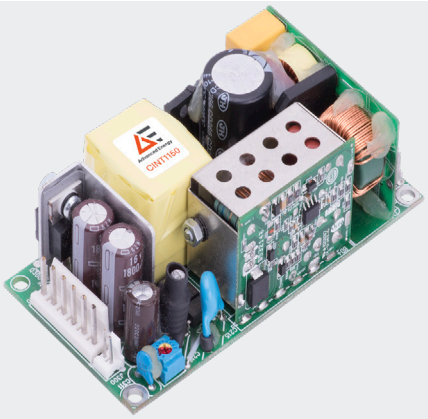
# CINT1150 SERIES

150 Watts Single Output
Industrial Grade



Industrial

Advanced Energy's CINT1150 family is the latest offering in high density single output open-frame AC/DC power supplies. Approved to EN/CSA/IEC/UL62368-1, the CINT1150 family is ideal for lighting, industrial printers, gaming equipment, and many other applications where power density and cost are critical. The CINT1150 operates at universal input rang of 90 to 264 VAC and wide temperature range -10°C to +70°C, devering full rated output power up to +50°C. In addition, these models feature Power Fail and DC OK signals.

## AT A GLANCE

**Total Power**

150 Watts

**Input Voltage**

90 to 264 VAC

**# of Outputs**

Single

RoHS CE

## SPECIAL FEATURES

- 2"W x 4"L x 1.3"H Size
- For 1U Applications
- Universal Input 90 to 264 VAC
- 150 W w/air, 100 W convection cooled
- Power Fail/Output Good Signal
- Approved to EN/CSA/IEC/UL62368-1
- ROHS Compliant
- 3 Years Warranty

## SAFETY

- EN/CSA/IEC/UL62368-1

©2026 Advanced Energy Industries, Inc.

## ELECTRICAL SPECIFICATIONS

| | |
|---|---|
| **Input** | |
| Input Range | 90 to 264 VAC, 47 to 63 Hz, 1Ø<br>127 to 370 VDC |
| Turn-On Input Voltage | 82.7 VAC, norminal |
| Turn-Off Input Voltage | 67.0 VAC, norminal |
| Power Factor | >0.9 |
| Switching Frequency | PFC: Variable 30 to 400 kHz<br>Main converter: Variable 35 to 180kHz, 65 to 70 kHz at full load |
| Inrush Current | 50 A max., cold start @ 264 VAC input |
| Input Current | 115 VAC: 2 A, 230 VAC: 1 A |
| Input Fuses | 250 VAC fuses provided in both line & neutral |
| Earth Leakage Current | <750 µA @ 264 VAC, 60 Hz, NC |
| Efficiency | 88% typical at 115 VAC |
| Isolation Voltage | Input/Ground: 1800 VAC<br>Input/Output: 4000 VAC<br>Output/Ground: 500 VAC |
| **Output** | |
| Maximum Power | 150 W continuous with 200 LFM airflow, 100 W convection cooled |
| Ripple and Noise | See chart |
| Total Regulation | +/-5%, See chart |
| Minimum Load | Not required |
| Output Voltage | See chart |
| Adjustment Range | +/-5% from nominal |
| Transient Response | 50% load step, Δi/Δt<0.2 A/µs. Max. voltage deviation is 3% |
| **Auxiliary Signals** | |
| AC Power Fail | During normal operations, stays HIGH |
| Power Fail | Goes LOW with 5 ms warning before loss of output power due to AC failure |
| DC OK | Open collector logic signal goes and stays HIGH 100 ms to 500 ms after main output reaches regulation. |
| **Reliability** | |
| MTBF | 640K hrs at 100 W convection. 1,500 K hrs at 150 W with 200 LFM air |
| Warranty | 3 years |
| **Protection** | |
| Overvoltage Protection | Latch. OVP firing reduces output voltage to <50% of nominal in <50 ms. See chart for trip range. |
| Short Circuit Protection | Hiccup mode. No damage will occur if the output is shorted |
| Thermal Protection | Automatic power shutdown at TC = 155°C |
| Overload Protection | Hiccup mode |

