



Plug-in

- Dual Tracking Outputs
- Dual Isolated Outputs (user-selectable)

LINEAR REGULATED AC-DC

- Shipped Within 3 Days
- All Models U.L. Recognized
- Five Year Warranty



Don't forget these facts about Acopian....

- Fast Shipping? Acopian invented it! For over half a century, Acopian has built and shipped millions of power supplies within 3-DAYS after receipt of order. And we still do today! View our 3-DAY Shipping Promise: www.acopian.com/3dayship.html
- You ALWAYS talk to a real person when you call Acopian.
- Acopian power supplies last a *very long time!*
- You can email 3day@acopian.com anytime for 24/7 product support.
- The *Online System Builder* (www.acopian.com/SystemBuilder) is a convenient way to get your own custom power supply or power system (and most ship within 9 Days).
- You can order Acopian power supplies factory direct.
- ALL Acopian products are made in the USA.



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 Made in USA



Plug-in DUAL ISOLATED OUTPUTS (User-selectable)

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AC-DC

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Space-saving Acopian duals combine two electrically independent DC outputs in a single case. Either identical or different outputs may be selected. And every combination is supplied with Acopian's usual 3 day shipment guarantee and 5 year warranty. Like all Acopian Plug-ins, a dual-output module can be installed in seconds. Simply plug it into a standard 11-pin socket. Acopian duals are exceptionally dependable, too - offering the highest reliability of any available series-regulated power supply.

SPECIFICATIONS

Input Voltage: 105-125 VAC, 50-400 Hz, single phase.

Output Specifications: See page F46.

Polarity: Outputs are floating. Each section may be independently connected to provide any combination of positive and negative outputs.

Short Circuit Protection: Delivers current surges without damage—to protect against prolonged overloads and shorts, use of an input fuse is recommended.

Temperature Coefficient: 0.02%/°C (Typical).

Ambient Operating Temperature: -10 to +65°C.
No derating required.

MIL Tested and Extended Temperature Range:
See page F48.

Storage Temperature: -55 to +85°C.

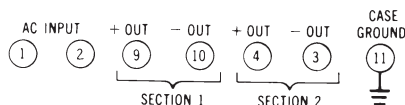
Installation: Plugs into standard 11-pin octal-type socket (see page H4). Four mounting holes (6-32) are provided in the base for fastening the module when used in other than the upright position, or if extreme vibration will be encountered.

HOW TO ORDER

Select two **sections** from the table on page F46. The complete model number is the combination of the two **sections** selected. Example: The combination of section 6J40D and section 12J100D is Model 6J40D-12J100D. Always assign the lower voltage section first. (Two of the same section can also be selected.) Where the indicated case sizes for the two sections differ, the larger case size applies.

PIN CONNECTIONS:

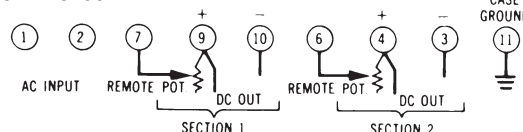
Standard model.



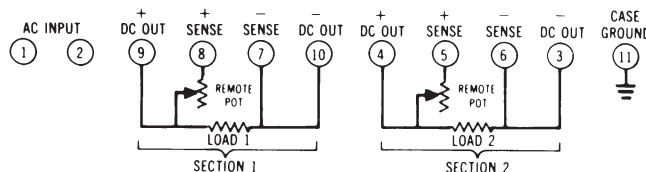
OPTIONS

Solder Terminals: All models can be furnished with solder terminals instead of the octal type plug. Contact factory or see web site for detailed information.

Remote Output Adjustment: All models have local voltage adjustments. When provision for remote (external) adjustments is also desired, add prefix "E" to model number. Example: E6J40D-12J100D.



Remote Sensing: Provision for remote sensing of the output voltages, to compensate for drops in the load lines, can be furnished. Add prefix "R" to model number when ordering. "R" power supplies have local voltage adjustments and provision for remote (external) output adjustments.



