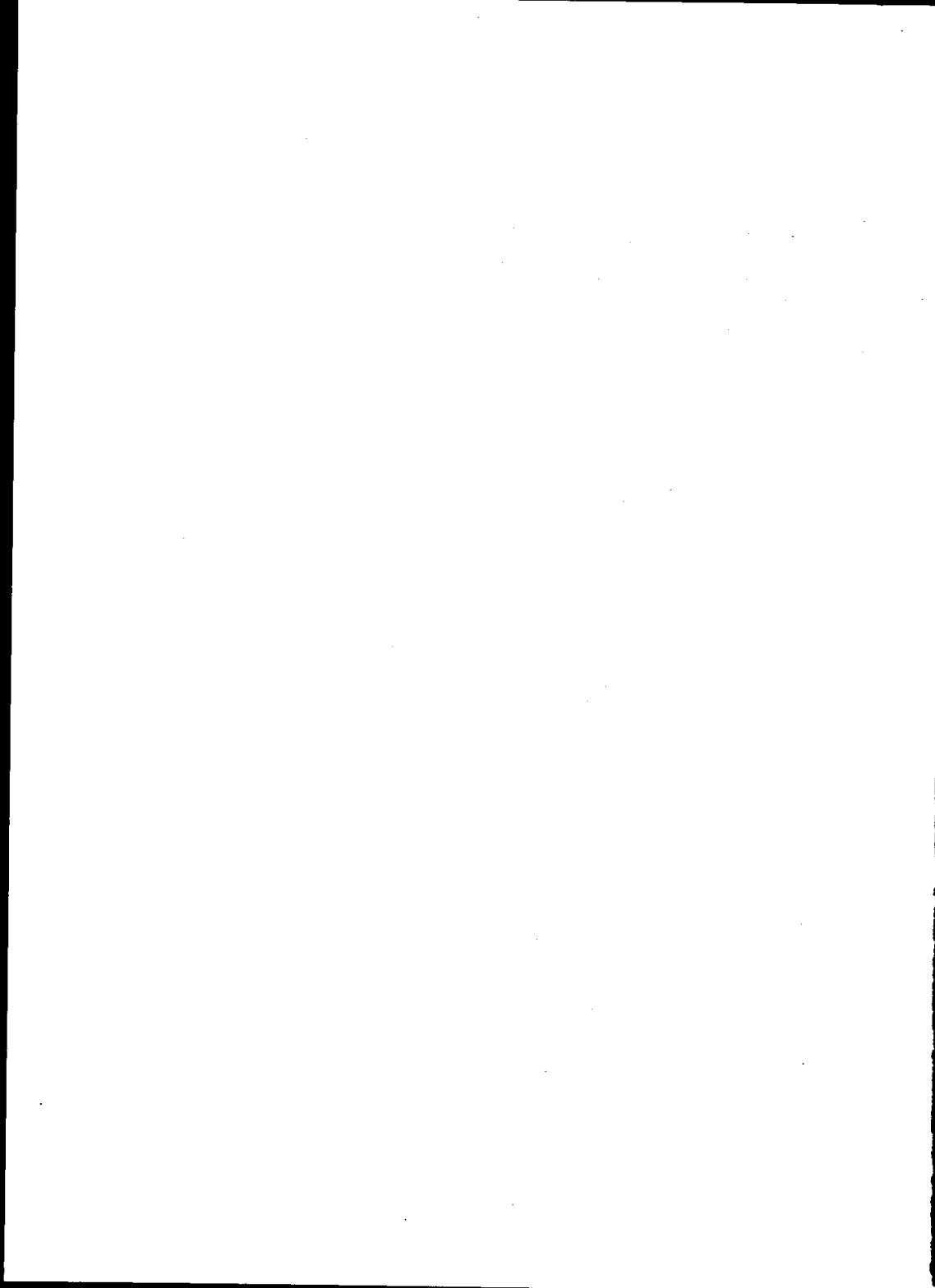


**Model PS-150**

**150 Watt Switching Power Supply Unit**

**USER'S MANUAL**



**Model PS-150**

