

**APPLIED  
CONCEPTS INC.**

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**AC2-12-1147**

**PRODUCT DATA SHEET**

6/26/00

**CCFL INVERTER**  
*(For Multiple Tube Applications)*

The AC2-12-1147 is designed to power 4 CCFL's to a nominal power level of 15 watts.

Intensity control (0-100%) is accomplished by the user providing a variable dc level of 0V(off) to 5V(full-on) at pin 6 of CON1.

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

This unit features a second analog input(pin 8 of CON1) designed to accept an output from a National temperature sensor LM50C. Maximum pwm duty-cycle will decrease as sensed temperature increases(See Specifications).

All outputs are open and short circuit protected.

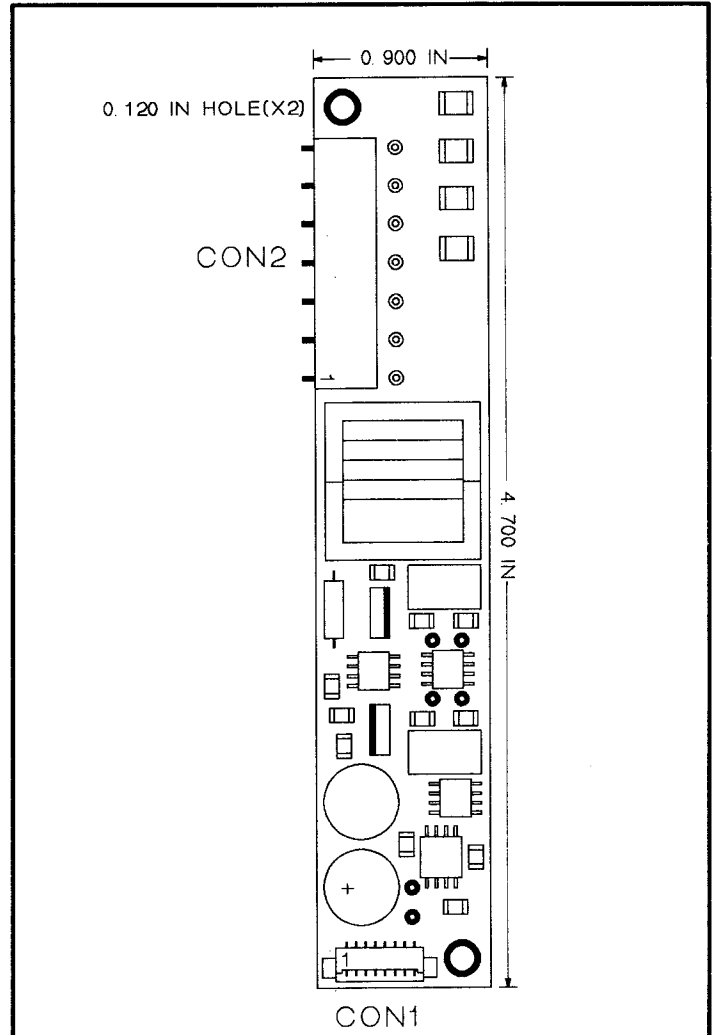
**Specifications:**

- Vin = +12V +/- 10%
- CCFL strike voltage = 1500Vrms @ Vin=12V
- CCFL tube current = 7.5mA/tube @ 100% intensity/Vin=12V)
- Recommended CCFL sustaining voltage = 400Vrms - 600Vrms
- Nominal tube current frequency = 57khz +/- 10%
- Nominal pwm frequency = 98Hz +/- 3%
- Pwm duty cycle range = 0 to 100%
- Average electrical efficiency >90%

**Temperature(Voltage) vs Max Duty-Cycle:**

Temp(Deg-C)	Sensor(V)	Max Duty(%)
< 50.0	< 0.99	100
50.0 - 53.99	1.00 - 1.0399	75
54.0 - 57.99	1.04 - 1.0799	50
58.0 - 61.99	1.08 - 1.1199	25
> 62.0	> 1.12	10

Temperature hysteresis = 2Deg-C(20mV)



PROFILE < 0.575 IN

INPUT CONNECTOR CON1 MOLEX 53261-0890		OUTPUT CONNECTOR CON2 MOLEX 22-28-1130	
PIN #	FUNCTION	PIN #	FUNCTION
1	+12V(PWR)	1	CCFL COMMON
2	+12V(PWR)	2	NC
3	GND(PWR)	3	NC
4	GND(PWR)	4	NC
5	ENABLE	5	NC
6	VCNTL	6	NC
7	+5V OUT	7	CCFL4
8	TEMP SENSOR IN	8	NC
		9	CCFL3
		10	NC
		11	CCFL2
		12	NC
		13	CCFL1