230 Volt Input: All models can be alternately furnished for operation on inputs of 210 to 250 VAC, 50 to 400 Hz. To order, add suffix "-230" to model number. The "-230" option requires two additional days.

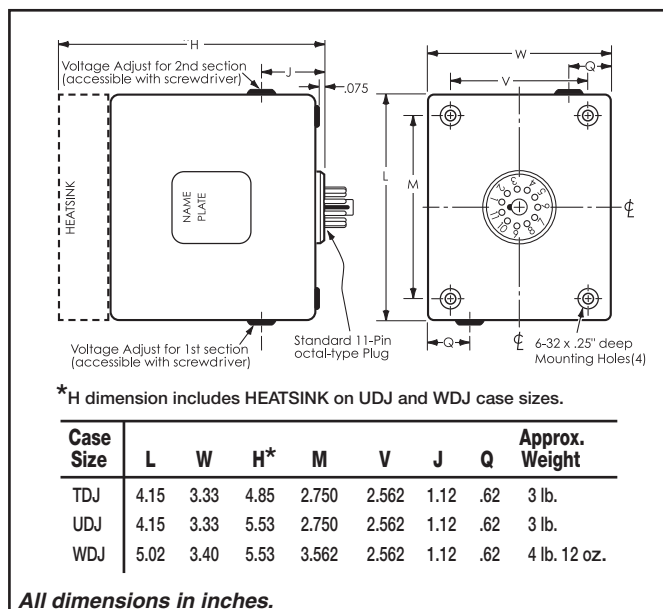
Overvoltage Protection: Two separate, preset overvoltage protection circuits, one for each output. To order, add prefix "V" to model number.

DUAL OUTPUT (User-selectable)

Nominal Output Voltage	Adjust Range \pm V	Output Current Amps.	Regulation		Ripple mV RMS	(see 'How to Order') Section	Case Size
			Load \pm %	Line \pm %			
3.3	.5	.500	.5	.05	1	3.3J50D	TDJ
3.3	.5	.700	.5	.05	1	3.3J70D	UDJ
3.3	.5	1.0	.5	.05	1	3.3J100D	WDJ
4	1	.500	.3	.05	1	4J50D	TDJ
4	.5	.700	.4	.05	1	4J70D	UDJ
4	.5	1.0	.5	.05	1	4J100D	WDJ
5	1	.400	.3	.05	1	5J40D	TDJ
5	1	.500	.3	.05	1	5J50D	TDJ
5	.5	.700	.4	.05	1	5J70D	UDJ
5	.5	1.0	.5	.05	1	5J100D	WDJ
5	.25	2.0	.5	.05	1	5J200D	WDJ
6	1	.400	.15	.05	1	6J40D	TDJ
6	1	.500	.15	.05	1	6J50D	TDJ
6	.5	.700	.2	.05	1	6J70D	UDJ
6	.5	1.0	.3	.05	1	6J100D	WDJ
7	1	.400	.15	.05	1	7J40D	TDJ
7	1	.500	.15	.05	1	7J50D	TDJ
7	.5	.700	.2	.05	1	7J70D	UDJ
7	.5	1.0	.3	.05	1	7J100D	WDJ
8	1	.400	.1	.05	1	8J40D	TDJ
8	1	.500	.1	.05	1	8J50D	TDJ
8	.5	.700	.15	.05	1	8J70D	UDJ
8	.5	1.0	.2	.05	1	8J100D	WDJ
9	1	.500	.1	.05	1	9J50D	TDJ
9	.5	.700	.15	.05	1	9J70D	UDJ
9	.5	1.0	.2	.05	1	9J100D	WDJ
10	1	.400	.1	.05	1	10J40D	TDJ
10	1	.500	.1	.05	1	10J50D	TDJ
10	.5	.700	.15	.05	1	10J70D	UDJ
10	.5	1.0	.2	.05	1	10J100D	WDJ
12	1	.400	.1	.05	1	12J40D	TDJ
12	1	.500	.1	.05	1	12J50D	TDJ
12	.5	.700	.1	.05	1	12J70D	UDJ
12	.5	1.0	.1	.05	1	12J100D	WDJ
13	1	.500	.1	.05	1	13J50D	TDJ
13	.5	.700	.1	.05	1	13J70D	UDJ
13	.5	1.0	.15	.05	1	13J100D	WDJ
15	1	.400	.1	.05	1	15J40D	TDJ
15	1	.500	.1	.05	1	15J50D	TDJ
15	.5	.700	.1	.05	1	15J70D	UDJ
15	.5	1.0	.15	.05	1	15J100D	WDJ
18	1	.400	.1	.05	1	18J40D	TDJ
18	1	.500	.1	.05	1	18J50D	TDJ
18	1	.750	.15	.05	1	18J75D	WDJ
18	.5	1.0	.15	.05	1	18J100D	WDJ

