

Din Rail Power Supplies with redundant function and Rdy signal usage instructions

For traditional power supply usage when power supply is faulty, the whole user's system is going down and shut off. This usually causes the unremarkable business costs lost and data lost. To avoid and improve the reliability of power supply itself, it has developed the redundant and Rdy signals functions.

Instruction as following :

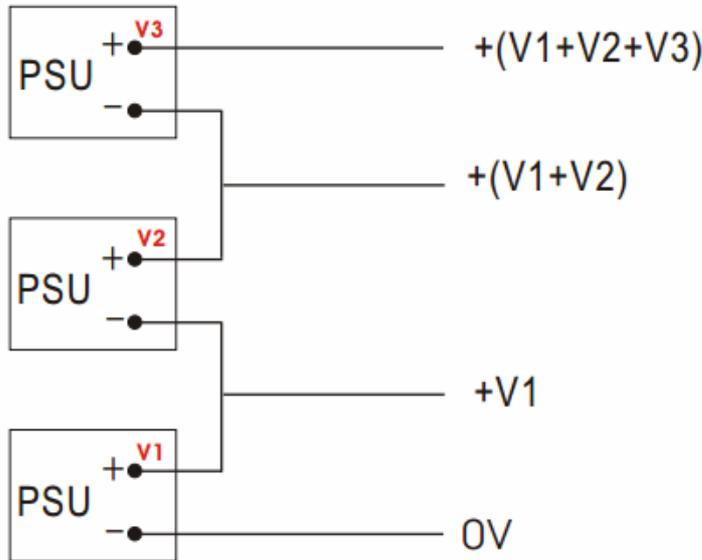
In order to solve the problem mentioned above, a backup power supply solution is a suitable scheme. When Multi-parallel connection, one of the power supply has faulty at the same time the others are still working. Therefore user still has the system working properly due to one faulty unit but the user does not know which one is faulty. It has the solution to develop Rdy signal This signal 「Relay」 will be active when the power supply unit is normal, equally when abnormal the signal 「Relay」 will be open.) The user is informed by the Rdy signal to know which unit is faulty and with Alarm design system, repair engineer could be informed to replace the faulty power supply.

Remarks:

1. Redundant function users may parallelize unlimited power supply units. (when several power supplies go down, user's system could remain working and avoid system shut down.)
2. EX91240 series(240 watt series) has current share when parallelizing wattage increasing. For example if user needs 2000 wattage power supply, 9 units of 240 wattage din rail power supply parallelized would be the solution. Pleased note that this only for 240 watt series.
3. Rdy signal could supply 1A constant current which is differ from power supply market warning signal. In the market internal Rdy signal is making by semiconductor construction(This construction can not active as relay)

