

Accel/Decel Card

Instruction Manual
Model C11698-000

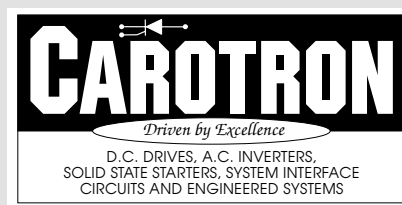




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1

General Description

Quality Design

Model C11698-000 Accel/Decel card is designed to handle a variety of applications where Accel/Decel functions are required without isolation.

Inputs up to 10VDC maximum are acceptable sources. A +10VDC voltage is available to allow the input signal to be sourced from a 1,000 to 10,000 ohm potentiometer. The input signal is supplied through a linear acceleration/deceleration circuit with two selectable time ranges. The two

time ranges are switch selectable for 1 - 60 seconds or 6 - 600 seconds with individual Accel and Decel potentiometers to set the time within a selected range.

A customer supplied contact closure "enables" the Accel/Decel circuit and allows the reference to accelerate to a level set by the input voltage or potentiometer. The decel circuit operates whenever the reference is lowered. When the enable contacts opens, the reference is zeroed immediately.

The unit also includes ± 12 VDC Power Supply outputs rated at 100 mA each for customer use.

2

Standard Features

- Depluggable terminal strip provided for easy connection

- Compact chassis design
- Programmable for 115 or 230 VAC input

3

Specifications

AC Input

- 115/230 VAC, $\pm 10\%$, 50/60 Hz, 4.4 VA Max.

