Following are the suggestions while checking the fault DIGIT 3K6, comes from:

1- Components which appears problem on it while the 3K6 production, present by QC people in workshop.

2- Replacing suggestion presented by design engineer.

PCB: AVSQ01401-02A (P.S.U.)

Components		Possible fault if it damaged	Action
R36	1ohm / 0805	its damage will cut of PSU working as it is used as a fuse here	Replace by a 0ohm resistor or just change to direct wiring
D43,D44	FR104	a> no Start, LED in mains power switch not light -up b> sometimes it will cause IC9 get damaged (not often)	Change to use MUR160
D31,D32,D33,D34	MUR1540 / TO-220	amp not work, burn the Fuse in mains power socket	Replace by new one
D1	20A / 1000V	amp not work, burn the Fuse in mains power socket	Replace by new one
Q1,Q2,Q3,Q4,Q5,Q6	RFP32N50K / TO-24	amp not work, burn the Fuse in mains power socket	Replace by new one
D3	MUR1560 / TO-220	used for PFC filting, its damage will burn the Fuse in mains power socket	Replace by new one
D13,D14	18V / 0.5W	used as Fuse, its damage will stop the PSU working	Replace by new one
Control Box		PSU not work	Replace by new one

R36

As mentioned above, this resistor in previous unit is just act as a additional FUSE to protect the PSU section, so it got broken while some fault happened. If there is no other components broken also, the amplifier will work again while a 0ohm resistor replaced or direct wiring made. In pending production, this resistor was cancelled.

D3

This is the important unit, it insulate the AC and DC section, its damage will caused at least one of Q1 & Q2 broken then PSU section stop work.

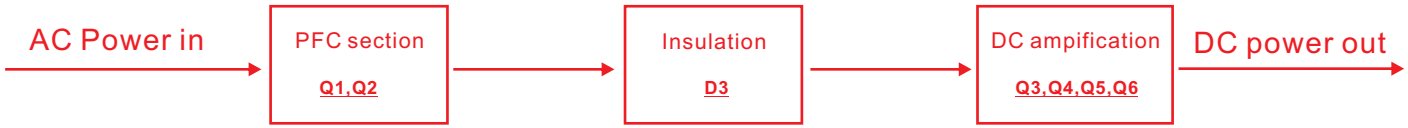
Q1,Q2

These two transistors are for PFC -> AC Voltage separating & Power factor adjusting

Q3,Q4,Q5,Q6

These transistors are for DC voltage amplifing

To analysis the reason which causing the damage of Q1,Q2,Q3,Q4,Q5,Q6,D3, we need to get more information form your service people as these components are working together, we want to know which section is the most often fault one, please refer to below route:



3K6 with the same circuit of 2K2, difference are the different power components used, possible solution might be some of this components without enough ability to support the power requirement in 3K6 so it is easily damaged while the heavy load.

Do your service people has the record for the returned 3K6, especially the percentage of damage of:

1. D3
2. Q1,Q2
3. Q3,Q4,Q5,Q6