

# Power Supplies

## CXA Series CXA-0217

### DC to AC Inverters

### Connector type, Dimming, 7W, for 2 Bulbs

#### FEATURES

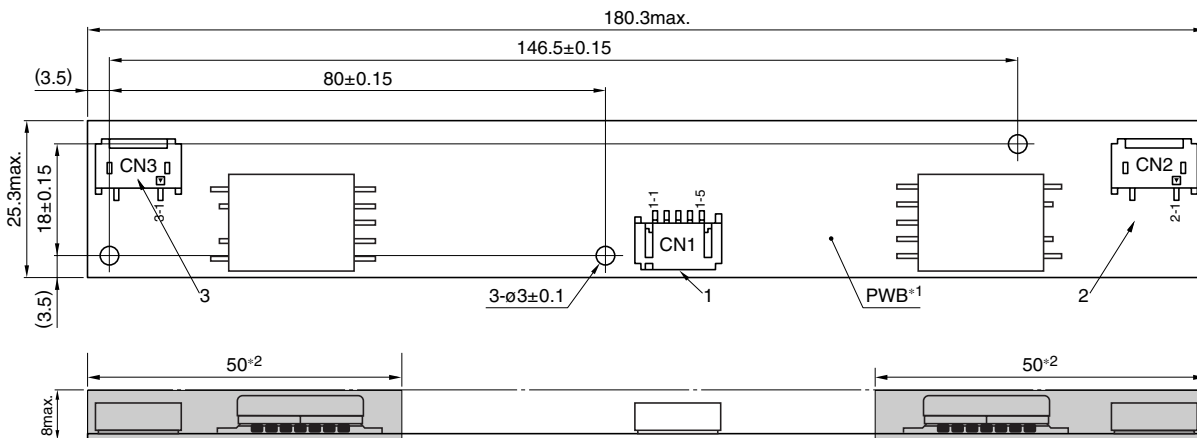
- For 2 bulbs.
- Applicable panel size\* : 10 to 15-inch
- With brightness control function.
- The high-voltage terminals are coated with silicone so as to avoid the defects caused by dust.

\* The applicable panel size is for typical reference dimensions.

#### TEMPERATURE AND HUMIDITY RANGES

|                        |           |  |
|------------------------|-----------|--|
| Temperature range (°C) | Operating | 0 to +70   |
|                        | Storage   | -30 to +85   |
| Humidity range(%)RH    |           | 95max.<br>[Maximum wet-bulb temperature 38°C. No dew.] |

#### SHAPES AND DIMENSIONS



\*1 Substrate(PWB: Printed wiring board): Flame retardant material UL94V-0(FR-4 or CEM-3) t=1mm

Weight: 21g typ.

\*2 : High-voltage generator (The entire surface within a range of 50mm away from the end of the base in the output)

Dimensions in mm

|                    | Connector manufacturer's company and type            | Symbol |
|--------------------|--|--------|
| 1 Input connector  | Japan Solderless Terminal Co., Ltd. S5B-PH-SM3       | CN1    |
| 2 Output connector | Japan Solderless Terminal Co., Ltd. SM02(8.0)B-BHS-1 | CN2    |
| 3 Output connector | Japan Solderless Terminal Co., Ltd. SM02(8.0)B-BHS-1 | CN3    |

#### TERMINAL NUMBERS AND FUNCTIONS

##### CN1

| Terminal No. | Function  | Symbol           |
|--------------|---|------------------|
| CN1-1        | Input voltage Edc: 9.6 to 14.4V/12V[nom.]                           | V <sub>in</sub>  |
| CN1-2        | 0V  | GND              |
| CN1-3        | Brightness dimmer voltage Edc: 0 to 3.4V (Maximum brightness on 0V) | V <sub>br</sub>  |
| CN1-4        | Used in the internal circuits, do not connect.                      | N.C.             |
| CN1-5        | Remote voltage Edc 0V: off/5 to 7V:on                               | V <sub>rmt</sub> |

##### CN2

| Terminal No. | Function   | Symbol             |
|--------------|--|--------------------|
| CN2-1        | Output 1[High voltage] I <sub>rms</sub> 2 to 6mA | V <sub>HIGH1</sub> |
| CN2-2        | —  | N.C.               |
| CN2-3        | Output 1[Low voltage] (2V)                       | V <sub>Low1</sub>  |

