

MagneX Interrupter for Dual Voltage Transformers

The MagneX Interrupter can be connected to a two-position dual voltage switch with an eight contact terminal block to protect dual voltage transformers. A shunt resistor is connected in parallel with the MagneX Interrupter sensor element. When operating at the lower voltage, the shunt resistor will divert half the current from passing through the MagneX Interrupter sensor element. Therefore, the same amount of current will pass through the MagneX Interrupter sensor element at both voltages.

Depending on the ratio between the dual voltages and the MagneX Interrupter used, a different resistor is needed.

$$\left(\text{Voltage Ratio} = \frac{\text{Higher of the dual voltages}}{\text{Lower of the dual voltages}} \right)$$

Use the following table to determine the resistor part number suffix needed for the application:

Resistor part number: 2238036C __

Voltage Ratio	MagneX Interrupter							
	D01	D03	D04	D05	D06	D07	D08	D09
	Resistor							
1.496	01	09	12	16	24	26	30	31
1.500	01	09	12	16	24	26	30	31
1.509	01	09	12	16	24	27	30	31
1.587	02	10	13	18	25	28	31	32
1.732	03	11	16	20	27	30	32	33
1.833	04	12	18	21	28	31	32	34
1.890	04	12	18	22	29	31	33	34
2.000	04	13	19	22	30	31	33	34
2.614	06	19	22	26	32	33	35	37
2.750	06	19	23	26	32	34	35	37
2.767	06	20	23	26	32	34	36	37
2.875	06	20	23	27	33	34	36	37
3.000	06	21	24	27	33	34	36	37
3.175	06	21	25	28	34	35	37	37
3.321	07	22	25	28	34	35	37	37

MagneX / Dual Voltage Connections

When using the transformer at the higher voltage, position the dual voltage switch as illustrated in Figure 1 below:

When using the transformer at the lower voltage, position the dual voltage switch as illustrated in Figure 2 below:

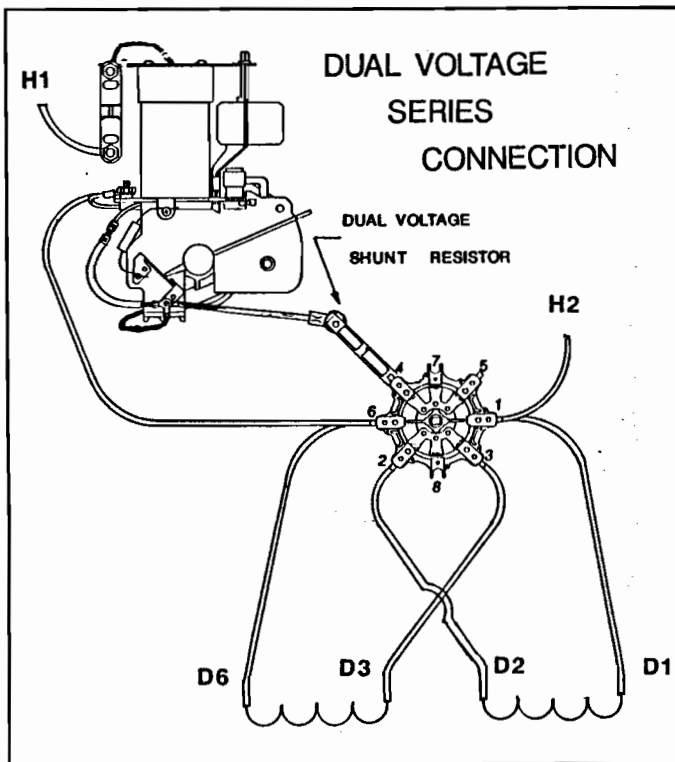


Figure 1

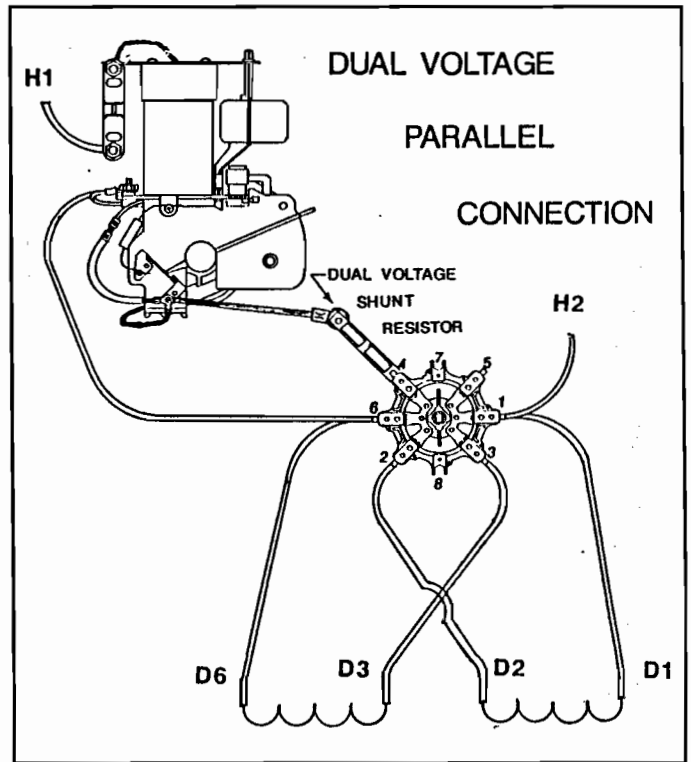


Figure 2

The shunt resistor should be connected the same way for both voltages as shown in the above drawings. Approximately one foot of #12 AWG copper conductor should be used to connect the shunt resistor to the MagneX Interrupter.