

CE300AXE, CE300BXE, and CE300CXE

XENON POWER SUPPLY



The CE300AXE, CE300BXE, and CE300CXE power supplies are designed to run xenon arc lamps in a constant-power mode.

The CE300 power supply is designed to run xenon arc lamps in a constant-power mode. The supply is designed to run the Osram XBO 300 and Cermax® Xenon family lamps. The output power is adjustable from 270 - 315 Watts with a built-in potentiometer. EMI line filtering is built-in to the unit. The CE300BXE has smaller Y-capacitors to meet the 100 μ A leakage requirement for many U.S. hospitals.

Output current: 17.0 to 22.0 Adc

Output ripple: <0.7 Ap-p*

Efficiency: >70% at 300 W output, 120 VAC input

Thermal protection: ballast is disabled when temperature exceeds 90 °C.

Unit will automatically restart after cooling down.

Isolated Auxiliary output (UL-rated): +12V fan power, 800 mA max. Optically Isolated Status and Control Connector (UL-rated circuit)

Remote Enable

• Lamp Lit Status

Ground Leakage: CE300AXE: < 300 μA

CE300BXE: < 10 μA

CE300CXE: $< 100 \mu A$



Key Features

- Line Input: 100 240 VAC,
 ± 10%, 47 63 Hz, 6.5 Arms max.
- Environmental: 0°C to 50°C operating.
- Altitude: -1,000 ft. to 12,000 ft. (-305 m to 3658 m) MSL.
- Weight: 2.5 lbs. (1.14 Kg).
- Dimensions: 6.50" x 4.65"

x 2.80" tall

(165mm x 118mm x 71mm tall).

Ignitor:

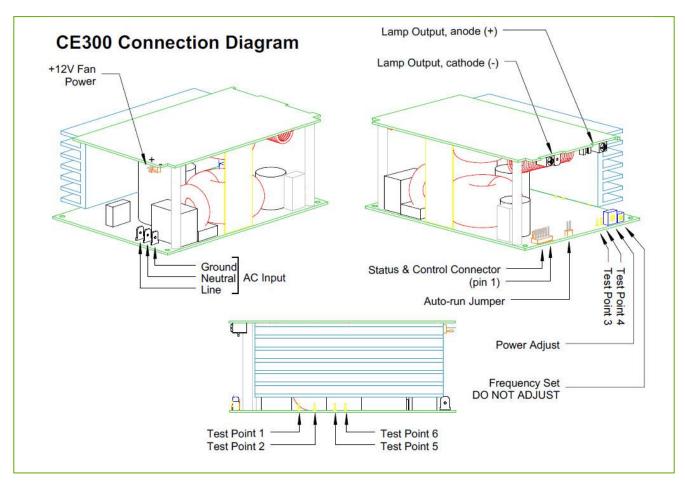
- 25 KV ignition spike. Negative-side ignition.
- Minimum repetition rate is 10 strikes/second at all input voltages. Ignition pulses will continue until lamp ignites.
- Ignitor Life: > 500,000 strikes

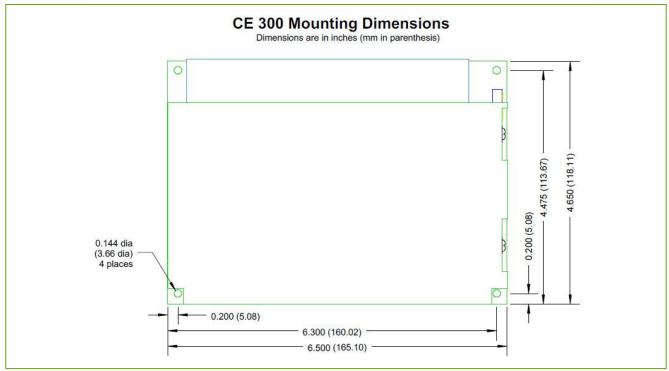
Option 180:

- Output power 170-190 W, constant power control
- Output current 12-16 amps, DC



^{*} ripple is measured in a DC to 20 MHz bandwidth





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Input / Output Connections

Models:

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AC Input:

- 100 240 VAC, ± 10%, 6.5 Arms maximum
- 47 63 Hz
- 0.25" faston-type connectors

Lamp Output:

0.25" faston-type connectors:

- Male connector for lamp cathode (-)
- Female connector for lamp anode (+)

Screw terminal connectors (6-32 or M3 screws) are also available.

