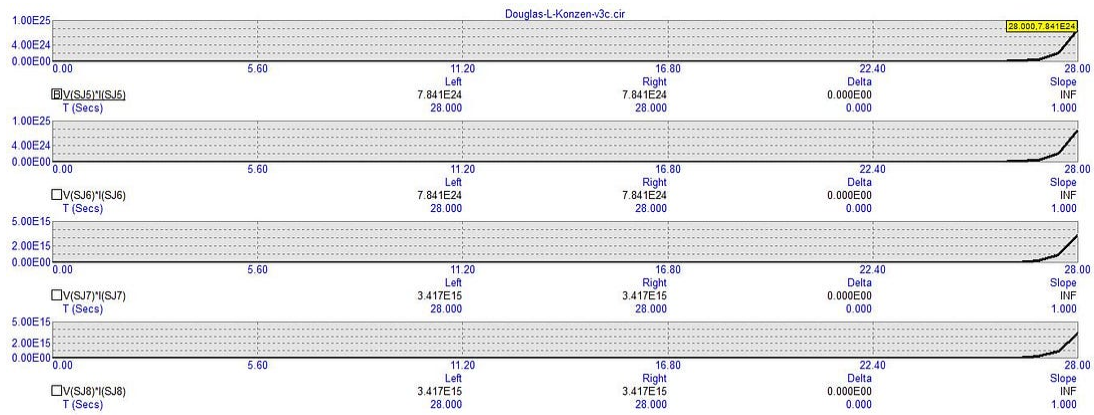


Fig. #4

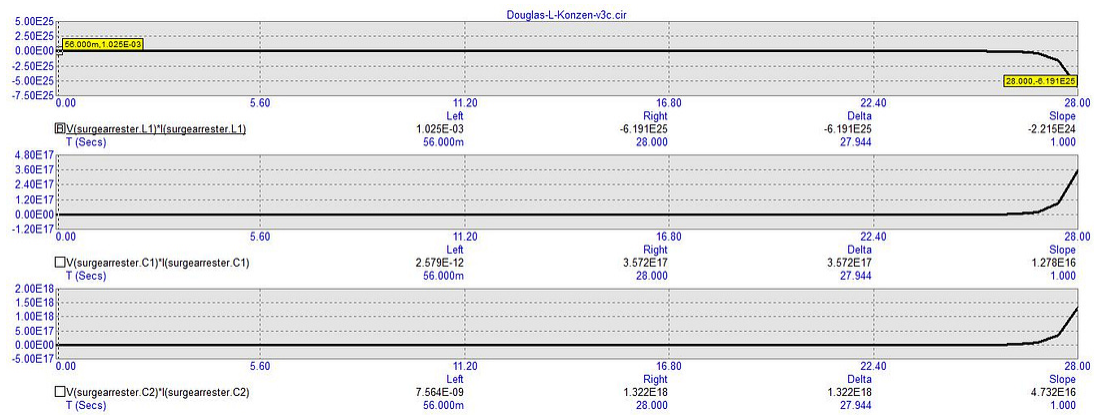


Fig. #5

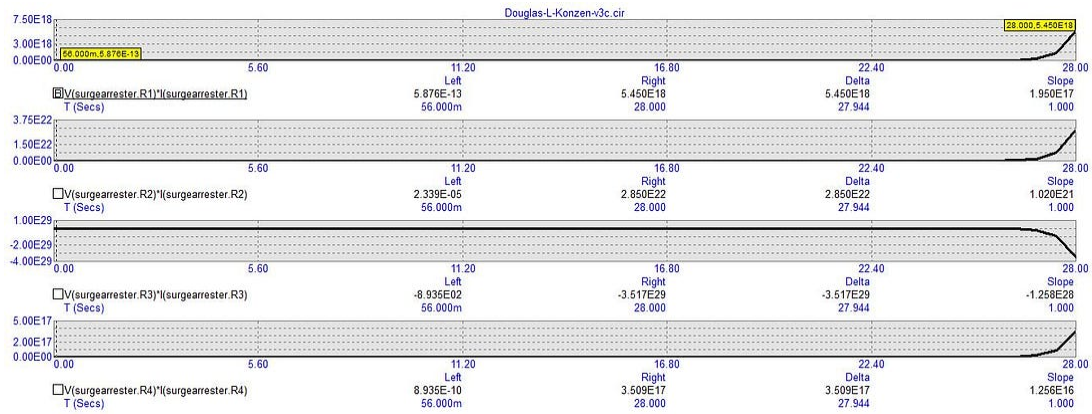


Fig. #6

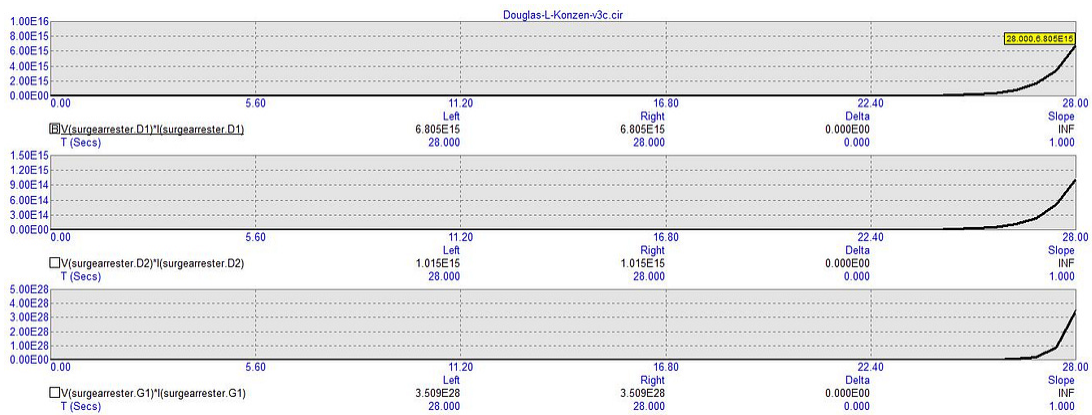
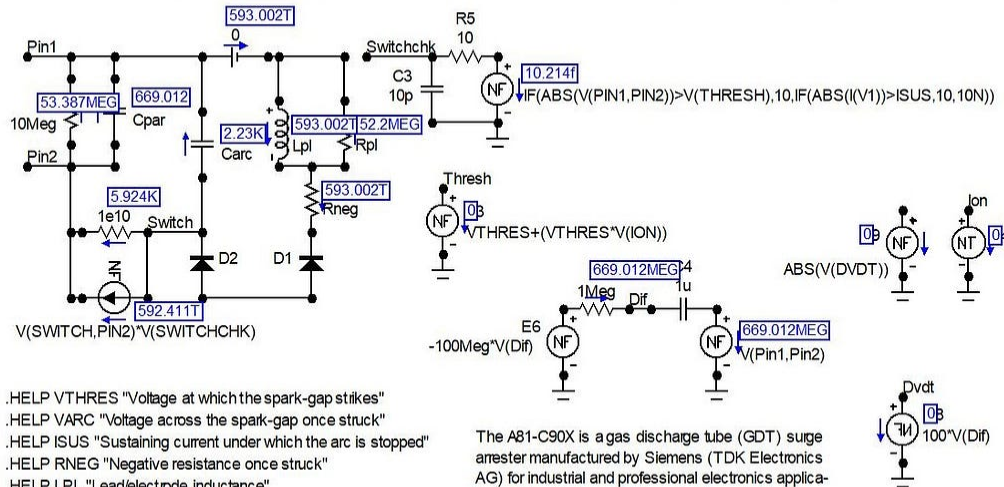


Fig. #7

In this version, I cannot include the wattage of the zero-voltage battery (that is inside of the macro for the surge arrester) since zero volts renders as zero watts. Yet, the current passing through this component is very high.

NEON BULB, SPARK GAP MACRO: Siemens A81-C90X Gas-Filled Surge Arrester.

.PARAMETERS(VTHRES=90, VARC=10, ISUS=500M,RNEG=-1,LPL=130N,RPL=2K,CPAR=1P,CARC=3P)

