

NV DELTA ELEKTRONIKA



E 015-2

E 030-1

E 060-0.6

REGULATED DC POWER SUPPLIES

E 015-2 0-15 V, 0-2 A

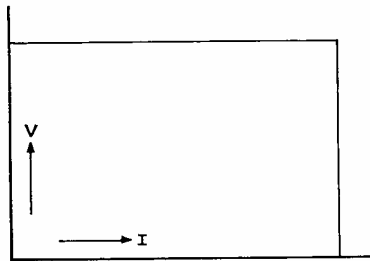
E 030-1 0-30 V, 0-1 A

E 060-0.6 0-60 V, 0-0.6 A

DESCRIPTION

The power supplies E 015-2, E 030-1 and E 060-0.6 have voltage and current regulation.

The voltage regulation changes sharply into current regulation if the setted current limit is reached.



These power supplies can be used as a constant voltage source with a limited current or as a constant current source with a limited open voltage.

Both limits are continuously variable.

The constant voltage/constant current design provides complete protection against all overload and short circuit conditions.

CONSTANT VOLTAGE OPERATION

Voltage control

10-turn potentiometer, range 0-100 %.

Remote programming

The voltage can be programmed by an external variable resistor of 0-5000 Ohm. Input on front panel. (10 kΩ for E 060-0.6).

Voltage regulation

5 mV for a + or - 10 % AC input voltage variation.

10 mV for a 0-100 % load variation.

Temp. coeff.

2.10^{-4} per °C from maximum output voltage.

Ripple voltage

0.1 mV r.m.s., 0.5 mV p-p.

Output impedance

Maximum 0.1 Ohm up to 100 kHz.

Recovery time

15 micro seconds for recovery to within 30 mV after a step load change from 10 % to 100 %.

CONSTANT CURRENT OPERATION

Current control

Single turn potentiometer, range 0-100 %.

Current regulation

0.3 mA for a 2 mA for a + or - 10 % AC input voltage variation.
2 mA for a maximum output voltage swing.

Temp. coeff.

$5 \cdot 10^{-4}$ per DC from maximum output current.

Ripple current

0.1 mA r.m.s.

REMAINING SPECIFICATIONS

Input voltage

220 V, 50 Hz. Other input voltages at special order.

Parallel and series connection

Special design enables parallel and series operation without precaution.

Ambient temp.

- 20 to + 45 DC (to + 35 DC for E 015-2 if used at 2 A below 10 V).

Meter

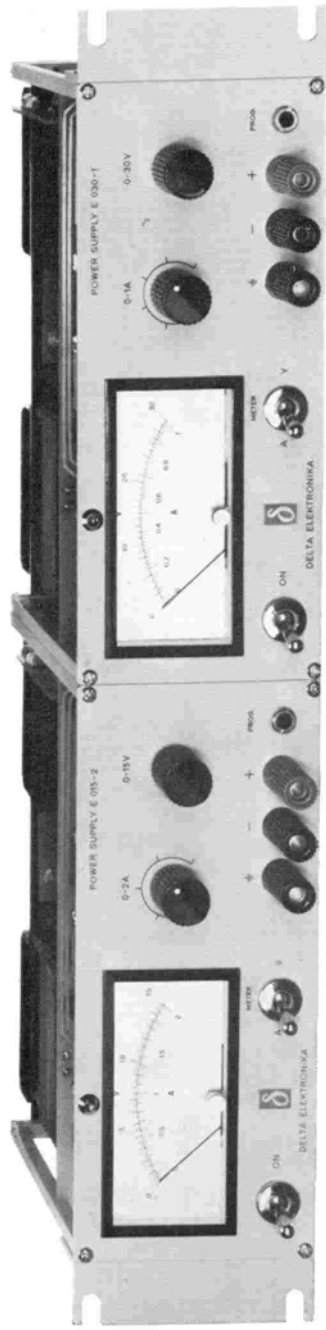
Meter with selector switch for voltage and current, accuracy 1.5 % f.s.