**150 Watt Switching Power Supply Unit**

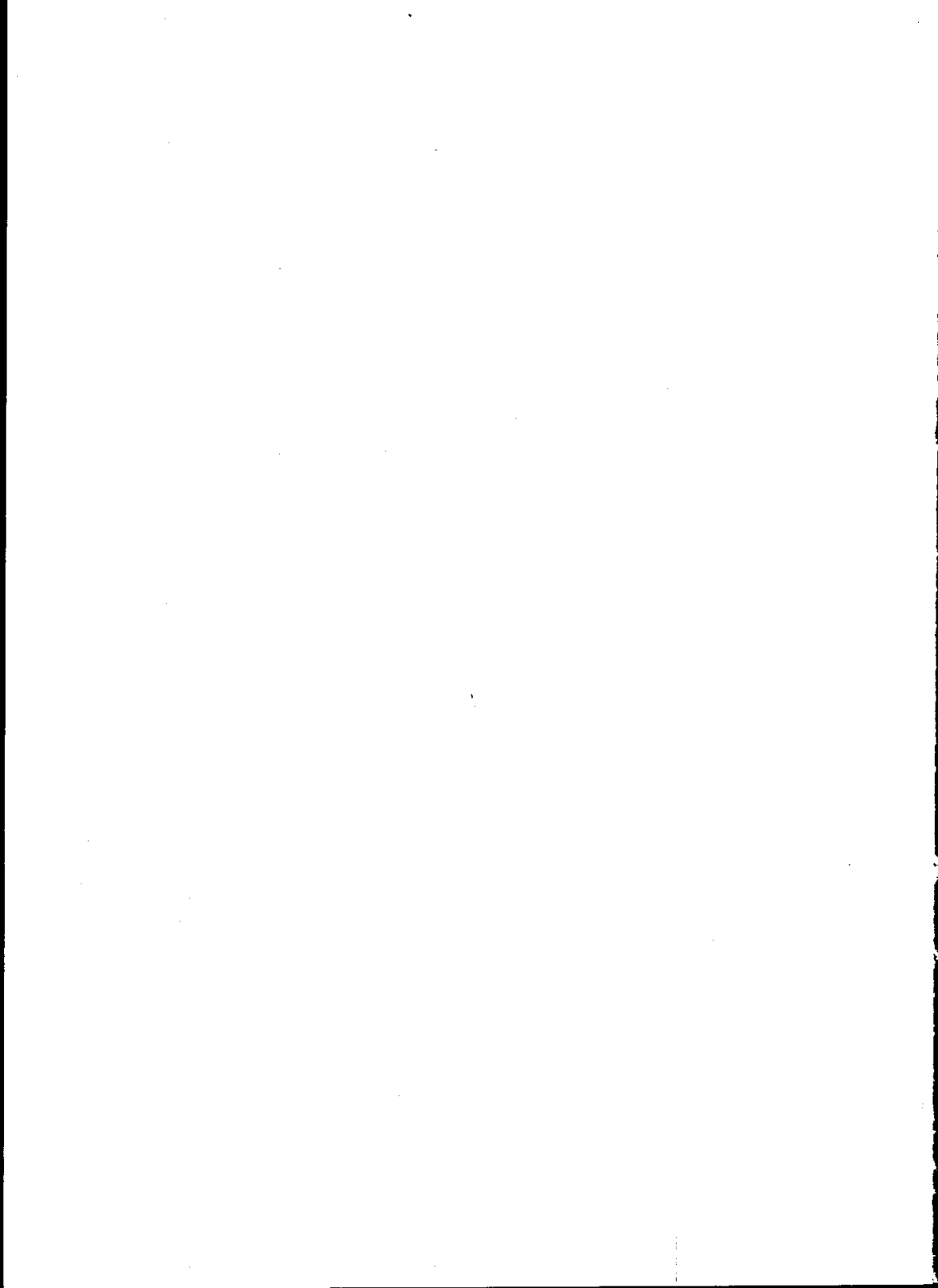
**USER'S MANUAL**

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