Nominal Output Voltage	Adjust Range \pm V	Output Current Amps.	Regulation		Ripple mV RMS	(see 'How to Order') Section	Case Size
			Load \pm %	Line \pm %			
20	1	.400	.1	.05	1	20J40D	TDJ
20	1	.500	.1	.05	1	20J50D	TDJ
20	1	.750	.15	.05	1	20J75D	WDJ
22	1	.400	.1	.05	1	22J40D	TDJ
24	1	.400	.1	.05	1	24J40D	TDJ
26	1	.400	.05	.05	1	26J40D	TDJ
28	1	.400	.05	.05	1	28J40D	TDJ
30	1	.400	.05	.05	1	30J40D	TDJ
32	1	.300	.05	.05	1	32J30D	TDJ
34	1	.300	.05	.05	1	34J30D	TDJ
35	1	.200	.05	.05	1	35J20D	TDJ
36	1	.200	.05	.05	1	36J20D	TDJ
40	1	.200	.05	.05	1	40J20D	TDJ
45	1	.200	.05	.05	1	45J20D	TDJ
48	1	.200	.05	.05	1	48J20D	TDJ
50	1	.200	.05	.05	1	50J20D	TDJ
55	1	.200	.05	.05	1	55J20D	TDJ
60	1	.100	.05	.05	1	60J10D	TDJ
65	1	.100	.05	.05	1	65J10D	TDJ
70	1	.050	.05	.05	1	70J05D	TDJ
70	1	.100	.05	.05	1	70J10D	TDJ
75	1	.100	.05	.05	1	75J10D	TDJ
80	1	.100	.05	.05	1	80J10D	TDJ
85	1	.100	.05	.05	1	85J10D	TDJ
90	1	.100	.05	.05	1	90J10D	TDJ
95	1	.100	.05	.05	1	95J10D	TDJ
100	1	.100	.05	.05	1	100J10D	TDJ
105	1	.100	.05	.05	1	105J10D	TDJ
110	1	.100	.05	.05	1	110J10D	TDJ
115	1	.100	.05	.05	1	115J10D	TDJ
120	1	.100	.05	.05	1	120J10D	TDJ
125	1	.100	.05	.05	1	125J10D	TDJ
130	1	.100	.05	.05	1	130J10D	TDJ
135	1	.100	.05	.05	1	135J10D	TDJ
140	1	.100	.05	.05	1	140J10D	TDJ
145	1	.100	.05	.05	1	145J10D	TDJ
150	1	.100	.05	.05	1	150J10D	TDJ

LINEAR REGULATED AC-DC



Plug-in DUAL TRACKING OUTPUTS

LINEAR REGULATED
AC-DC

- Shipped Within 3 Days
- All Models U.L. Recognized
- Five Year Warranty



Dual tracking output Plug-in power supplies provide the balanced voltages commonly required for driving operational amplifiers and related linear circuitry. The convenient plug-in configuration simplifies mounting and wiring, and connections for the remote sensing of the output voltages, to permit compensation of load line voltage drops, are a standard feature.



SPECIFICATIONS

Input Voltage: 105-125 VAC, 50-400 Hz, single phase.

Output Tracking: Within 1%.

Polarity: Positive output, common, and negative output.

Remote Voltage Sensing: Provision for sensing the output voltage across the load, so that drops in the load lines are compensated, is a standard feature.