Signal Voltage Input

- 0 to 10 VDC Max

Potentiometer Input

- +10 VDC, $\pm 5\%$ available to source a 1,000 to 10,000 ohm potentiometer

Enable Input

- Contact closure, contacts must be rated for 12 VDC @ 40 mA

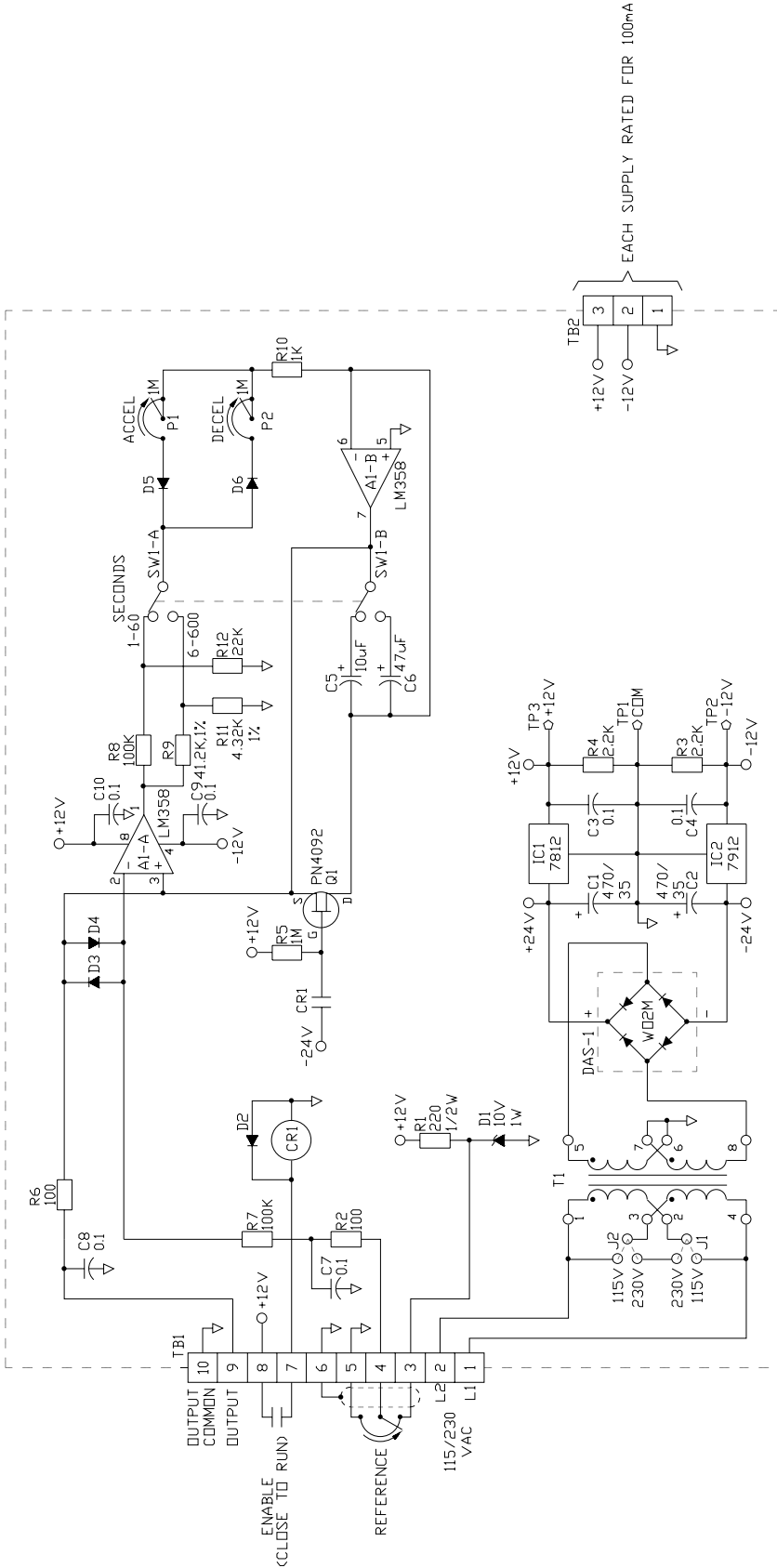
Output Range

- 0 to Signal voltage input level (10 VDC Max.) @ 10mA

Power Supply Outputs

- +12 VDC @ 100 mA
- -12 VDC @ 100 mA

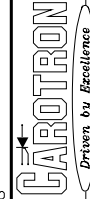
4 Prints



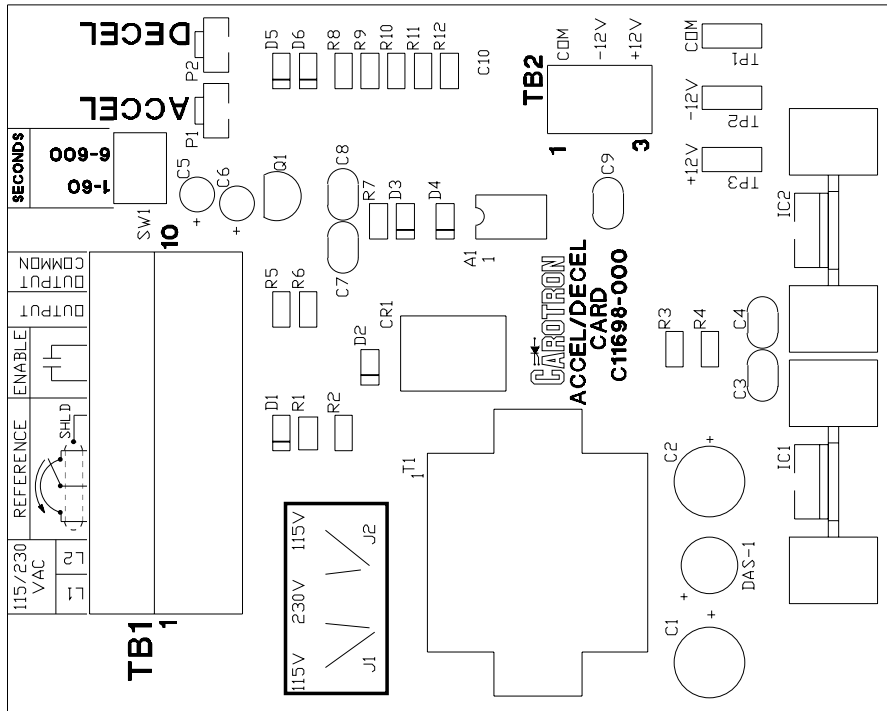
- NOTES:
1. ALL DIODES IN4148 UNLESS NOTED
 2. ALL RESISTORS 1/4 WATT, 2% UNLESS NOTED
 3. REF. ASSEMBLY C11698