Status and Control Connector:

6-pin, 0.1" spacing, with locking ramp

Use Molex 10-11-2063 connector or equivalent

• pin 1: Lamp Lit Return

• pin 2: Lamp Lit Output

• pin 3: Enable Return

• pin 4: Enable Input

• pin 5: reserved

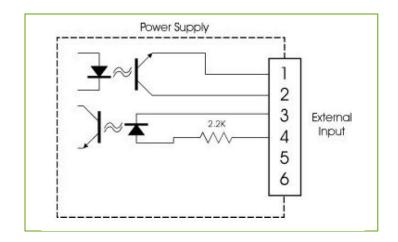
• pin 6: reserved

Fan Connector:

- 2-pin, 0.1" spacing, with locking ramp
- Use Molex 22-01-3027 connector or equivalent

Current Sense Test Points:

Test points TP3 and TP4 are across a 0.01 ohm resistor that is in series with the output to the lamp. This can be used to monitor output current.



Auto-Run Jumper:

Attaching a two-pin shorting block across this connector forces the supply to run as soon as power is applied. The state of the Enable input is ignored.

Using the Status and Control Connector

The Status and Control Connector consists of two inputs and one output, each of which is optically isolated. The inputs are designed to be driven by a 12V source. The source used must be capable of supplying 2.0 mA into a 6.2 V load.

The Enable input turns the lamp on and off. A high input to the Enable pin turns on the lamp. The auxiliary +12 V supply runs all the time, regardless of the state of the Enable input. The electrical delay of the enable input is less than 10 ms. To turn on the lamp, the delay of the Enable input must be added to the time to ignite the lamp, which is approximately 100 ms, for a total of 110 ms. Turning off the lamp takes only 10 ms.

The Lamp Lit output is a transistor that is on when current is flowing to the lamp. The collector current will be greater than 3.0 mA when the lamp is on. A 2.2K ohm resistor pullup will create a TTL-compatible signal. The delay from light output from the lamp to the Lamp Lit output being asserted is less than 10 ms.

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Regulatory Compliance

Approved to UL2601 (E177225). Complies with EN55011 Class B Emissions. CE-marked.



About Excelitas Technologies

Excelitas Technologies is a global technology leader focused on delivering innovative, customized solutions to meet the lighting, detection and other high-performance technology needs of OEM customers.

From medical lighting to analytical instrumentation, clinical diagnostics, industrial, safety and security and aerospace and defense applications, Excelitas Technologies is committed to enabling our customers' success in their end-markets.

Excelitas Technologies has approximately 3,000 employees in North America, Europe and Asia, serving customers across the world.

Excelitas Technologies Illumination, Inc. 44370 Christy Street Fremont, California 94538-3180 USA

Telephone: (+1) 510.979.6500 Toll-free: (+1) 800.775.6786 Fax: (+1) 510.687.1140 shortarcxenon.na@excelitas.com **Excelitas Technologies**

47 Ayer Rajah Crescent #06-12 Singapore 139947 Telephone: (+65) 6775 2022 (Main Line) Telephone: (+65) 6770 4366 (Customer Service Hotline)

Fax: (+65) 6778 1752 shortarcxenon.asia@excelitas.com Excelitas Technologies GmbH & Co. KG Wenzel-Jaksch-Str. 31 D-65199 Wiesbaden Germany

Telephone: (+49) 611 492 430 Fax: (+49) 611 492 165 shortarcxenon.europe@excelitas.com Excelitas Technologies

East Tower 4th Floor, Otemachi First Square 1-5-1 Otemachi, Chiyoda-ku, Tokyo 100-0004 Telephone: (+81) 3-5219-1228 Fax: (+81) 3-5219-120

shortarcxenon.asia@excelitas.com

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