Temperature Coefficient: 0.02%/°C (Typical).

Ambient Operating Temperature: -10 to +65°C.
No derating required.

Storage Temperature: -55 to +85°C.

Installation: Plugs into standard 8-pin octal socket (see page H4). Four mounting holes (6-32) are provided in the base for fastening the module when used in other than the upright position, or if extreme vibration will be encountered.

PIN CONNECTIONS:

AC INPUT	+V	+S	COM	-S	-V	CASE GROUND
①	②	③	④	⑤	⑥	⑦
						⑧

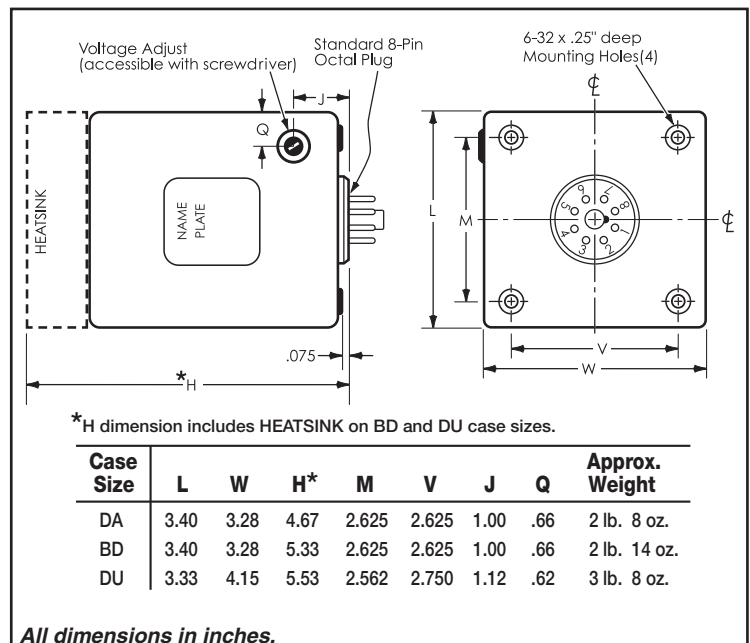
OPTIONS

Solder Terminals: All models can be furnished with solder terminals instead of the octal-type plug. To order, add suffix "L" to model number.

230 Volt Input: All models can be alternately furnished for operation on inputs of 210-250 VAC, 50-400 Hz. Add suffix "-230" to model number. The "-230" option requires two additional days.

Overvoltage Protection: A built-in, preset overvoltage protection circuit is available on all models. If either output fails, both outputs are 'crowbarred'. To order, add prefix "V" to the model number.

Nominal Output Voltages	Adjust Range ± V	Amps. per Output	Regulation		Ripple mV RMS	Model	Case Size
			Load ± %	Line ± %			
±5	.25	.750	.1	.1	1.5	JD5-75	BD
±5	.25	1.5	.1	.1	1.5	JD5-150	DU
±12	1	.400	.1	.1	1.5	JD12-40	DA
±12	1	.700	.1	.1	1.5	JD12-70	BD
±12	1	1.0	.1	.1	1.5	JD12-100	DU
±15	1	.400	.1	.1	1.5	JD15-40	DA
±15	1	.700	.1	.1	1.5	JD15-70	BD
±15	1	1.0	.1	.1	1.5	JD15-100	DU



Plug-in Power Supplies

MIL TESTED and EXTENDED TEMP RANGE (for Plug-in models on pages F43-F47)

SHIPPED WITHIN 3 DAYS
ALL MODELS U.L. RECOGNIZED

Ruggedized construction and capability for operation through an extended ambient temperature range of -20 to $+71^{\circ}\text{C}$ (without derating) are provided by Acopian MIL-option supplies. In all other respects they are identical to our standard Plug-in power supplies.

HOW TO ORDER:

Add prefix "MIL-" to standard model number.
Example: Model 6J200 becomes MIL-6J200.

MIL-option equivalents to all the models included on pages F39 through F42, except those housed in case size HS, have been tested to these specifications:

ALTITUDE: MIL-STD-810B, Method 500, Procedure II.