## SYSTEM TIMING SPECIFICATIONS

| Parameter | Min | Typ | Max | Unit |
|---|---|---|---|---|
| Turn On Time - 115 VAC inversely proportional to input voltage and thermistor temperature | - | - | 2000 | ms |
| Hold Up Time - 120 VAC @ 100% load | 12 | - | - | ms |

## EMI/EMC COMPLIANCE

| | |
|---|---|
| Conducted Emissions | EN55011/22: Class B, FCC Part 15, Subpart B, Class B |
| Radiated Emissions | EN55011/22: Class A, FCC Part 15, Subpart B, Class A w/6db margin |
| Line Harmonic Emissions | EN61000-3-2, Class A, B, C, D |
| Voltage Fluctuations & Flicker | EN61000-3-3, Complies (dmax<6%) |
| Static Discharge Immunity | EN61000-4-2, 6kV contact, 8kV air, Criteria A |
| Radiated RF EM Immunity | EN61000-4-3, 3 V/m, Criteria A |
| Electrical Fast Transients / Bursts | EN61000-4-4, 2 kV/5 Khz, Criteria A |
| Surges Line to Line (DM) and Line to Ground (CM) | EN61000-4-5, 1kV DM, 2kV CM, Criteria A |
| Conducted Disturbances Induced by RF Fields | EN61000-4-6, 3 Vrms, Criteria A |
| Power Frequency Magnetic Fields Immunity | EN61000-4-8, 3 A/m, Criteria A |
| Voltage Dips | EN61000-4-11:<br>--0% Vin, 0.5 cycle<br>--40% Vin, 5 cycle<br>--70% Vin, 25 cycle<br>Criteria A |

## ENVIRONMENTAL SPECIFICATIONS

| | |
|---|---|
| Vibration | Operating: 0.003 g/Hz, 1.5 grams overall, 3 axes, 10 min/axis<br>Non-operating: 0.026 g²/Hz, 5 grams overall, 3 axes, 1 hr/axis |
| Shock | Operating: Half-sine, 20 gpk, 10 ms, 3 axes, 6 shocks total<br>Non-operating: Half-sine waveform, 40 gpk, 10 ms, 3 axes, 6 shocks total |
| Operating Temperature | -10°C to +70°C, -40°C start up |
| Temperature Derating | Derate output power above 50°C to 50% at 70°C |
| Storage Temperature | -40°C to +85°C |
| Altitude | Operating: -500 to 10,000 ft. Non-operating: -500 to 40,000 ft |
| Relative Humidity | 5% to 95%, non-condensing |
| Weight | 183 g |

## ORDERING INFORMATION

| Model Number | Output Voltage | Output Current | | Ripple & Noise[2] | Total Regulation | OVP Threshold |
|---|---|---|---|---|---|---|
| | | w/200 LFM air | Convection[1] | | | |
| CINT1150A1206K01 | 12 V | 12.5 A | 8.33 A | 0.5% RMS, 1.2% pk-pk | +/-5% | 14.0 ± 1.1 V |
| CINT1150A2406K01 | 24 V | 6.25 A | 4.17 A | 0.5% RMS, 1.0% pk-pk | +/-5% | 28.0 ± 2.5 V |
| CINT1150A4806K01 | 48 V | 3.13 A | 2.08 A | 0.5% RMS, 1.0% pk-pk | +/-5% | 55.0 ± 4.0 V |
| CINT1150A5606K01 | 56 V | 2.68 A | 1.79 A | 0.5% RMS, 1.0% pk-pk | +/-5% | <59.9 V |

Notes:
1. Maximum output power is 95 Watts for input voltage of 90 to 105 VAC at 50°C convection. For input voltage of 105 VAC or more, total output power is 100 Watts at 50°C convection.
2. Measured with noise probe directly across output terminals, and load terminated with 0.1 µF ceramic and 10 µF low ESR capacitors.