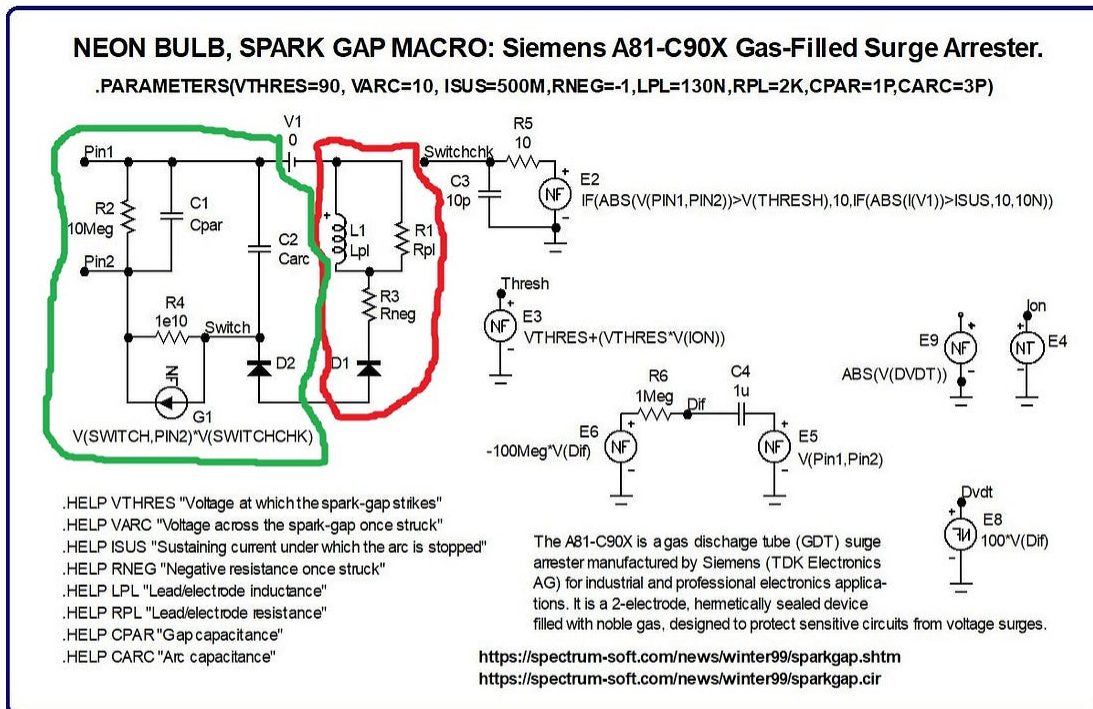


.HELP VTHRES "Voltage at which the spark-gap strikes"
 .HELP VARC "Voltage across the spark-gap once struck"
 .HELP ISUS "Sustaining current under which the arc is stopped"
 .HELP RNEG "Negative resistance once struck"
 .HELP LPL "Lead/electrode inductance"
 .HELP RPL "Lead/electrode resistance"
 .HELP CPAR "Gap capacitance"
 .HELP CARC "Arc capacitance"

The A81-C90X is a gas discharge tube (GDT) surge arrester manufactured by Siemens (TDK Electronics AG) for industrial and professional electronics applications. It is a 2-electrode, hermetically sealed device filled with noble gas, designed to protect sensitive circuits from voltage surges.

<https://spectrum-soft.com/news/winter99/sparkgap.shtm>
<https://spectrum-soft.com/news/winter99/sparkgap.cir>

That's a lot of current passing through the zero-voltage battery, V1, up-
 above. Is any of that current coming from the battery? Or, is it merely
 passing through it from elsewhere?



Two halves of the analog portion of Micro-Cap's model for a surge arrester (which they misleadingly call a 'neon bulb'). The left half, circled in green, is kept at the same voltage as the right half, circled in red, if we imagine that the zero volt battery, V1, is substituting for an open short linking together what could have remained separated which would have caused these two halves to fold out and downward along a vertical axis between these two halves and using the connection between the two diodes, D1 and D2, as a pivot point. For some reason, the software engineers assumed that these two halves are two aspects of the same thing but in a serial relationship and must be cloned copies of each other from the standpoint of their voltages. Hence, they deduced that a zero voltage battery should connect them together.

It's almost as if this zero-voltage DC source was intended to tie two halves together (lying on either side of this circuit) as if they were one entity modeled in parallel with each other and maintain the same voltage (between these two halves) by tying them together with a zero-voltage DC source.

But since I'm curious whether this component is contributing any wattage, and I can't tell what its wattage is since its voltage is zero (despite its elevated current depicted in the screenshot up-above), then I will include two deviations (within the compressed ZIP file) to see if I can evince a wattage from out of this component. — *[I couldn't.]*

But, as it stands, and without the wattage from this component, here are the subtotals and the grand total of the wattages of all of the

components of this circuit simulation which contribute towards its total outcome using the data from the screenshots, up-above.