Series Connection Circuit

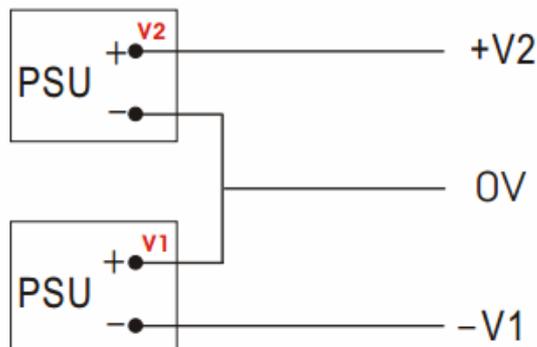
Picture 1



PS: $V_1 \sim V_x$ can be any voltage
 $V_1 \sim V_x$

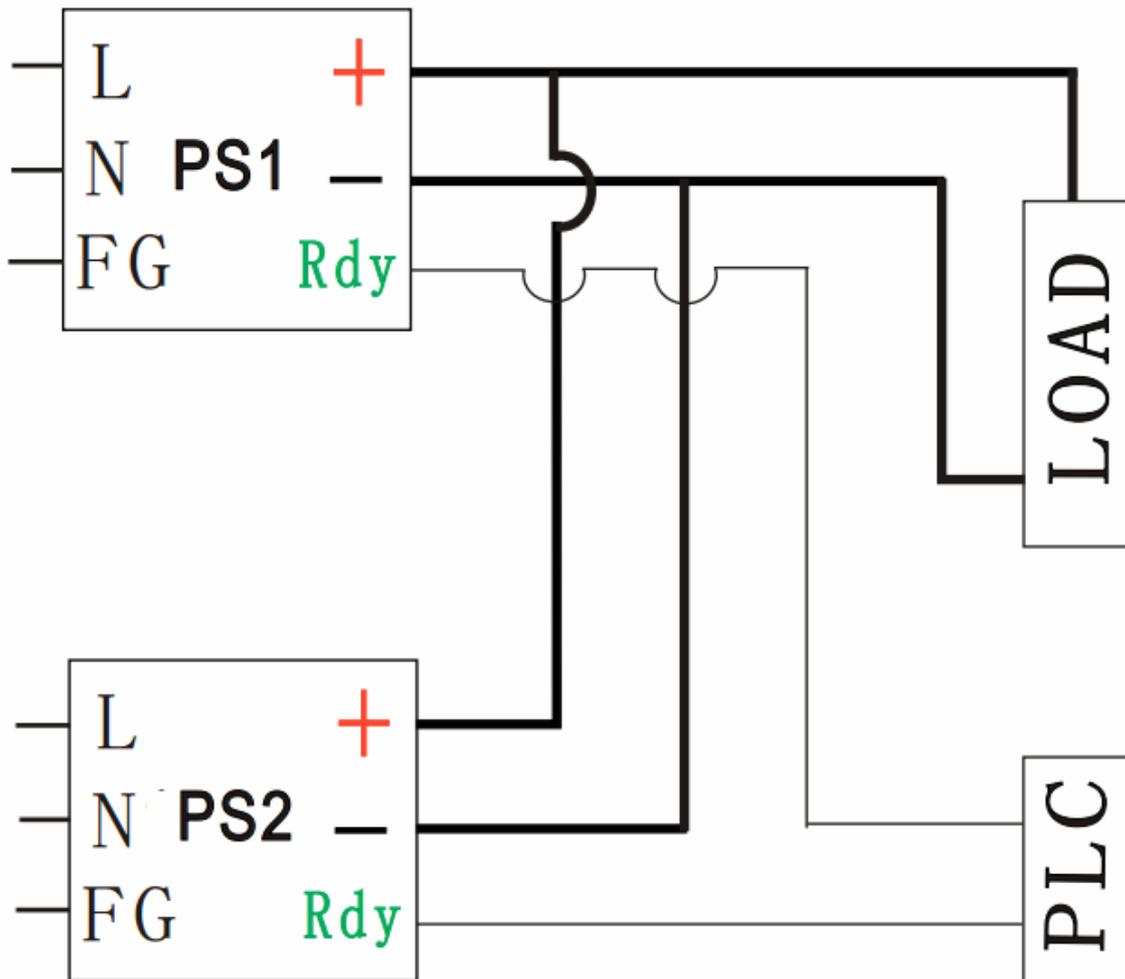
Split Rail Connection Circuit

Picture 2



Redundant Use Connection Circuit

Picture 3



Programable Logic Controller

ALARM CKT

NOTE:

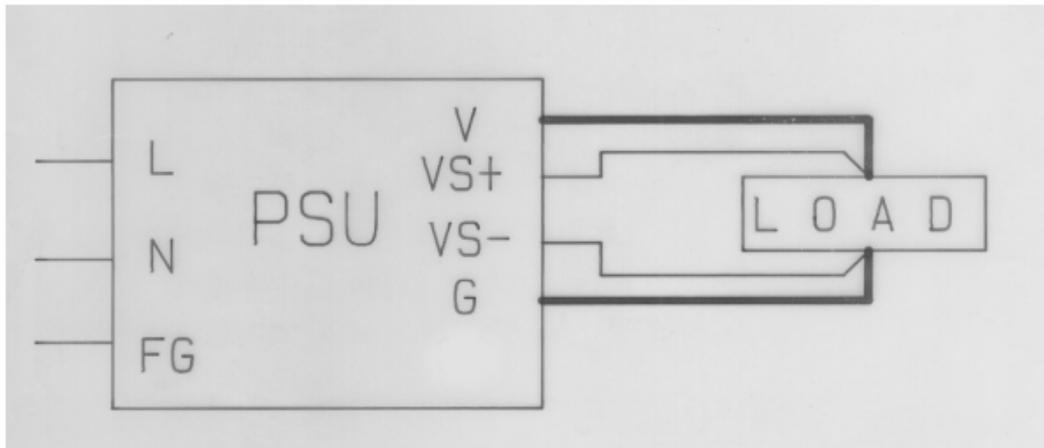
The line total output generated from the remaining PSU is the same.