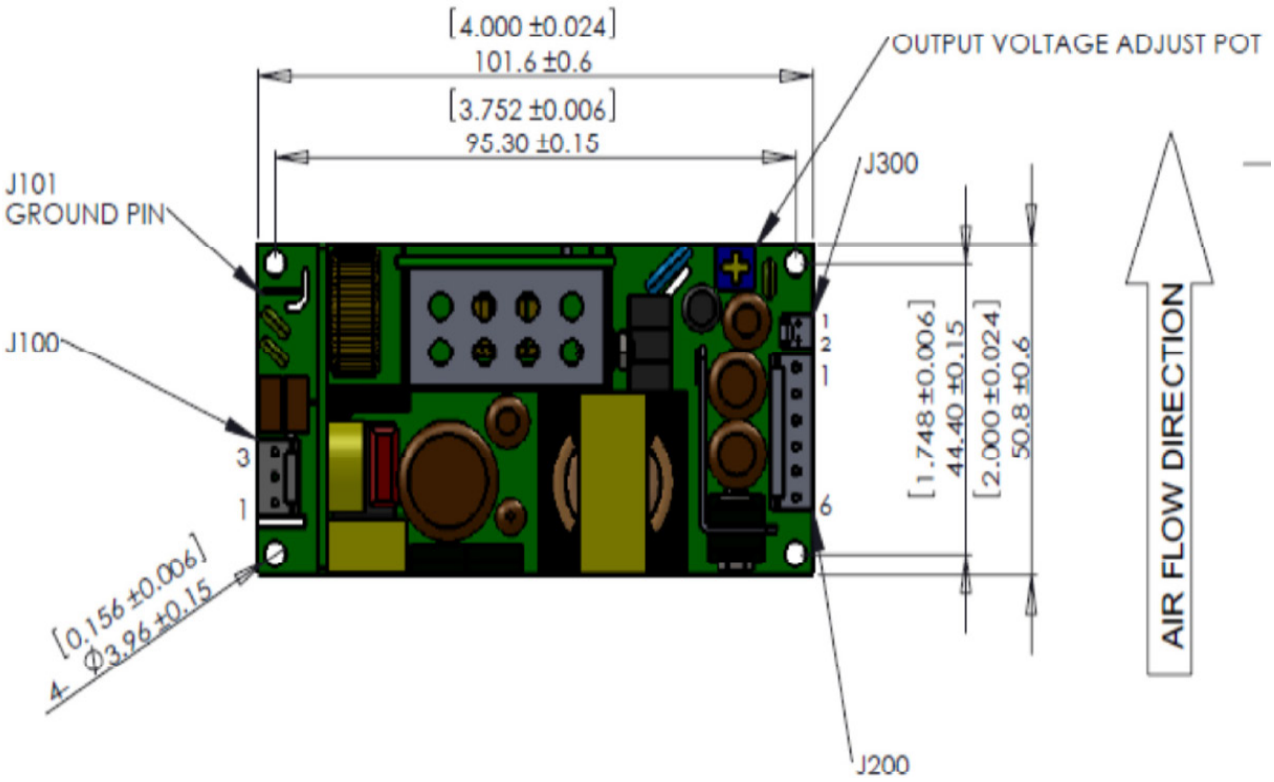
## SAFETY

| | |
|---|---|
| EN | EN62368-1 |
| CSA | CAN/CSA-C22.2 No. 62368-1 |
| IEC | IEC62368-1 |
| UL | UL62368-1 |

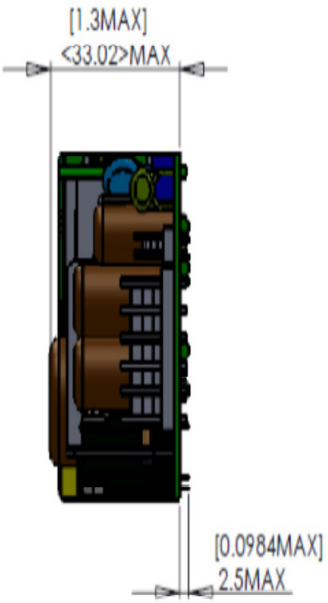
## PIN ASSIGNMENTS

| Type | Connector | Pin # | Assignment | Mating Connector |
|---|---|---|---|---|
| INPUT | J100 | 1 | AC Line | Molex: 09-50-3031<br>Pins: 08-52-0072 |
| | | 2 | Empty | |
| | | 3 | AC Neutral | |
| GROUND | J101 | 0.187" FASTON TAB | | Molex: 01-90020009 |
| OUTPUT | J200 | 1 | +Vout | AMP: 640250-6<br>Pins: 640252-1 |
| | | 2 | +Vout | |
| | | 3 | +Vout | |
