

# DC-AC INVERTER UNIT

**PS-DA0229-01(S) (7.7 W DUAL OUTPUTS)**

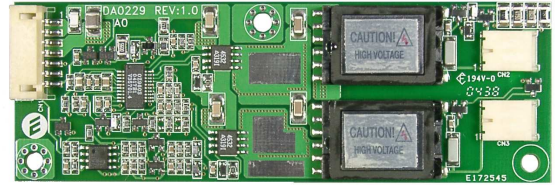
(PRELIMINARY INFORMATION)

**DESCRIPTION :**

This low profile DC to AC Inverter is developed for quad lamps.

**APPLICABLE LCD:**

- 6.4 to 15 inches dual lamp type
- Lamp Voltage 855 Vrms
- Lamp Current 2 x 4.5 mArms
- Lamp Start Up Voltage 1.800 Vrms (Vin : 12 Vdc)



**FEATURES :**

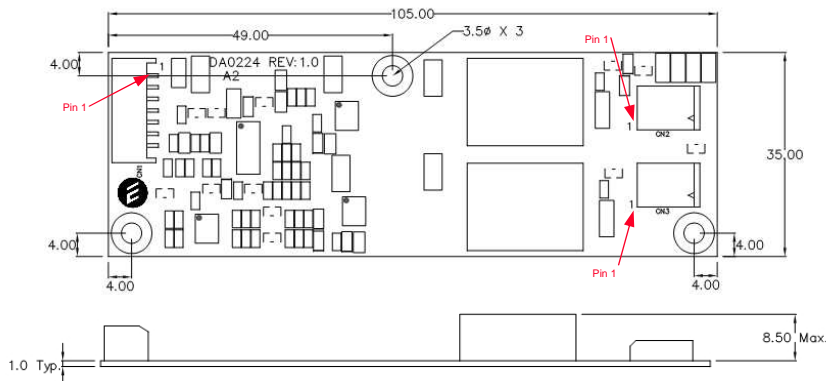
- Remote ON/OFF
- Open Lamp Detection
- RoHS compliant (S)

**TEMPERATURE & HUMIDITY :**

- Operating Temperature Range 0°C ~ +50°C
- Storage Temperature Range -20°C ~ +85°C
- Humidity 95 %RH max

**DIMENSIONS :**

**L x W x H 105 x 35 x 9,50mm**



Unit : mm  
Weight :21 (g) typ.

Tolerance: ±0.2mm Unit: mm

Note: Please use plastic screw in case of a non-insulating mounting base!

**Components**

| No. | Part Description    | Qty. | Material                | Note         |
|-----|---------------------|------|-------------------------|--------------|
| 1   | PCB                 | 1    | UL94V-0 (FR-4 or CEM-3) | t=1mm        |
| 2   | Connector CN1       | 1    | S7B-PH-SM3-1-TB (JST)   | JST or equal |
| 3   | Connector CN2 + CN3 | 2    | SM02B-BHSS-1-TB         | JST or equal |

**Input side CN1:**

| Pin No. | Symbols | Ratings                        |
|---------|---------|--------------------------------|
| CN 1-1  | Vin     | 12 Vdc                         |
| CN 1-2  | Vin     | 12 Vdc                         |
| CN 1-3  | GND     |                                |
| CN 1-4  | GND     |                                |
| CN 1-5  | Vbr     | 0 ~ 2.5 Vdc                    |
| CN 1-6  | Vst     | 0 / 5 Vdc                      |
| CN 1-7  | Vrmt    | 0 ~ 0.4 = OFF / 2.5 ~ Vin = ON |

**Output side CN2:**

| Pin No. | Symbols | Ratings              |
|---------|---------|----------------------|
| CN 2-1  | Vhigh   | 855 Vrms (4.5 mArms) |
| CN 2-2  | GND     | -                    |

**Output side CN3:**

| Pin No. | Symbols | Ratings              |
|---------|---------|----------------------|
| CN 3-1  | Vhigh   | 855 Vrms (4.5 mArms) |
| CN 3-2  | GND     | -                    |

**Power Systems – The Power Solution**

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Email: [Info@Power-Systems.de](mailto:Info@Power-Systems.de)

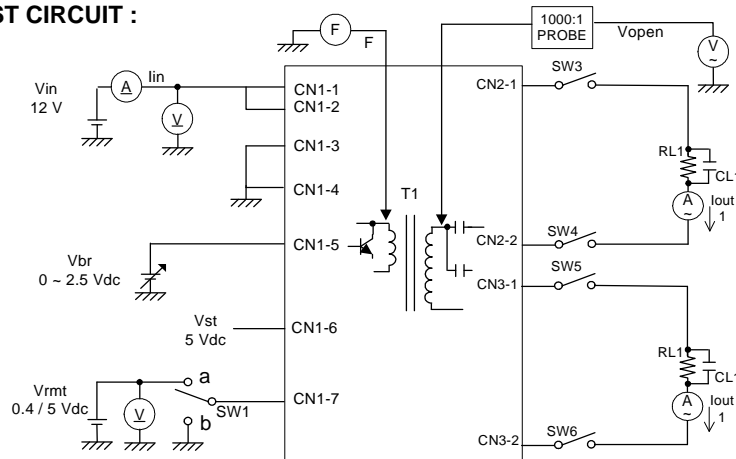
Address: Hauptstr. 48 ; 74360 Ilfeld-Auenstein / Germany  
Tel. : + 49 / 70 62 / 67 59 - 6  
Fax: + 49 / 70 62 / 67 59 - 800

**ELECTRICAL CHARACTERISTICS :**

| Parameters           | Symbols | Conditions |          |         | Specification |       |       | Unit  | Note         |
|----------------------|---------|------------|----------|---------|---------------|-------|-------|-------|--------------|
|                      |         | Vin (V)    | Vrmt (V) | Tu (°C) | Min.          | Typ.  | Max.  |       |              |
| Output Current       | Iout    | 12±1.2     | 5±0.25   | 0 ~ +50 | 4.0           | 4.5   | 5.0   | mArms | Duty 100%    |
| Output Current       | Iout    | 12±0.6     | 5±0.25   | 0 ~ +50 | 53.0          | 63.0  | 73.0  | %     | Duty min     |
| Input Current        | Iin     | 12±1.2     | 5±0.25   | 0 ~ +50 | -             | 0.64  | 0.85  | Adc   |              |
| Frequency            | F       | 12±1.2     | 5±0.25   | 0 ~ +50 | 45            | 50    | 55    | kHz   |              |
| Open Circuit Voltage | Vopen   | 11.4       | 5±0.25   | 0 ~ +50 | -             | 1.800 | 2.000 | Vrms  |              |
| No load Shutdown     | Tsd     | 12±1.2     | 5±0.25   | 0 ~ +50 | -             | 1.0   | -     | sec   | without load |

Note 1 : Please keep minimum of 2mm clearance (all directions) between inverter high voltage area as marked on mechanical drawing and any conductors.

Note 2: Before apply any control signal into inverter, please provide Vcc first. Please follow the reversed sequence during power off. Power off control signal first, then power off Vcc.

**TEST CIRCUIT :**


| SW 1 | Operation of unit |
|------|-------------------|
| a    | Operation         |
| b    | Non operation     |

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