Finish

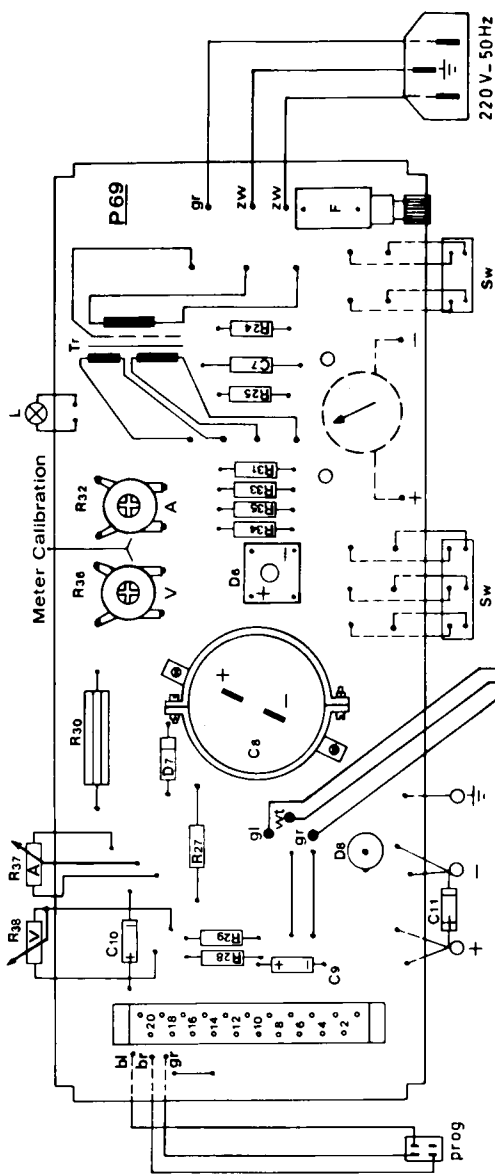
Light grey front panel with dark grey case.

Weight and size

2.7 kg 219 x 93 x 154 mm.



Two uncased units can be mounted side by side and with the addition of two H 6 brackets can be inserted in a 19" rack.



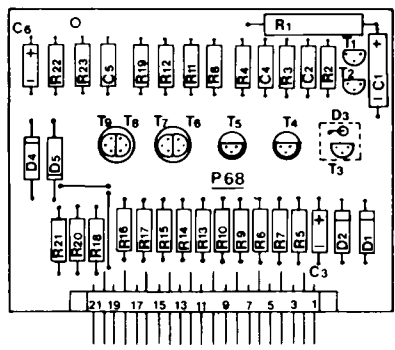
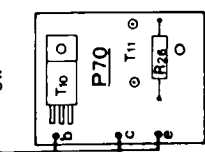
220 V - 50 Hz