##### CN3

| Terminal No. | Function   | Symbol             |
|--------------|--|--------------------|
| CN3-1        | Output 2[High voltage] I <sub>rms</sub> 2 to 6mA | V <sub>HIGH2</sub> |
| CN3-2        | —  | N.C.               |
| CN3-3        | Output 2[Low voltage] (2V)                       | V <sub>Low2</sub>  |

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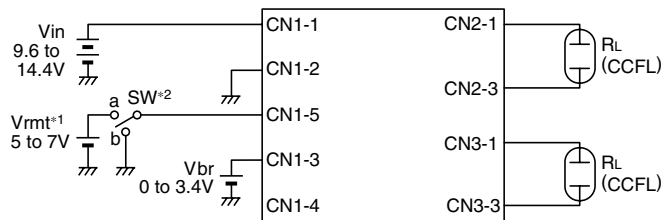
Connector type, Dimming, 7W, for 2 Bulbs

## ELECTRICAL CHARACTERISTICS

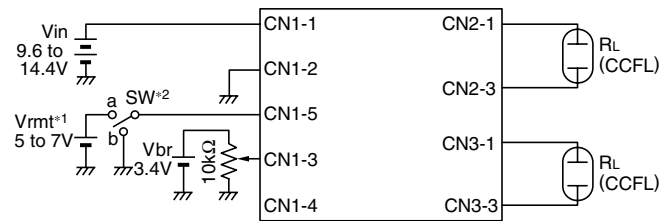
| Item                             | Unit | Symbol | Specification |      |      | Condition |          |          |           | Brightness |
|----------------------------------|------|--------|---------------|------|------|-----------|----------|----------|-----------|------------|
|                                  |      |        | min.          | typ. | max. | Vin(V)    | Vbr(V)   | Ta(°C)   | RL(kΩ)    |            |
| Output current Irms              | mA   | lout1  | 5.3           | 6    | 6.7  | 12±2.4    | 0        | 0 to +70 | 76 to 114 | Maximum    |
|                                  |      | lout2  | 5.3           | 6    | 6.7  | 12±2.4    | 0        | 0 to +70 | 76 to 114 | Maximum    |
|                                  |      | lout1  | 5.5           | 6    | 6.5  | 12±1.2    | 0        | 0 to +70 | 95        | Maximum    |
|                                  |      | lout2  | 5.5           | 6    | 6.5  | 12±1.2    | 0        | 0 to +70 | 95        | Maximum    |
|                                  |      | lout1  | 1.7           | 2    | 2.4  | 12±1.2    | 3.4      | 0 to +70 | 250       | Minimum    |
|                                  |      | lout2  | 1.7           | 2    | 2.4  | 12±1.2    | 3.4      | 0 to +70 | 250       | Minimum    |
| Input current Idc                | A    | Iin    | —             | 0.76 | 1.3  | 12±2.4    | 0 to 3.4 | 0 to +70 | 76 to 114 |            |
| Oscillation frequency            | kHz  | FL     | 52            | 58   | 64   | 12±2.4    | 0        | 0 to +70 | 95        |            |
| Open circuit output voltage Erms | V    | Vopen  | 1400          | 1500 | 2000 | 12±2.4    | 0 to 3.4 | 0 to +70 | ∞         |            |

## TYPICAL CONNECTIONS

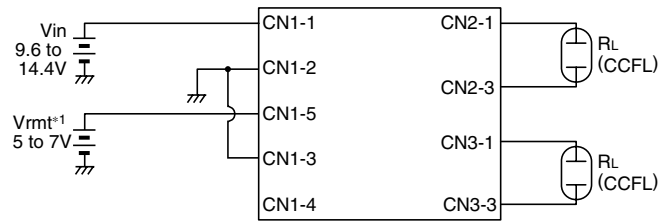
### EXAMPLE OF VOLTAGE DIMMER CONTROL



### EXAMPLE OF POTENTIOMETER DIMMER CONTROL



### NO DIMMER CONTROL



\*1 Vbrt (remote voltage) shall be ON after Vin is ON.

\*2 SW a:on, b:off

## BRIGHTNESS DIMMER VOLTAGE- OUTPUT CURRENT CHARACTERISTICS

