ZNR Application Note

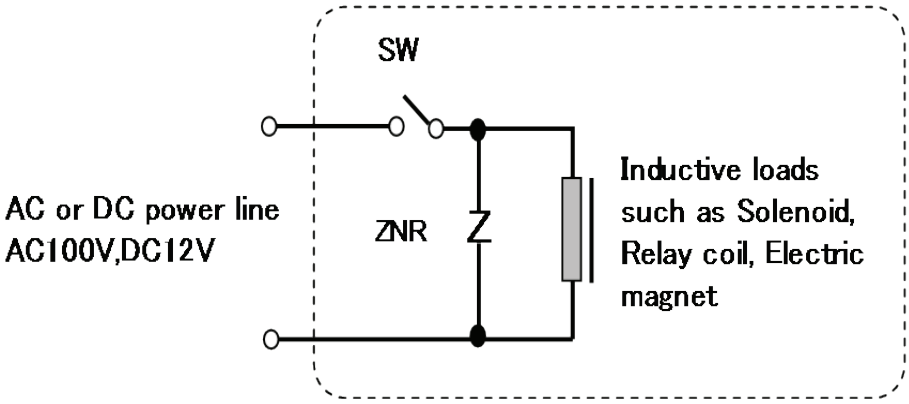
General Inductive Load

1. Industry Segments:

Field of Industry: Inductive devices

Product: Relay coil, Electric magnet, Solenoid, Motor, Transformer, Inductive acctuater, Magnetic contactor, etc.

2. Transient Surge Voltage and its Protection by Using ZNR:



Aim of ZNR Application:

Suppression of switchig surge voltage from the inductor

Problems with Surge Voltage:

Kind of surge voltage: Switching surge voltage

Path of surge voltage: Power line connected to Inductive loads

Failed parts or circuits: Malfunction of the electronic circuits connected to the same power line

How to Apply ZNR to Circuit: (Blue Part Numbers Indicate NEW "E-Series")

Connection: Power line of inductive loads(line-line forming roop circuit)

ZNR part number selection (representative):

For AC100V : ERZE□□A271, For AC200V :ERZE□□A471, For DC12V : ERZV□□D220

□□is a nominal dics size of ZNR and should be selected by an inductive load energy etc.

Precaution in surge protection designing (Parameters to be considered for ZNR selection):

Maximum power line voltage, current into inductive load, switching repetition and their interval should be taken into account.

3. More Information:

Home page for up-to-date information: http://na.industrial.panasonic.com/products/circuit-thermal-protection/circuit-protection/znr-transientsurge-absorbers