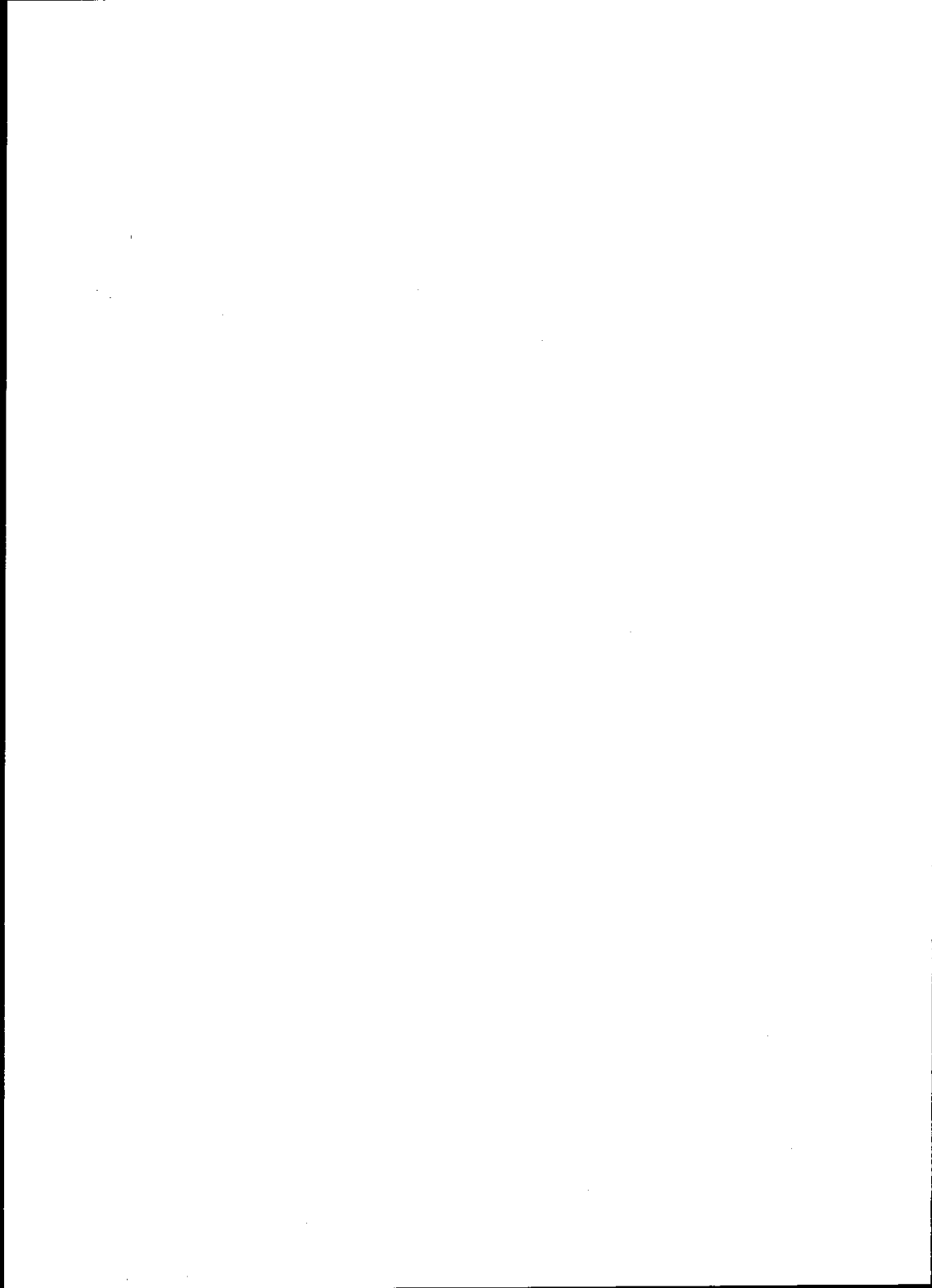
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## CHAPTER 1. SPECIFICATIONS