Wiring diagram and printed
circuit boards

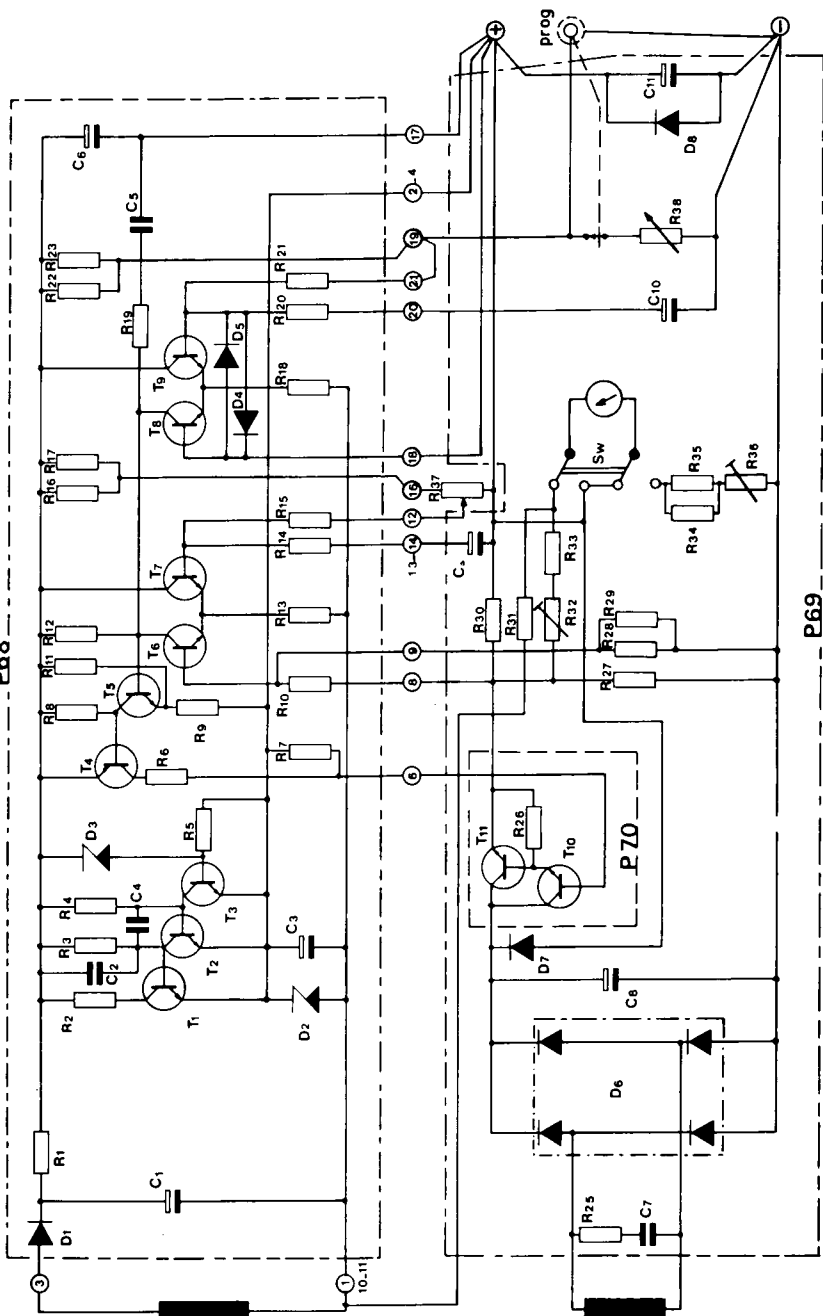
E 015-2

E 030-1

E 060-0.6



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E 015-2, E 030-1 and E 060-0.6

PART LIST

E 015-2

E 030-1

E 060-0.6

R (Ohm)

1 = 820	680	680	1W
2 = 150	150	150	
3 = 10 k	10 k	10 k	
4 = 10 k	10 k	10 k	
5 = 150	150	150	MF
6 = 33	33	33	
7 = 1 k	1 k	1 k	
8 = 2,2 k	2,2 k	2,2 k	
9 = 2,2 k	2,2 k	2,2 k	MF
10 = 470	470	470	
11 = 2,7 k	2,7 k	2,7 k	MF
12 = 22 k	22 k	22 k	
13 = 6,8 k	6,8 k	6,8 k	
14 = 470	470	470	
15 = 470	470	470	
16 = CR	CR	CR	MF
17 = 12 k	12 k	12 k	MF
18 = 6,8 k	6,8 k	6,8 k	
19 = 150	150	150	
20 = 470	470	470	
21 = 470	470	470	
22 = CR	CR	CR	MF
23 = 2,2 k	1,2 k	1,2 k	MF
24 = 560 k	560 k	560 k	
25 = 82	82	82	
26 = 10	10	10	
27 = 560	1,5 k	5,6 k	1W
28 = 2,7 M	1,2 M	820 k	
29 = CR	CR	CR	
30 = 1	1,8	3,3	7W WW
31 = 1,2 M	680 k	330 k	
32 = 1 k	1 k	1 k	var.
33 = 1,5 k	1,5 k	1,5 k	MF
34 = 15 k	33 k	68 k	MF
35 = CR	CR	CR	MF
36 = 1 k	1 k	1 k	var.
37 = 5 k	5 k	5 k	var. WW
38 = 5 k	5 k	10 k	10t. potm.

C (microfarad)

1 =	50	70 V	50	70 V	50	70 V
2 =	0,01	250 V	0,01	250 V	0,01	250 V
3 =	25	15 V	25	15 V	25	15 V
4 =	0,01	250 V	0,01	250 V	0,01	250 V
5 =	0,047	250 V	0,047	250 V	0,047	250 V
6 =	25	15 V	25	15 V	25	15 V
7 =	0,22	250 V	0,22	250 V	0,22	250 V
8 =	5000	35 V	2500	70 V	1000	100 V
9 =	10	35 V	10	35 V	10	35 V
10 =	10	100 V	10	100 V	10	100 V
11 =	50	35 V	50	70 V	50	100 V

D

1 =	TS 2	TS 2	TS 2	Diode Inc.
2 =	ZD 6,2	ZD 6,2	ZD 6,2	ITT
3 =	ZP 6,2	ZP 6,2	ZP 6,2	ITT
4 =	1N4148	1N4148	1N4148	ITT
5 =	1N4148	1N4148	1N4148	ITT
6 =	VH148	VH148	VH148	VARO
7 =	TS 2	TS 2	TS 2	Diode Inc.
8 =	MR 1031 B	MR 1031 B	MR 1031 B	Motorola

T

1 =	BC 182	BC 182	BC 182	Texas I.
2 =	BC 182	BC 182	BC 182	Texas I.
3 =	BC 182	BC 182	BC 182	Texas I.
4 =	BC 212	BC 212	BC 212	Texas I.
5 =	BC 182	BC 182	BC 182	Texas I.
6 =	BC 182	BC 182	BC 182	Texas I.
7 =	BC 182	BC 182	BC 182	Texas I.
8 =	BC 182	BC 182	BC 182	Texas I.
9 =	BC 182	BC 182	BC 182	Texas I.
10 =	TIP 29 A (Texas I.)	TIP 29 A (Texas I.)	MJE 340	Motorola
11 =	2N3055	2N3055	2N3442	RCA

F = Fuse 1 A - 5 x 20 mm

WW = Wire wound resistor

MF = Metalfilm resistor

CR = Calibration resistor.

All other resistors carbon

½ W 5%