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ELECTRAPRIME

Cat No. 29-00300 Cat No. 29-T0300

Without timer With timer

Output range

0-300 V 0-400 mA 0-120 W

- ✓ Four sets of output terminals
- ✓ Can be used in cold room or incubator $(-10^{\circ} \text{ C to } +50^{\circ} \text{ C})$
- ✓ Dual mode (CV & CC) with auto crossover
- ✓ Independent digital displays for mA, volts & timer (resolution 1 mA, 1 V)
- ✓ Output Voltage and Current can be set to any desired value within range
- Noise and vibration free
- ✓ Light weight Aluminium body with handles provided for portability





Electraprime (with timer)

Electraprime (without timer)

Features of this apparatus

Rugged

- Reduced probability of transistor burnout as MOSFETs with high voltage and current capacity used.
- Instantaneous voltage stabilization, input voltage spikes removed.
- Can be used in low voltage & high current applications
- Large operating temperature range (-10° C to +50° C)

Convenience

- Small foot print due to the low EMI radiation of transformer.
- Voltage, current and timer readings can be viewed simultaneously due to the independent displays
- · Four outputs in parallel
- · Low heat dissipation, hence can be placed in a cold room or cold cabinet without affecting cabinet temp.

Safety

- No shock from accidental contact with single output due to high insulation between primary and secondary windings of transformers.
- Short circuit proof due to special motherboard design.
- CE certified
- Low EMI radiation

Economical

- Four apparatus of similar resistance can be run simultaneously.
- Reduced maintenance and repairing cost as low probability of burnouts and short circuits
- Less than 10% dissipation of energy as heat
- No moving parts which may need replacements

Ordering description

Electraprime (29-00300): power supply, range 300 V, 400 mA, 120 W, constant voltage or constant current mode with MOSFETS, autocrossover, four outputs, independent digital displays for mA & V.

Electraprime (29-T0300): power supply, range 300 V, 400 mA, 120 W, constant voltage or constant current mode with MOSFETS, autocrossover, four outputs, independent digital displays for mA & V, with timer.

Technical specification

Feature	Electraprime	Electraprime (with timer)
	29-00300	29-T0300
Voltage Output	0-300V	0-300V
Current output	0-400mA DC	0-400mA DC
Power (wattage)	120 W	120 W
Voltage adjustment	1 V increment	1 V increment
	via ten turn knob	via ten turn knob
Current adjustment	1 mA increment	1 mA increment
	via one turn knob	via one turn knob
Mode of regulation	CVCC with LED indication	CVCC with LED indication
Timer	No	Yes



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Timer Display	-	www.technosour Dual, 3 digit LED display
Time ranges	-	Select between nine time ranges
		0 - 9.99/ 99.9/ 999 sec
		0 - 9.59 min:sec, 99.9/ 999 min
		0 – 9.59 hr:min, 99.9/ 999 hr
Programmable	No	Yes
Auto recovery on power failure	Yes	Yes
Set point stays indefinitely		
Timer recovery on power failure	-	Yes, memory retention for 10
		years
Pause resume function key	Yes	Yes
Operating temperature range	-10°C to +50°C	0°C to +50°C
Voltage input	230V rms, 50 Hz, single phase	230V rms, 50 Hz, single phase
Voltage Variation (from nominal AC input	+10%, -15%	+10%, -15%
voltage)		
Frequency	47Hz to 53Hz	47Hz to 53Hz
Transient suppression provided	Yes	Yes
Component details		
Mains switch	Illuminated rocker switch	Illuminated rocker switch
Fuse	On front panel	On front panel
Pause/ resume switch	Rocker switch	Rocker switch
Timer ON/ OFF switch	-	Rocker switch
Timer reset switch	-	Push button (momentary)
Output socket	4mm recessed female	4mm recessed female
Mains inlet	IEC C14	IEC C14
Output is fully isolated from input	Yes	Yes
Line regulation	Better than	Better than
in CV mode	+/-0.25%	+/-0.25%
in CC mode	+/-0.5%	+/-0.5%
Load regulation in:		
- no load to full load variation (in CV mode)	+/-0.25%	+/-0.25%
- change in zero to max output (in CC mode)	+/-0.5%	+/-0.5%
Ripple & noise		
in CV mode	100mV rms max. 20Hz-20MHz	100mV rms max. 20Hz-20MHz
in CC mode	5mA rms max.	5mA rms max.
Automatic overload & short circuit	Yes	Yes
protection with self-recovery		
3.5 digit voltmeter and ammeter	Yes	Yes
(independent display)		
Isolation		
~ between AC input & DC output terminals	2.1KV AC for 1 min	2.1KV AC for 1 min
 between DC output terminals and chassis 	1.5KV AC for 1 min	1.5KV AC for 1 min
Insulation		
~ between output & chassis	> 10Mohms @ 250DC	> 10Mohms @ 250DC
Humidity tolerance	upto 95% (non condensing)	upto 95% (non condensing)
Cooling by normal convection, venting at the	Yes	Yes
bottom and sides		. 55
Dimensions of the body	155 mm (w) x 250 mm (h) x 205	155 mm (w) x 250 mm (h) x 205
[measurement excludes projecting knobs,	mm (d)	mm (d)
handles and switches]	(2)	(-)