VIBRATION: MIL-STD-810B, Method 514, Procedure I, Curve D.

SHOCK: MIL-STD-810B, Method 516, Procedure I.

FUNGUS: (additional \$25.00/output charge applies.)
MIL-STD-810B, Method 508, Procedure I.

CONDUCTED EMI: MIL-I-6181D, Paragraph 4.3.1., Figure II.

RADIATED EMI: MIL-I-6181D, Paragraph 4.3.2.

SUSCEPTIBILITY TO CONDUCTED AND RADIATED EMI: MIL-I-6181D, Paragraph 4.3.4.

HIGH TEMPERATURE: MIL-STD-810B, Method 501, Procedure I.

LOW TEMPERATURE: MIL-E-5272C, Paragraph 4.2.2, Procedure II.

HUMIDITY: MIL-STD-810B, Method 507, Procedure I.

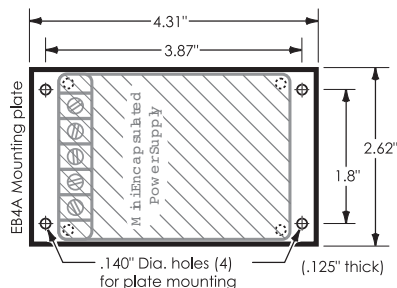
SALT FOG: MIL-STD-810B, Method 509, Procedure I.

Mounting Kits for 'Mini Encapsulated - with screw terminals' power supplies:

WALL MOUNTING

Model EB4A

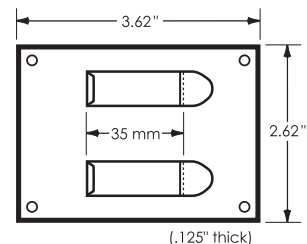
Use Mounting Kit EB4A to mount from the power supply side of the mounting surface, necessary when the other side of the mounting surface is inaccessible. This kit consists of an aluminum plate and four screws for attaching it to the power supply, effectively adding mounting flanges to any Mini Encapsulated power supply with screw terminals or any Mini DC-DC Converter with screw terminals.



DIN RAIL MOUNTING

Model EB35DIN

Mounting Kit EB35DIN consists of an aluminum plate, with two DIN clips attached to it, and four screws for attaching the plate to the bottom of any Mini Encapsulated power supply with screw terminals or any Mini DC-DC Converter with screw terminals. The power supply can then be snapped onto a 35mm 'top hat' type of DIN rail.

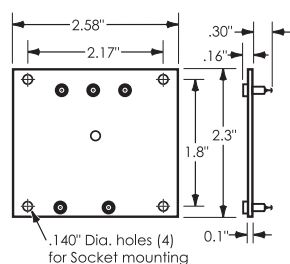


Sockets for 'Mini Encapsulated - PC Board mounting' power supplies:

For use with PC board mounting Mini Linears and PC board mounting DC-DC Converters. Each of these sockets has a sturdy phenolic base with gold plated teflon-insulated contacts.

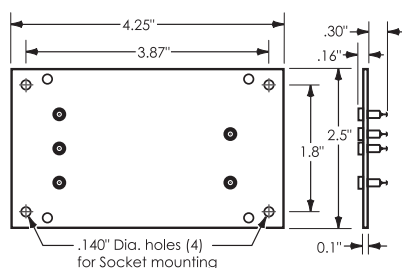
Model ES-1

For case sizes ES-10 and ESC-10



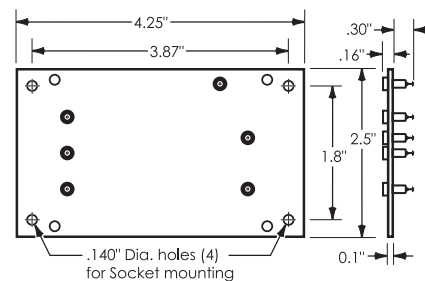
Model EL-1

For case sizes EL-10, EL-13, EL-20 and ELC-10



Model ELW-1

For case sizes ELW-13 and ELW-20

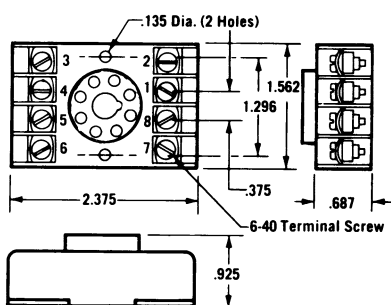


Sockets for 'Plug-In' power supplies:

