

The input supply voltage may be

AC 220V/110V via F101, F102 and TR101 or

DC +16-36V directly through F103 and D101.

If desired, both AC and DC supply may be connected to avoid power loss if one of the supplies is shut down.

Normal current consumption at various input supply voltages:

DC supply voltage:

+16V appx.	150-200 mA
+24V appx.	100-150 mA
+36V appx.	70-100 mA

AC supply voltage:

110V appx.	40-60 mA
220V appx.	20-30 mA

If supply voltage is applied to the Power Board without the controller being connected, the Alarm Buzzer will sound continuously. To be able to work on the Power Board without the annoying sound of the buzzer, make a temporary connection from IC201 pin 1 to ground (e.g. IC201 pin 9). Remember to remove this short before the system is reassembled.

### **1.3.1 Analogue Current Sources.**

There are two analogue 0(4)-20 mA current sources on the board. They are used for analogue interface outputs and are controlled by 0 - 5 V signals coming from the Controller Board.

The current sources consist of operational amplifiers inside the Switching regulator Circuits IC101, IC102 and various resistors R109-R128. The resistor values shown in brackets give output of 4-20 mA.

### **1.3.2 Fuse Replacement**

The fuses are soldered into the board to avoid problems with bad connections in the fuse-holders which frequently is a more serious problem than blown fuses in modern electronic equipment.

All onboard voltage regulators are short circuit proof, and the fuses are expected to blow only in case of circuit component failure, in which case qualified service is required anyway.

Fuse replacement is best carried out by cutting the broken fuse near the body with a cutter and soldering a new fuse onto the old fuse terminals.

Do not replace a fuse until the remaining circuitry is checked for failures. Use an electronic laboratory power supply with an adjustable current limiter to make sure that the system power consumption is within the recommended limits.