PS1=PS2=.....=PSn=PS(Output)

PS1=PS2=.....=PSn=PS

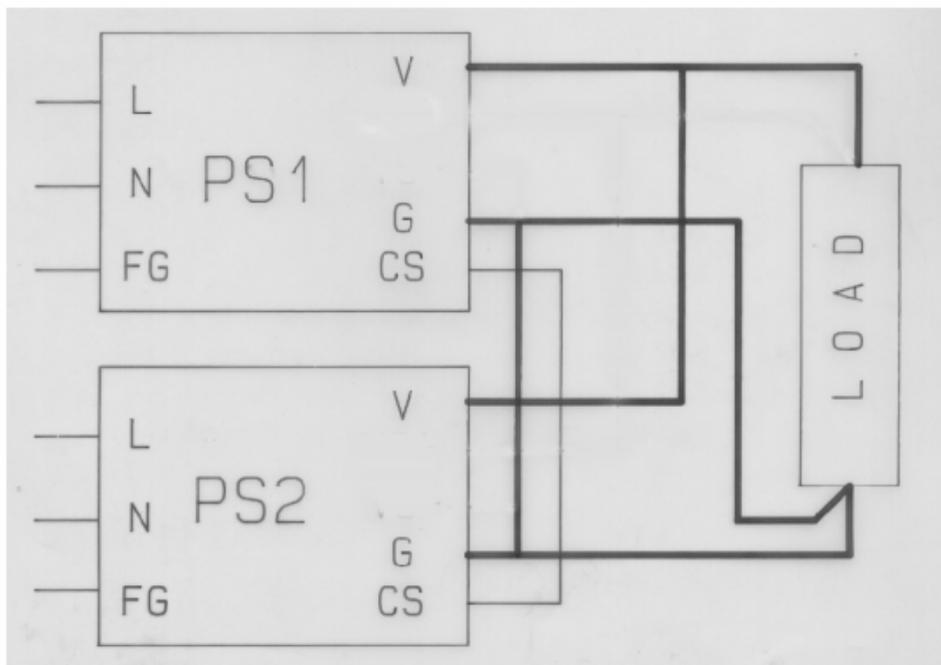
Normal Use With Remote Sensor Circuit

Picture 4



Parallel Use With Current Share Connection Circuit

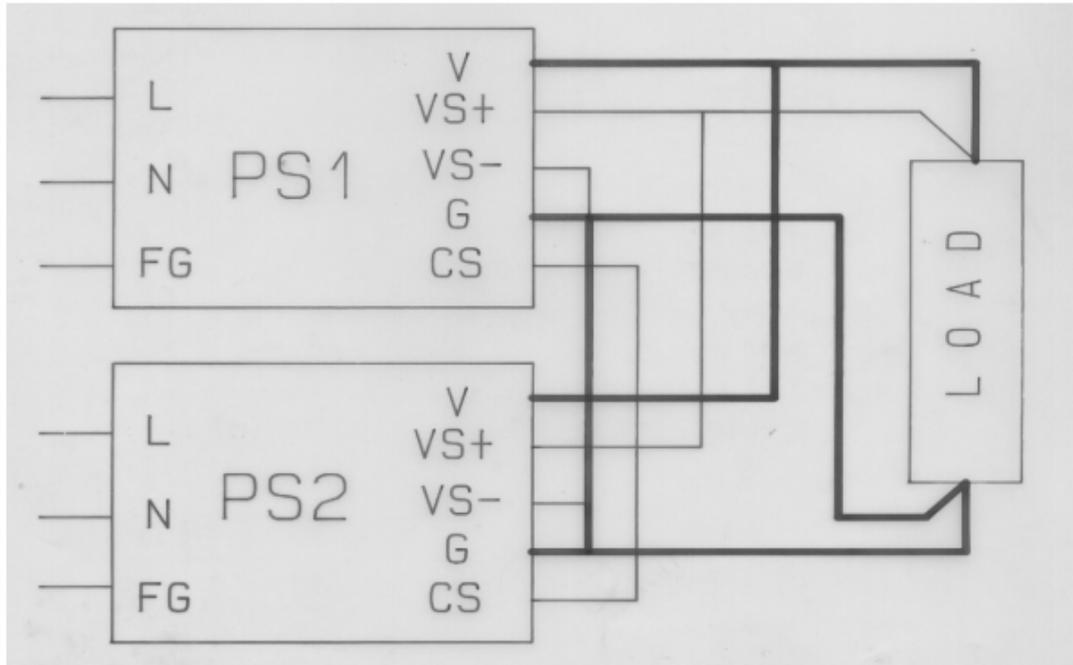
Picture 5



Total Output Current=PS1+PS2+.....+PSn

Parallel Use With Remote Sense & Current Share Connection Circuit

Picture 6



Total Output Current = PS1 + PS2 + + PSn