### 1.1. Input

AC Input voltage rating:	110/220 V <sub>AC</sub> ( auto range )
AC Input voltage range:	90 - 132 V <sub>AC</sub> for 110 V <sub>AC</sub> 180 - 264 V <sub>AC</sub> for 220 V <sub>AC</sub>
Input frequency:	47Hz to 63Hz
Input surge current:	50A max @ cold start for 230 V <sub>AC</sub>
Input current:	4A max. for 110V 2A max. for 220V

### 1.2. Output

	<u>V1</u>	<u>V2</u>	<u>V3</u>	<u>V4</u>
O/P voltage:	+5V	-5V	-12V	+12V
Min. load current:	3A	0.2A	0.2A	1A
Max. load current: (Convection cooled)	9A	0.6A	0.6A	3A
Max. load current: (Forced Air 30CFM)	15A	1A	1A	5A
Line regulation:	1%	2%	2%	2%

Load regulation:	$\pm 1\%$	$\pm 6\%$	$\pm 6\%$	$\pm 6\%$
	(V1 20 -100% Max load V2 thru V4 20 -100% Max.load)			
Cross regulation:	$\pm 1\%$	$\pm 6\%$	$\pm 6\%$	$\pm 6\%$
	(V1 - change V2, V3 V4 load 20 - 100% V2 thru V4 - change V1 load 50 - 100%)			
Ripple and noise:	50mVp-p	100mVp-p	100mVp-p	100mVp-p
Over shoot:	5%	5%	5%	5%

### 1.3. Overall performance

Output power:	150 watts @ with FAN cooling
Efficiency:	70% typical @ nominal AC line, full load
Hold up time:	16 mS @ nominal AC line and full load
Switching frequency:	100KHZ typical
Response time:	+5VDC output return within 1% of nominal voltage within 0.1m sec. for a 50% load change

### 1.4. Features

Current limit:	120% of MAX. output power
Over voltage protection:	5.9V to 7.0V for V1
Over current protection:	All outputs equipped with short circuit protection.



**1.5. Environmental**

Temperature:	Operating	0°C to 50°C
	non-operating	-25°C to 85°C
Relative humidity:	operating	20% to 95%
Cooling:	Convection @ less than 100W output 30 CFM air flow @ more than 100W output	
Temperature coefficient:	±0.04% per °C	

**1.6. Reliability**

Meantime between failure:	50K hrs. min. at Max. load for a 25°C ambient temperature
---------------------------	--------------------------------------------------------------

**1.7. Safety standard**

Designed to meet the standard of:	UL 1950, CSA 22.2 No. 1402C, VDE 0805. IEC950 EN60950
--------------------------------------	----------------------------------------------------------

**1.8. EMI standards**

Meets the conduction	
Input 110V limits of:	FCC class A rules
Input 220V limits of:	VDE 0871 class A

**1.9. Insulation resistance**

Primary to secondary: >7M ohm  
Primary to frame ground: >7M ohm  
Secondary to frame ground: >7M ohm

**1.10. Dielectric withstand (HIPOT) test**

Input to output: 2200VDC 20mA 1min  
Input to ground: 2200VDC 20mA 1min  
Output to ground: 750VDC 20mA 1min

**1.11. Mechanical**

6.8 inch (172.72 mm) long  
3.8 inch (96.52 mm) width  
1.5 inch (38.1 mm) height  
1.6 pounds (0.72kg) weight