Positive Watts Tally at 28 seconds

+2.462e+29 = L2, Fig. #1

+1.364e+21 = C1, Fig. #1

+7.143e+24 = C2, Fig. #1

+6.531e+25 = LightBulb100W, Fig. #2

+3.486e+25 = GndSA, Fig. #2

+8.5432e+7 = GndLd, Fig. #2

+1.79e+19 = SJ1, Fig. #3

+1.79e+19 = SJ2, Fig. #3

+3.516e+28 = SJ3, Fig. #3

+3.516e+28 = SJ4, Fig. #3

+7.841e+24 = SJ5, Fig. #4

+7.841e+24 = SJ6, Fig. #4

+3.417e+15 = SJ7, Fig. #4

+3.417e+15 = SJ8, Fig. #4

+3.572e+17 = surgearrester.C1, Fig. #5

+1.322e+18 = surgearrester.C2, Fig. #5

+5.45e+18 = surgearrester.R1, Fig. #6

+2.85e+22 = surgearrester.R2, Fig. #6

+3.509e+17 = surgearrester.R4, Fig. #6

+6.805e+15 = surgearrester.D1, Fig. #7

+1.015e+15 = surgearrester.D2, Fig. #7

+3.509e+28 = surgearrester.G1, Fig. #7

+351,733,024,907,294,754,000,085,432,000 = +3.517e+29 SUBTOTAL
POSITIVE WATTS

Negative Watts Tally at 28 seconds

-8.099e+25 = L3, Fig. #1

-6.191e+25 = surgearrester.L1, Fig. #5

-3.517e+29 = surgearrester.R3, Fig. #6

-351,733,024,907,294,754,000,085,432,000 = -3.517e+29 SUBTOTAL
NEGATIVE WATTS

Total Tally

+351,733,024,907,294,754,000,085,432,000 WATTS

-351,733,024,907,294,754,000,085,432,000 WATTS

0 = TOTAL WATTS! ENERGY IS CONSERVED! YIKES! 😬

First of all, I'm totally shocked. I didn't think it would add up to zero. But this is a clear indication of the accuracy of 64-bit computing since, when I performed this type of analysis on a much simpler set of circuits back in 2021, I could never come out to zero. It would either be greater than or less than zero but never exactly zero unless the circuit being analyzed and tallied was a simple flashlight circuit. But if the circuit had no voltage source, no current source, no behavioral source, and merely ran from a precharged capacitor, then my 32-bit laptop kept coming up with inequalities between the positive wattages and the negative wattages.

This is a good sign for 64-bit computers closing the credibility gap when it comes to simulating free energy circuits.

I won't bother with the other two deviations since I'm lazy. But I'll let you download their screenshots and perform your own calculations if you care to.

Their raw data is exactly the same except for the nearly zero-voltage battery in the spark gap macro has been modified to be the minimum voltage which the simulator can accommodate with its double-precision floating_point system of enumeration.

This would be: $+1\text{e-}15\text{V} = 1$ femto volt, or one thousandth of a pico volt. This is the same as one millionth of a nano volt, or one billionth of one millionth of a volt.

Then I double this battery and face it towards its partner or away from its partner in these two variations of a zero-volt battery, spark gap

NEON BULB, SPARK GAP MACRO: Siemens A81-C90X Gas-Filled Surge Arrester.

.PARAMETERS(VTHRES=90, VARC=10, ISUS=500M,RNEG=-1,LPL=130N,RPL=2K,CPAR=1P,CARC=3P)

The schematic diagram illustrates the internal components of the Siemens A81-C90X Gas-Filled Surge Arrester macro model. It features two input pins, Pin1 and Pin2. Pin1 is connected to a resistor R2 (10Meg) and a capacitor C1 (Cpar). Pin2 is connected to a resistor R4 (1e10), a switch controlled by V(SWITCH,PIN2)*V(SWITCHCHK), and a diode D2. The output of the switch is connected to a neon bulb G1. A second branch from Pin1 goes through a capacitor C2 (CARC) to a series combination of an inductor L1 (Lpl) and a resistor R1 (Rpl). This branch also includes a diode D1 and a resistor R3 (Rneg). A central component is a gas discharge tube (GDT) represented by two parallel voltage sources V1 and V2, each with a value of 1e-15. An arrow points from the GDT to a box labeled "EXPERIMENTAL". Below this box is the conditional logic: IF(ABS(V(PIN1,PIN2))>V(THRESH),10,IF(ABS((I(V1)))>ISUS,10,10N)). To the right of the main circuit are several test nodes: E3 (Threshold voltage VTHRES+(VTHRES*(ION))), E2 (Switch control signal Switchchk), E6 (Input voltage V(Pin1,Pin2)), E5 (Output voltage V(Pin1,Pin2)), E9 (Arc resistance ABS(V(DVDT))), E4 (Ion current Ion), and E8 (Dvdt rate).