RETMA-numbered screw-type terminals simplify wiring and permit the use of wire terminals or bare wire, 12 to 20 guage. Rated at 300 volts RMS, 10 amp.

Model SL608

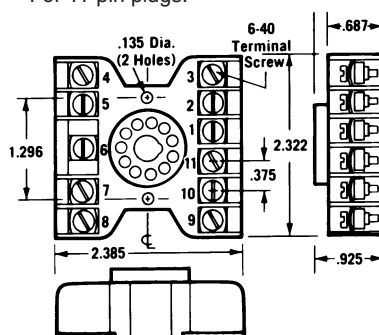
For 8-pin plugs.



All dimensions in inches.

Model SL611

For 11-pin plugs.



All dimensions in inches.

ACOPIAN SELLS FACTORY DIRECT WORLDWIDE: We do not use representatives or distributors. Contact Acopian for technical information or a quote.

WARRANTY: Acopian power supplies are warranted to be free from defects in material and workmanship for a period of five years (encapsulated devices, for one year) from date of original shipment. Acopian's obligation under this warranty is limited to repairing any power supply returned to the factory Service Department in Easton, PA or Melbourne, FL, and replacing any defective parts. Mini Encapsulated power supplies are not repairable. Authorization must be obtained from Acopian before a power supply may be returned for repair. Units must be well packed when shipping to Acopian; the repair of any damage incurred during shipment will be charged. Transportation charges are to be paid by the purchaser. A reinspection and handling charge will be applied to returned units found to have no defects. If a failure has been caused by misuse, operation in excess of specifications, or modification by the customer, repairs will be billed at cost; in such cases, a cost estimate will be submitted before work is started.

Acopian reserves the right to make changes or improvements in its products without incurring any obligation to install the same on products previously manufactured.

This warranty is in lieu of all other warranties, obligations, and liabilities, expressed or implied, and is the purchaser's exclusive remedy. Acopian makes no warranty, either express or implied, of merchantability, fitness for a particular purpose or otherwise. In no event shall Acopian be liable whether in contract, tort, or negligence, for special, indirect, incidental or consequential damages of any kind, including loss of business or profits, or any other losses incurred by the purchaser or any third party, the Customer's remedies being limited, at Acopian's option, to replacement, repair or credit at the price on the date of claim.

The validity, performance and construction of all terms and conditions and any sale made by Acopian shall be determined by the law of Pennsylvania, without regard to its conflict of law principles, and all parties to the transaction expressly consent to the jurisdiction of such courts and consent to the venue of the Court of Common Pleas for Northampton County, Pennsylvania.

PRICES: The prices shown are F.O.B. our factory; Easton, PA or Melbourne, FL. ('EXW Factory' if outside the 50 United States.) All prices and specifications are subject to change without notice.

TERMS: Net 30 days, subject to credit approval. Visa, MasterCard and American Express also accepted.

SHIPPING: Location permitting, small shipments are made by United Parcel Service, FedEx, DHL (international orders) or by Parcel Post; larger shipments, by insured motor freight collect. Shipments can be made by air upon request. Risk of loss shall be F.O.B. Our Factory, even in cases where freight may be prepaid or allowed to destination by Acopian. If equipment is received in damaged condition, it is the customer's responsibility to contact the carrier and file a claim for damages.

TIME FOR DELIVERY: The time for delivery quoted by Acopian is the time required to ship from our plants. We will not be liable for delays in delivery caused by any reason beyond our control, including but not limited to acts of God, casualty, civil disturbance, labor disputes, transportation or supply difficulties, or any interruption of our facilities, and the quoted time for delivery shall be extended during the continuance of such conditions and for a reasonable time thereafter. In no event will Acopian be liable for any premium transportation, procurement, or similar costs incurred by the Customer as a result of conditions beyond Acopian's control resulting in Acopian's inability to deliver product in accordance with customer's requested delivery schedules.

