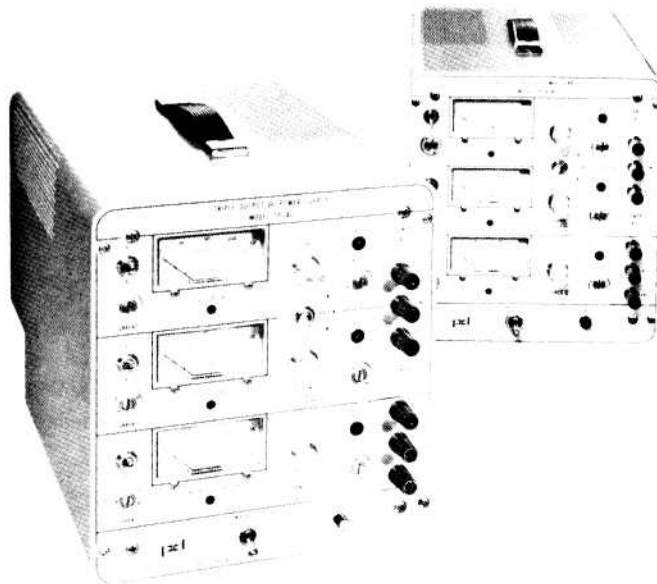


# POWER DESIGNS



## **POWER DESIGNS INC.**

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# INSTRUCTION MANUAL

## SECTION 1 INTRODUCTION

### 1.1 GENERAL

This manual contains instructions for the installation, operation and maintenance for Power Designs Model TP340 and TP343A triple output DC regulated power supply.

### 1.2 DESCRIPTION

This triple output regulated DC power source is suitable for general purpose laboratory and industrial applications. It features adjustable and independent current limiting and over-voltage crowbar protection for each output. A fault lamp indicates crowbar operation or an overload condition.

The following description refers to the three outputs as Source A ("A"), Source B ("B") and Source C ("C") respectively.

The power supplied by "A" and "B" is obtained from three binding posts on the front panel. The COMMON terminal is the internal connection between the negative terminal of "A" and the positive terminal of "B". This terminal is isolated from ground and both terminals of "C". The DC + terminal on source "A" produces a positive voltage with respect to COMMON. The DC - terminal on source "B" produced a negative voltage with respect to COMMON. Power from these terminals can also be obtained directly from DC + to DC -. In that case the output voltage will be the sum of the "A" and "B" voltages.

A front panel TRACKING switch provides individual control of each source or automatic Master/Slave operation. In this mode source "B" tracks source "A".

Source "C" provides power by means of two binding posts that are isolated from ground. This source may be operated in either polarity with respect to chassis or left floating.

All outputs may be operated simultaneously at full capacity with no derating.

### 1.3 ELECTRICAL SPECIFICATIONS

INPUT: 105 to 125 Volts, 58-440 Hz

PARAMETER	TP340 (Source A & B)	TP343 (Source A & B)	Both Models (Source C)
Output	0-32V, 0-1 AMP	0-20V, 0-2.5A 0-25V, 0-1A	0-6V, 0-5A 0-15V, 0-2.5A
Load Regulation	0.01% + 1MV PER AMP	0.01% + 1MV PER AMP	0.01% + 1MV PER AMP
Line Regulation	0.01% + 0.5MV	0.01% + 0.5MV	0.01% + 0.5MV
Stability (Note 1)	0.02% + 1MV	0.02% + 1MV	0.02% + 1MV
Recovery Time (Note 2)	50 us	100 us	100 us
Current Limit	2%-105% of rated current	2%-105% of rated current	2%-105% of rated current
Operating Temp.	0-50 °C	0-50 °C	0-50 °C
Temp. Coefficient	0.02% + 300uv/°C	0.02% + 300uv/°C	0.02% + 300uv/°C
OV Crowbar	Adj. 3-40V (Note 3)	Adj. 3-30V (Note 3)	Adj. 3-20V
Tracking	0.1% + 10 MV	0.1% + 10 MV	
Metering	Dual Range Volt/ Ammeter	Dual Range Volt/ Ammeter	Dual Range Volt/ Ammeter