

MYRRA SMPS APPLICATION NOTES

1 – Storage Guide:

Encapsulated type product:

Storage temperature: -10°C to $+35^{\circ}\text{C}$, Storage humidity: $<75\%RH$

Non-encapsulated type product:

Storage temperature: $+5^{\circ}\text{C}$ to $+35^{\circ}\text{C}$, Storage humidity: $<75\%RH$

2 – Shelf life Guide:

Encapsulated type product:

To ensure best power supply reliability and life, the customer shall limit the power supply shelf life to no longer than 6 months after delivery. The maximum recommended period before the power supply shall be powered is 18 months from the power supply date code.

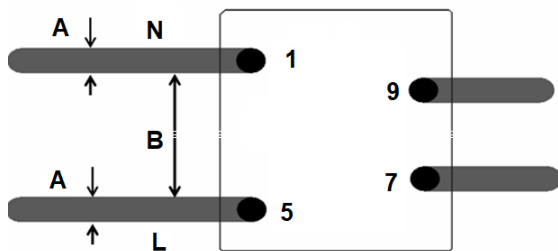
Non-encapsulated type product:

To ensure best power supply reliability and life, the customer shall limit the power supply shelf life to no longer than 6 months after delivery. The maximum recommended period before the power supply shall be powered is 12 months from the power supply date code.

3 –General Storage Conditions:

MYRRA power supplies should be stored in their original packaging before use. In the warehouse, there should not be harmful gas, inflammable, explosive products, corrosive chemical products, strong mechanical vibration, shock and strong magnetic field effects. The package box should be stored above ground by at least 20cm height, and 50cm away from any wall, thermal source, and vent.

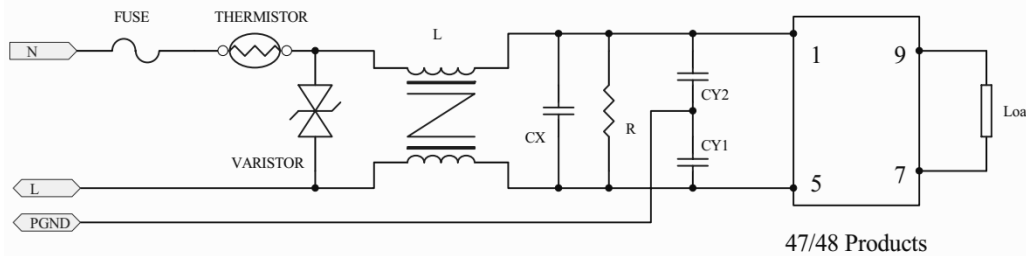
4- Safety and recommend wiring: linewidth $A \geq 2\text{mm}$, $B \geq 5\text{mm}$.



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5- Recommended circuit for applications requiring higher EMC performance:

The 47 /48 series are already certified as compliant to EN55032 and EN55014 CLASS B for emc. For this compliance no additional external components are required. Should a more stringent emc performance be required the circuit below can be proposed



Fuse: recommended parameters: 5A to 10A/250Vac, Time-lag type.

THERMISTOR: recommended parameters: 2A, 5Ω,1.8W to 5A D10,2.5Ω,2.4W.

Varistor: recommended parameters: 14D471,300Vac, maximum energy 118 Joule.

L is a common mode inductor: recommended parameters: 10mH to 30mH

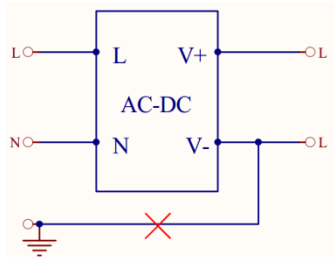
CX is a X2 capacitor: recommended parameters: 0.1uF to 0.22uF/275Vac

CY1 and CY2 are Y capacitors: recommended parameters: 1000pF to 2200pF/400V

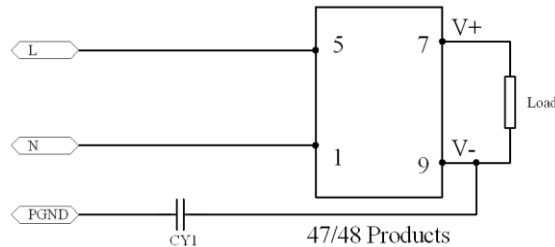
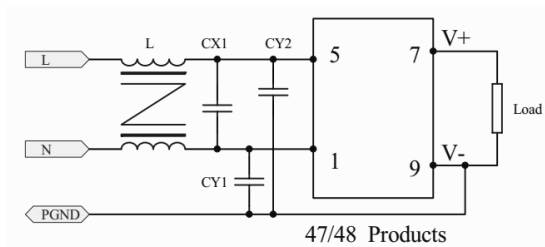
R is a resistor: recommended parameters: 1.0MΩ to 3.0 MΩ.

6 – Application of the connection to ground:

This application is not supported for 47 /48 products



The following proposed circuit may assist:



L is a common mode inductor, recommended parameters: 10mH to 30mH

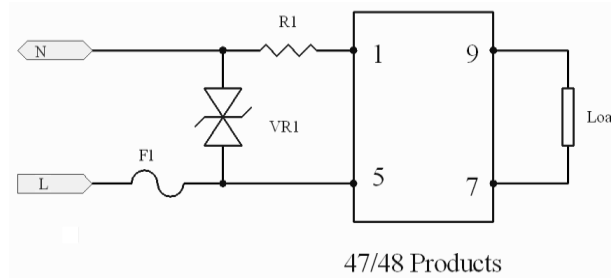
CX1 is a X2 capacitor, recommended parameters: 0.1uF to 0.22uF/275Vac

CY1 and CY2 are Y capacitors, recommended parameters: 1000pF to 2200pF/400V

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7 – High surge circuit:

The 47 /48 Series is tested and certified for a surge level in accordance with IEC61000-4-5 as standard without requiring any additional external components. To extend the surge level to 6KV the external circuit below can be proposed.



VR1 is a varistor, recommended parameters: 14D471,300Vac, maximum energy 118 Joule.

R1 is a wire-wound resistor, recommended parameters: 10R/1W to 10R/3W, resistance wire Φ 0.1 to 0.23mm.

F1 is a fuse, recommended parameters: 6.3A to 10A/250Vac, Time-lag type.