IF(ABS(V(PIN1,PIN2))>V(THRESH),10,IF(ABS((I(V1)))>ISUS,10,10N))

EXPERIMENTAL

Thresh
E3
NF
+
VTHRES+(VTHRES*(ION))
-

Switchchk
R5
10
C3
10p
NF
E2
+

E6
NF
-
-100Meg*V(Dif)
R6
1Meg
Dif
C4
1u
NF
E5
+
V(Pin1,Pin2)
-

E9
NF
-
ABS(V(DVDT))
Ion
NT
E4
+

Dvdt
7u
E8
100*V(Dif)
-

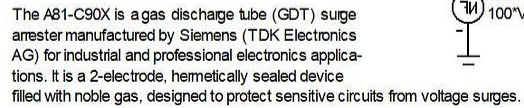
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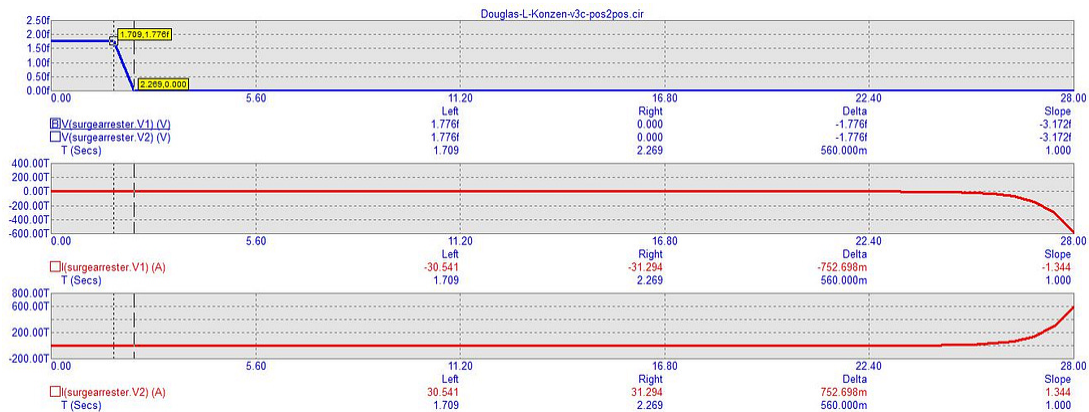
Positive terminal of one battery facing the positive terminal of the other battery.

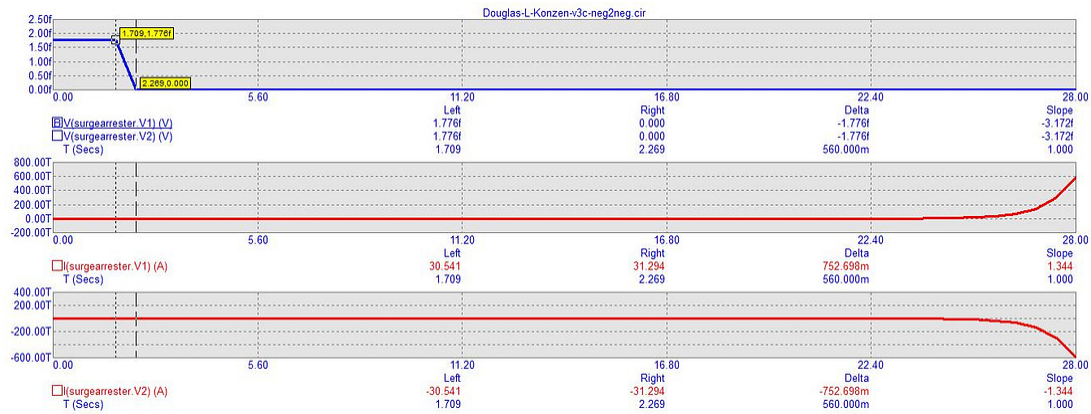
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.PARAMETERS(VTHRES=90, VARC=10, ISUS=500M,RNEG=-1,LPL=130N,RPL=2K,CPAR=1P,CARC=3P)
```



<https://spectrum-soft.com/news/winter99/sparkgap.shtm>
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As you can see in these next two images:





... the non-zero condition of these two (nearly zero-voltage) batteries gets pushed to zero volts, in approximately two seconds, due to the escalating current passing through it similar to how a wind can blow out a candle flame.

So, we still don't get to include this type of component in our assessment of total wattage because the momentary appearance of voltage and wattage occurs before any significant escalation of current contributes towards an interesting gain of outcome.

Download this circuit's files from [my website](#) or from [my Google Docs](#) account.

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DIY Earth Battery

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