| | | 4 | -Vout | |
| | | 5 | -Vout | |
| | | 6 | -Vout | |
| SIGNAL CONNECTOR | J300 | 1 | PF/DC OK | Molex: 1375820-2<br>Pins: 1375819 |
| | | 2 | Common | |

## MECHANICAL DRAWING






Notes:
1. All dimensions in mm (inches).
2. Dimensions: W: 2” x L: 4” x H: 1.3”.
3. Unit weight: 183 g.

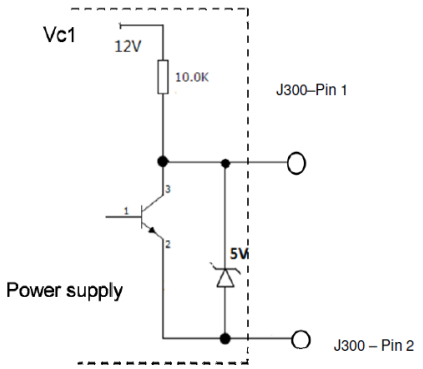
## POWER FAIL/DC OK SIGNALS - J300

AC Power Fail/DC OK

PF/DC OK: During normal operation stays HIGH

Goes HIGH 100 to 500 ms after main output

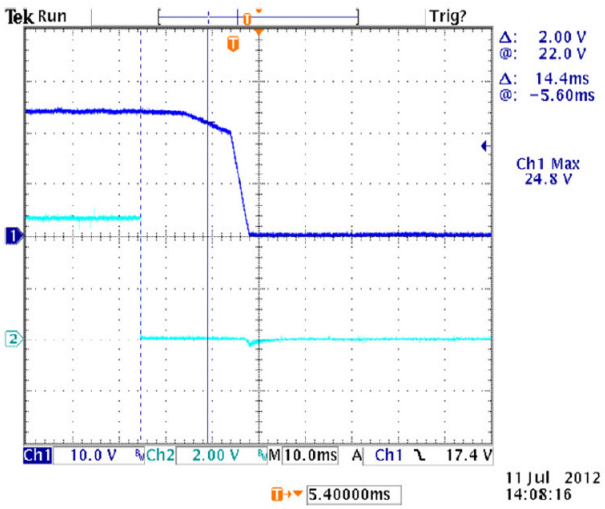
Goes LOW with 5 ms warning before loss of output from AC failure



