

Specification for DC-AC inverter ADL-10L

A. Electrical specification

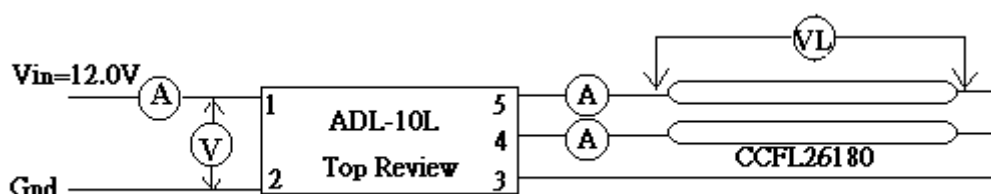
1. Used product

- (1) ELEVAM: CCFL26180 2 lamp
- (2) STANLEY: CCFL26180 2 lamp

2. Specification

No.	PARAMETER		SPECIFICATION	NOM.
1	DC input voltage	V_{in}	11.0V ~ 13.0V	12.0V
2	DC input current	I_{in}	0.36A ~ 0.41A	0.385A
3	Operating frequency	F_{osc}	23KHz ~ 29KHz	26KHz
4	Output Voltage	V_o	1,000Vrms(Max.)	
5	Lamp voltage	V_L	350Vrms(Typ.)	
6	Lamp current	I_L	$5 \pm 1mA$	5mA _{rms}
7	Operating temperature	T_a	0°C ~ 55°C	
8	Storage temperature	T_s	-20°C ~ 70°C	
9	Humidity (32+/-2°C)	RH	10% ~ 95%	
10	Size		21.0 X 44.0 x 16.0mm	
11	Weight		19g	

3. Test Circuit



4.. Measuring instruments:

DC POWER SUPPLY:	AMREL LPS-350
DC AMPERE METER:	FLUKE 45 true Multimeter
AC AMPERE METER:	FLUKE 45 true Multimeter
OSCILLOSCOPE:	Tektronix TDS-350 200MHz
HIGH VOLTAGE PROBE:	Tektronix P6015A
CURRENT PROBE:	Tektronix P6021 AC current probe

(3) Connector wire assignment

CN NO.	Pin No.	Function
Vin	1	+12Vdc
	2	Gnd
Vo1	4	VoH1
	3	VoL1
Vo2	5	VoH2
	3	VoL2

(4) Test condition

(1)Transformer insulation resistance

Apply DC 500V to insulation resistance that between core and primary coil, primary coil and secondary coil, secondary coil and core it must be more than 100 M ohm.

(2)Transformer withstanding voltage

(A) Primary --- secondary	AC 1.0 KV
(B) Primary --- core	AC 0.5 KV
(C) Secondary --- core	AC 1.0 KV

(3)Humidity resistance test

Place into a sump of 10 to 95% relative humidity and 35 +/- 2°C constant temperature for 500 hours, take out at constant humidity and temperature,

and wipe off the water drips on the surface then lay it for more than 30 minutes and within 90 minutes the variation of dielectric coefficient measured must be within initial value +/- 25%.

(4) Heat Resistance test

Place into a room of 80°C relative humidity 10---95% constant temperature with No load state for 24 hours, take out the material tested and place in

normal temperature for more than 30 minutes, and within 90 minutes, the variation of dielectric coefficient measured must be within initial value $\pm 25\%$.

(5) Solder adhesion and heat resistance

Soak the lead terminals into the 230°C solder bath for 5 seconds, the external

bushing shall not be cracked and no abnormality is allowed. After soldering the lead terminals within 30 seconds, the variant rate of L is $\pm 20\%$.

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(6) Temperature character

The variance of under -10°C to 60°C is within $25 \pm 5^{\circ}\text{C}$ of the value measured

under $\pm 20\%$.