REV. B, ECD 429, 3-5-96
 REV. A, ECD 417, 1-18-96

DATE	7-31-95
DRAWN BY	HJH
APPROVED BY	
TOLERANCES -	100%
3 DEC PL -	80%
SCALE	
TITLE	SCHEMATIC, ACCEL/DECEL CARD
DRAWING NUMBER	C11697
REV.	B
SH.	1 OF 1



HEATH SPRINGS, SC
 TEL 803-586-8614
 FAX 803-586-0853



REF. SCHEMATIC C11697
 REF. B.O.M. A11698-00

REV. A, ECO 429, 3-5-96

DATE:	10-6-95
DRAWN BY:	HJH
APPROVED BY:	
CAROTRON <i>Driven by Excellence</i>	
HIGHT SPRINGS, NC TEL: 803-286-6664 FAX: 803-286-6663	
TOLERANCES:	
2 DEC. PL. = .005"	
3 DEC. PL. = .005"	
TITLE:	ASSEMBLY ACCEL/DECEL CARD
SCALE:	
DRAWING NUMBER:	C11698
REV. A	SH. 1 OF 1

Standard Terms & Conditions of Sale

1. General

The Standard Terms and Conditions of Sale of Carotron, Inc. (hereinafter called "Company") are set forth as follows in order to give the Company and the Purchaser a clear understanding thereof. No additional or different terms and conditions of sale by the Company shall be binding upon the Company unless they are expressly consented to by the Company in writing. The acceptance by the Company of any order of the Purchaser is expressly conditioned upon the Purchaser's agreement to said Standard Terms and Conditions. The acceptance or acknowledgement, written, oral, by conduct or otherwise, by the Company of the Purchaser's order shall not constitute written consent by the Company to addition to or change in said Standard Terms and Conditions.

2. Prices

Prices, discounts, allowances, services and commissions are subject to change without notice. Prices shown on any Company published price list and other published literature issued by the Company are not offers to sell and are subject to express confirmation by written quotation and acknowledgement. All orders of the Purchaser are subject to acceptance, which shall not be effective unless made in writing by an authorized Company representative at its office in Heath Springs, S.C. The Company may refuse to accept any order for any reason whatsoever without incurring any liability to the Purchaser. The Company reserves the right to correct clerical and stenographic errors at any time.

3. Shipping dates

Quotation of a shipping date by the Company is based on conditions at the date upon which the quotation is made. Any such shipping date is subject to change occasioned by agreements entered into previous to the Company's acceptance of the Purchaser's order, governmental priorities, strikes, riots, fires, the elements, explosion, war, embargoes, epidemics, quarantines, acts of God, labor troubles, delays of vendors or of transportation, inability to obtain raw materials, containers or transportation or manufacturing facilities or any other cause beyond the reasonable control of the Company. In no event shall the Company be liable for consequential damages for failure to meet any shipping date resulting from any of the above causes or any other cause.

In the event of any delay in the Purchaser's accepting shipment of products or parts in accordance with scheduled shipping dates, which delay has been requested by the Purchaser, or any such delay which has been caused by lack of shipping instructions, the Company shall store all products and parts involved at the Purchaser's risk and expense and shall invoice the Purchaser for the full contract price of such products and parts on the date scheduled for shipment or on the date on which the same is ready for delivery, whichever occurs later.

4. Warranty

The Company warrants to the Purchaser that products manufactured or parts repaired by the Company, will be free, under normal use and maintenance, from defects in material and workmanship for a period of one (1) year after the shipment date from the Company's factory to the Purchaser. The Company makes no warranty concerning products manufactured by other parties.