QUANTITY DISCOUNTS: Discounts are available to quantity buyers and are dependent upon the order quantity and the manufacturing scheduling anticipated by the order, and apply only to the quantity and delivery ordered. Partial shipments are considered as separate orders for discounting purposes.

EXPORT ORDERS: A minimum export documentation charge of \$60.00 applies. (A minimum charge of \$25.00 applies on orders to certain U.S. territories requiring customs forms.)

MOISTURE/FUNGUS PROOFING: Power supplies can be furnished with a moisture and fungus resistant varnish applied to interior surfaces. To order, add the suffix letter F to the model number. This option requires two additional days and is not available on High Voltage, Mini Encapsulated, Rack Mounting, and Gold Box Switching models.

TAGGING: Add \$10.00 to price.

TEST DATA: Cost, \$35.00 or 2% of order, whichever is greater.

SPECIAL MODELS/MODIFICATIONS: Cataloged models can be altered at the factory to meet special requirements. Contact the Applications Engineering Department to discuss your needs.

PARTS: The designs used in Acopian power supplies utilize standard components to the greatest practical extent. When replacements are required, the types originally used, or their equivalents, can usually be obtained most quickly from a local electronic components distributor.

Special components, such as transformers, are stocked at the factory warehouses. Contact the Applications Engineering Department for information on the parts required, referencing the model number of the power supply, the circuit designation of the component, and a description.

PURCHASE ORDER ACCEPTANCE: Orders are accepted subject to Acopian's Terms and Conditions. Any Terms and Conditions of any Purchaser's order, agreement, or understanding which are in addition to or inconsistent with Acopian's shall not be binding upon Acopian unless made in writing and accepted over the signature of an authorized officer of Acopian. Orders shall not be considered accepted until entered into production at our plant. Acopian reserves the right to refuse any order. All typographical and clerical errors are subject to correction by Acopian.

RETURNED GOODS: Acopian products are built on a per-order basis, and ordinarily no credit can be extended for their return. No goods will be accepted for return unless authorized in writing by Acopian.

CHANGES: The customer may, by a written notice, request changes within the general scope of the order, in the drawings, designs or specifications; method of shipment; and place of delivery. If any such change causes an increase or decrease in the cost, or the time required for the processing of any part of the order, an equitable adjustment shall be made in the price or delivery schedule, or both, and the order shall be modified in writing accordingly.

CANCELLATION: Suspension or cancellation of orders may be made only upon our written approval and on terms that will indemnify us against all loss.

OVERTIME: It is anticipated that any order will be processed during regular working hours on regular working days. If for any reason the Purchaser requests Acopian to process the order, or any portion of it, outside of such regular working hours, any overtime or other additional expense occasioned thereby shall be billed to and paid by the Purchaser as an extra cost. Acopian reserves the right to decline to process the order outside regular working hours.

CUSTOMER DELAY OF WORK: If the performance of all or any part of the work is delayed or interrupted by Customer's failure to act within the time specified (or within a reasonable time if no time is specified) and such act is not expressed or implied by the order, an adjustment shall be made in the cost of performance of the order caused by such delay or interruption and the order modified in writing accordingly. Adjustment will also be made in the delivery or performance dates and any other contractual provisions affected by such delay or interruption.

GOVERNMENT SPECIFICATIONS: Pricing is based upon industrial-grade construction, marking, packing, and packaging. Exception is taken to any MIL specifications, and to any requirements for the use of special forms, documentation other than quoted, and Government Source Inspection. Acopian must decline to quote on any other basis.

APPLICATIONS ASSISTANCE: *Questions regarding the specifications, features, and use of any Acopian product should be directed to the Applications Engineering Department. A staff of power supply specialists will be pleased to assist you.*

ACOPIAN IS AN ISO 9001 CERTIFIED COMPANY