(7) Cool resistance test

Place into a room of -40°C relative humidity 10---95%

Constant temperature with no load state for 24 hours, take out the material tested and place in normal temperature for more than 30 minutes and within

90 minutes, the variation of dielectric coefficient measured must be within initial value $\pm 20\%$.

(8) Pulling strength

The static load of terminal must be more than 1kg.

(9) Safety & EMI request

Safety request

Meet UL. CSA. & TUV-GS. Safety mark request.

(10) Standard life test

It shall be repetition by preheating 3 seconds, putting on light 10 seconds and putting off light 10 seconds after total lighting time 300 hours spent.

(11) M.T.B.F.

(A) Initial spec.

The initial value of light output lamp of a DC inverter shall be 100% of its maintenance rate at 0 hour.

(B) M.T.B.F

Mean time between failure 50000 hours.

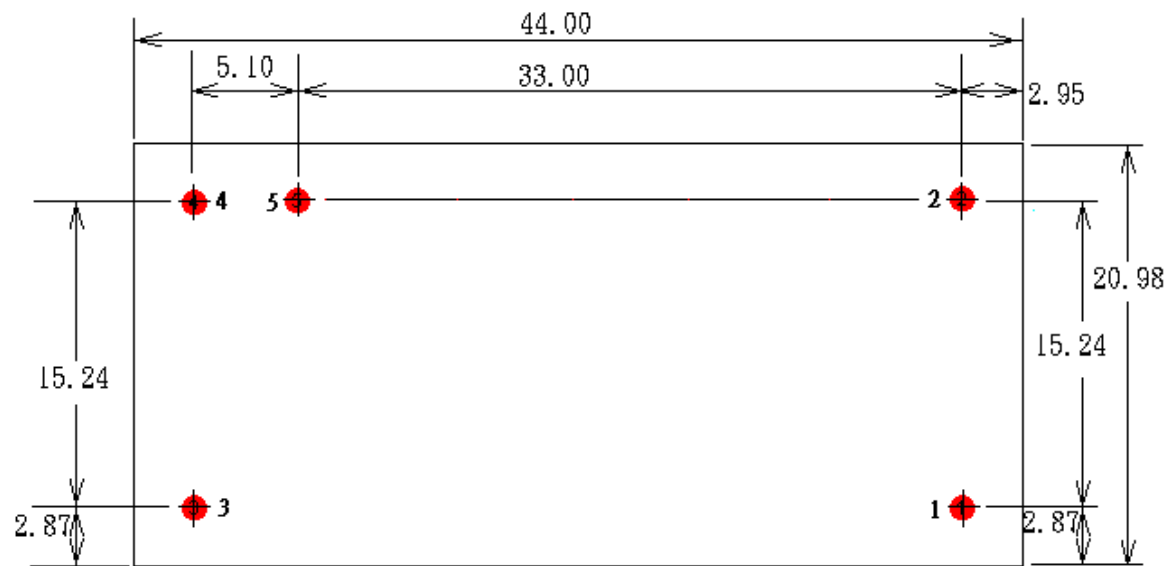
(12) Inspection item for acceptance

(A) Mechanical inspection

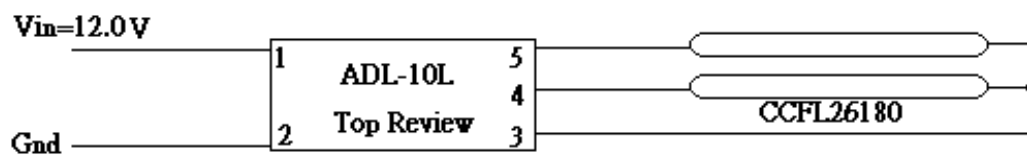
Frequency Each lot Acceptable condition AQL=1.0%.

(B) Electrical inspection

Frequency Each lot Acceptable condition AQL=0.65 %.



E. Assembly Diagram



Drawn By	Checked	Approved	Description		
			Rev. 1		
			Rev. 2		
			Rev.		

			3		
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