## CHAPTER 2. TERMINAL BLOCK ASSIGNMENT OF POWER SUPPLY

### 2.1. Terminal Block Assignment of Power Supply

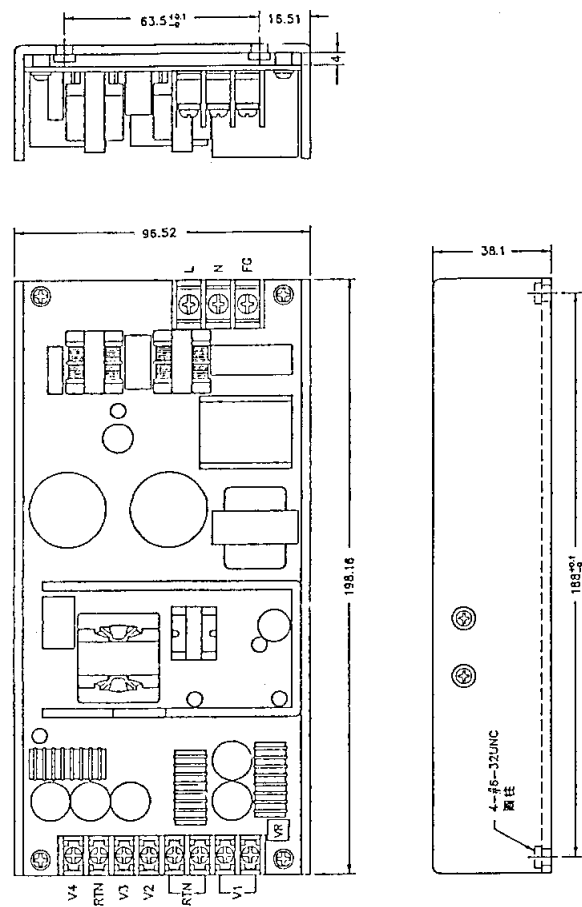


Fig. 2-1 Diagram of Terminal Block Assignment

2.2. DC Wires for HDD and FDD

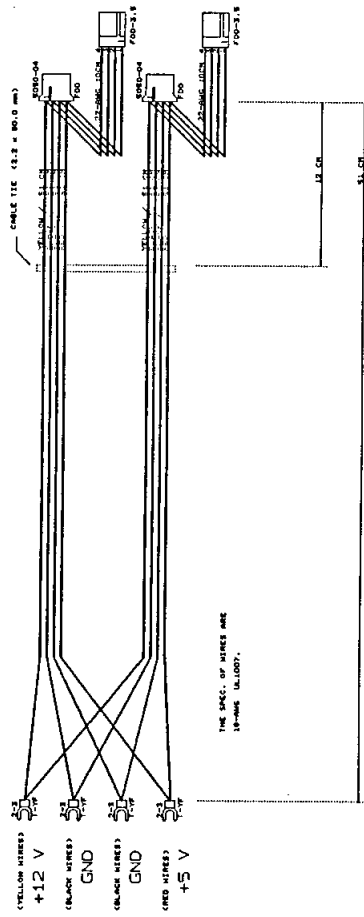


Fig. 2-2 Wires of +12V and +5V DC Output

## CHAPTER 3. MOUNTING THE POWER SET

### 3.1. Dimension of Mounting Bracket

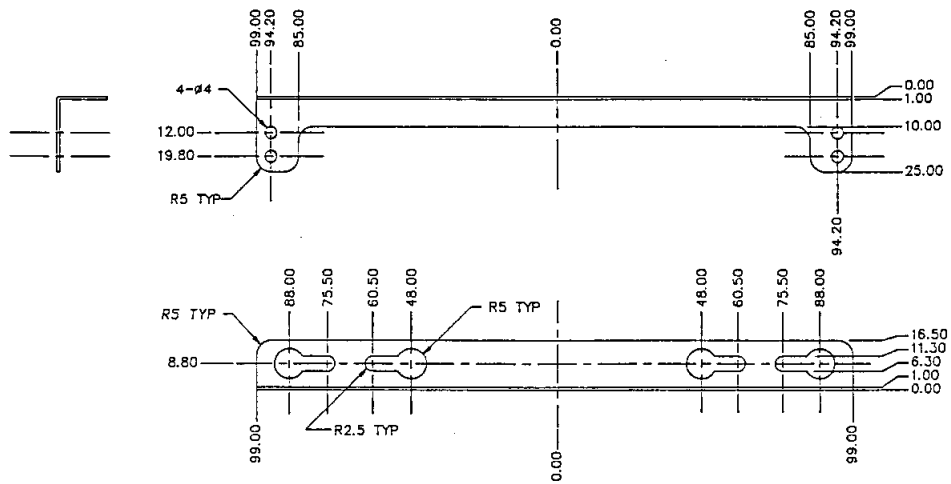
