

APPLIED CONCEPTS INC.

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ACL-12-1225

PRODUCT DATA SHEET

CCFL INVERTER

(For Multiple Tube Applications)

7/30/03

The ACL-12-1225 is designed to power 12 CCFL's to a nominal power level of 50 watts.

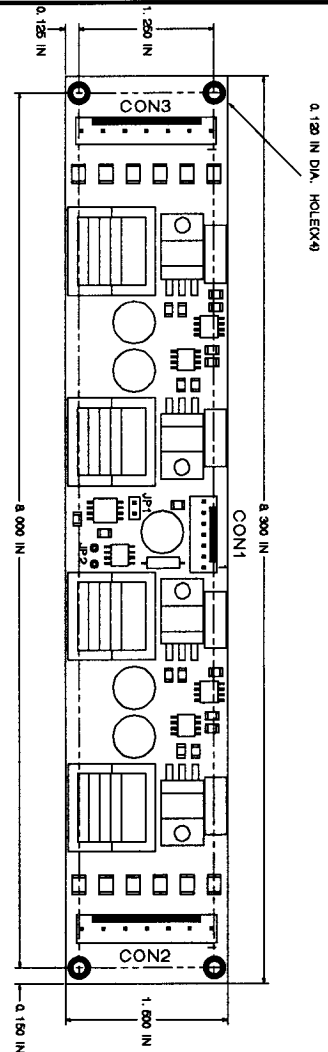
Intensity control (0-100%) is accomplished by the user providing a variable dc level of 0V(off) to 5V(full-on) at pin 4 of CON1.

Enable control is accomplished at pin 7 of CON1 (0V=off, 5V=on).

All outputs are open and short circuit protected.

This unit conforms to the USER SELECTABLE OPERATION CHART -ACL-12-1225 drive levels

PROFILE:
0.575 IN



Specifications:

- Vin = +12V +/- 10%
- CCFL strike voltage = 1800Vrms @ Vin=12V
- CCFL tube current = 6.0mA/tube @ 100% intensity/Vin=12V
- Recommended CCFL sustaining voltage = 600Vrms - 800Vrms
- Nominal tube current frequency = 27khz +/- 10%
- Nominal pwm frequency = 98Hz +/- 3%
- Pwm duty cycle range = 0 to 100%
- Average electrical efficiency >90%

Additional control/capability:*

- Supports multiple units ie: Master/Slave(s)
- Synchronization to display frame-rate
- Low power sleep-mode and soft-start
- 70 Watt total output power capability @ 70DegC

* Please contact factory for information

CON1
MOLEX 22-28-0070

PIN #

- | | |
|---|-----------------|
| 1 | +5V OUTPUT |
| 2 | +12V INPUT(PWR) |
| 3 | +12V INPUT(PWR) |
| 4 | VCNTL |
| 5 | GND(PWR) |
| 6 | GND(PWR) |
| 7 | ENABLE |

CON2(CON3)
MOLEX 22-28-0130

PIN #

- | | |
|----|------------|
| 1 | CCFL 1(7) |
| 2 | NC |
| 3 | CCFL 2(8) |
| 4 | NC |
| 5 | CCFL 3(9) |
| 6 | NC |
| 7 | CCFL 4(10) |
| 8 | NC |
| 9 | CCFL 5(11) |
| 10 | NC |
| 11 | CCFL 6(12) |
| 12 | NC |
| 13 | CCFL COM |

ACL-12-1225 USER SELECTABLE OPERATION CHART

TUBE CURRENT mA	DUTY CYCLE %	VCNTRL Volts	R-LIMIT Ohms Assume 10K pot
6	100	5	0
5.454545455	90.91	4.545454545	1000
5.357142857	89.29	4.464285714	1200
5.217391304	86.96	4.347826087	1500
5.084745763	84.75	4.237288136	1800
4.918032787	81.97	4.098360656	2200
4.724409449	78.74	3.937007874	2700
4.511278195	75.19	3.759398496	3300
4.316546763	71.94	3.597122302	3900
4.081632653	68.03	3.401360544	4700
3.846153846	64.1	3.205128205	5600
3.571428571	59.52	2.976190476	6800
3.296703297	54.95	2.747252747	8200

R-LIMIT is placed in series with the 5Volt supply to the 10K intensity pot