As the Purchaser's sole and exclusive remedy under said warranty in regard to such products and parts, including but not limited to remedy for consequential damages, the Company will at its option, repair or replace without charge any product manufactured or part repaired by it, which is found to the Company's satisfaction to be so defective; provided, however, that (a) the product or part involved is returned to the Company at the location designated by the Company, transportation charges prepaid by the Purchaser; or (b) at the Company's option the product or part will be repaired or replaced in the Purchaser's plant; and also provided that (c) the Company is notified of the defect within one (1) year after the shipment date from the Company's factory of the product or part so involved.

The Company warrants to the Purchaser that any system engineered by it and started up under the supervision of an authorized Company representative will, if properly installed, operated and maintained, perform in compliance with such system's written specifications for a period of one (1) year from the date of shipment of such system.

As the Purchaser's sole and exclusive remedy under said warrant in regard to such systems, including but not limited to remedy for consequential damages, the Company will, at its option, cause, without charges any such system to so perform, which system is found to the Company's satisfaction to have failed to so perform, or refund to the Purchaser the pur-

chase price paid by the Purchaser to the Company in regard thereto; provided, however, that (a) Company and its representatives are permitted to inspect and work upon the system involved during reasonable hours, and (b) the Company is notified of the failure within one (1) year after date of shipment of the system so involved.

The warranties hereunder of the Company specifically exclude and do not apply to the following:

a. Products and parts damaged or abused in shipment without fault of the Company.

b. Defects and failures due to operation, either intentional or otherwise, (1) above or beyond rated capacities, (2) in connection with equipment not recommended by the Company, or (3) in an otherwise improper manner.

c. Defects and failures due to misapplication, abuse, improper installation or abnormal conditions of temperature, humidity, abrasives, dirt or corrosive matter.

d. Products, parts and systems which have been in any way tampered with or altered by any party other than an authorized Company representative.

e. Products, parts and systems designed by the Purchaser.

f. Any party other than the Purchaser.

The Company makes no other warranties or representation, expressed or implied, of merchantability and of fitness for a particular purpose, in regard to products manufactured, parts repaired and systems engineered by it.

5. Terms of payment

Standard terms of payment are net thirty (30) days from date of the Company invoice. For invoice purposed, delivery shall be deemed to be complete at the time the products, parts and systems are shipped from the Company and shall not be conditioned upon the start up thereof. Amounts past due are subject to a service charge of 1.5% per month or fraction thereof.

6. Order cancellation

Any cancellation by the Purchaser of any order or contract between the Company and the Purchaser must be made in writing and receive written approval of an authorized Company representative at its office in Heath Springs, S.C. In the event of any cancellation of an order by either party, the Purchaser shall pay to the Company the reasonable costs, expenses, damages and loss of profit of the Company incurred there by, including but not limited to engineering expenses and expenses caused by commitments to the suppliers of the Company's subcontractors, as determined by the Company.

7. Changes

The Purchaser may, from time to time, but only with the written consent of an authorized Company representative, make a change in specifications to products, parts or systems covered by a purchase order accepted by the Company. In the event of any such changes, the Company shall be entitled to revise its price and delivery schedule under such order.

8. Returned material

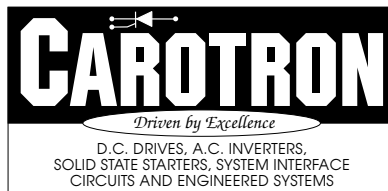
If the Purchaser desires to return any product or part, written authorization thereof must first be obtained from the Company which will advise the Purchaser of the credit to be allowed and restocking charges to be paid in regard to such return. No product or part shall be returned to the Company without a "RETURN TAG" attached thereon which has been issued by the Company.

9. Packing

Published prices and quotations include the Company's standard packing for domestic shipment. Additional expenses for special packing or overseas shipments shall be paid by the Purchaser. If the Purchaser does not specify packing or accepts parts unpacked, no allowance will be made to the Purchaser in lieu of packing.

10. Standard transportation policy

Unless expressly provided in writing to the contrary, products, parts and systems are sold f.o.b. first point of shipment. Partial shipments shall be permitted, and the Company may invoice each shipment separately. Claims for non-delivery of products, parts and systems, and for damages thereto must be filed with the carrier by the Purchaser. The Company's responsibility therefor shall cease when the carrier signs for and accepts the shipment.



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