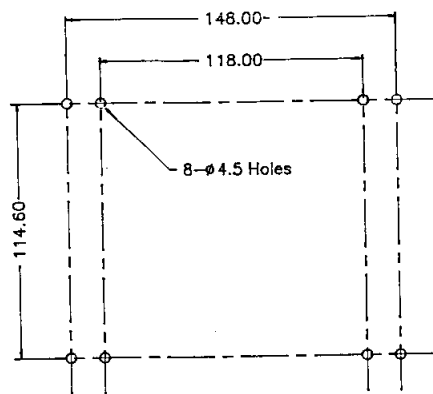
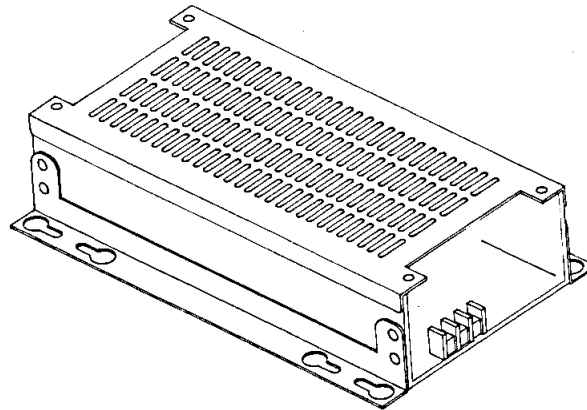


Fig. 3-1 Dimension of Mounting Bracket

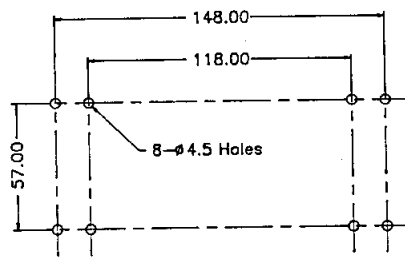
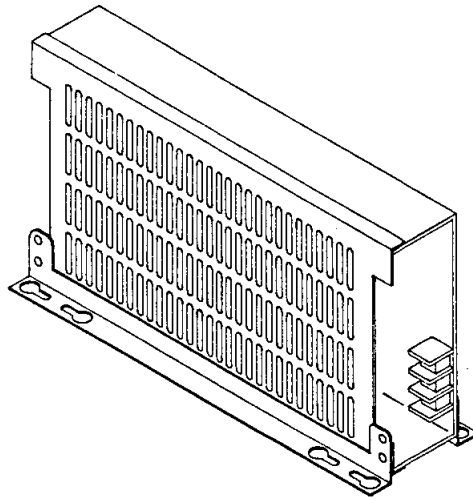
### 3.2. Example of Horizontal Mounting



Unit : mm

Fig. 3-2 Dimension of Horizontal Mounting

### 3.3. Example of Vertical Mounting



Unit : mm

Fig. 3-3 Dimension of Vertical Mounting