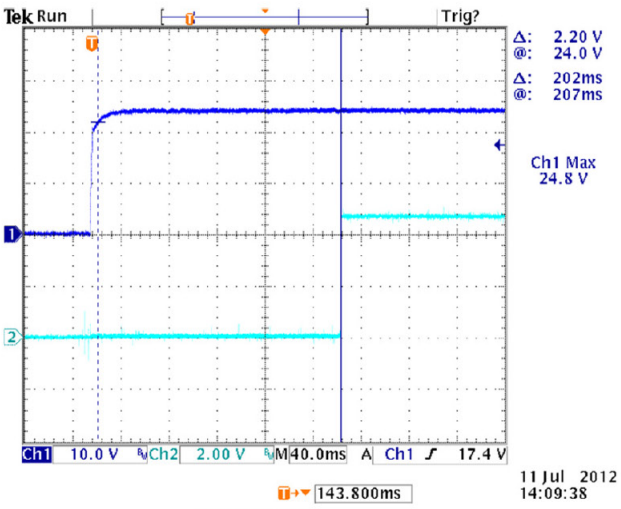

AC Power failure and DC OK signals use the same pin, so the signals can be used as follows

DC OK: Pin2 = HIGH & Pin1 = HIGH

AC Power Fail: Pin2 = LOW & Pin1 = LOW




AC POWER FAIL SIGNAL

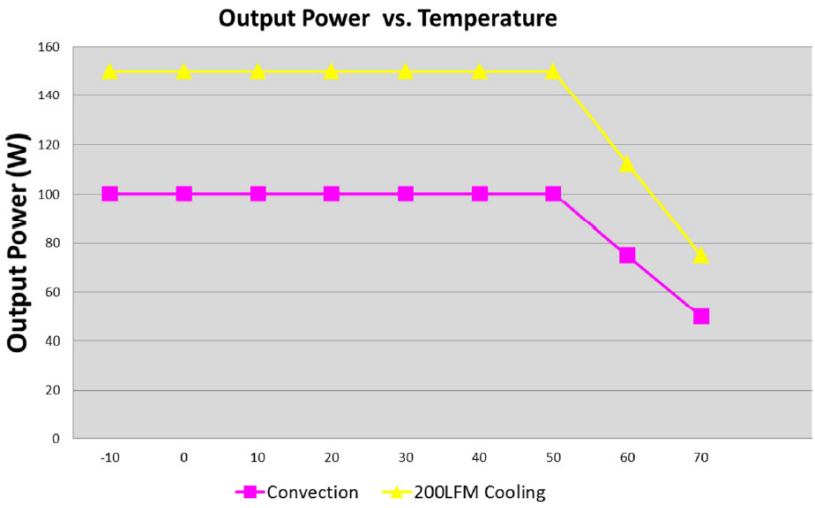



DC OK SIGNAL

## CHARACTERISTIC CURVES

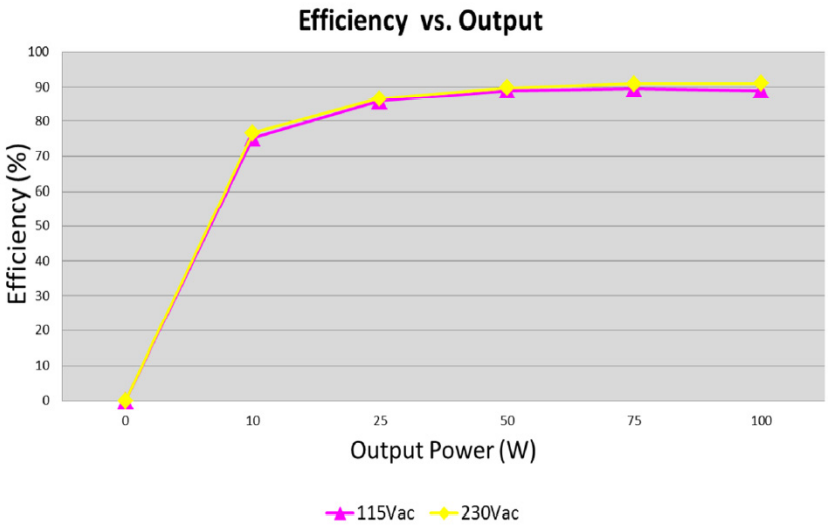
Output VS. Temperature

100 W convection cooled and 150 W continuous with 200 LFM airflow, derating output power to 50% at 70°C.




Efficiency VS. Loading

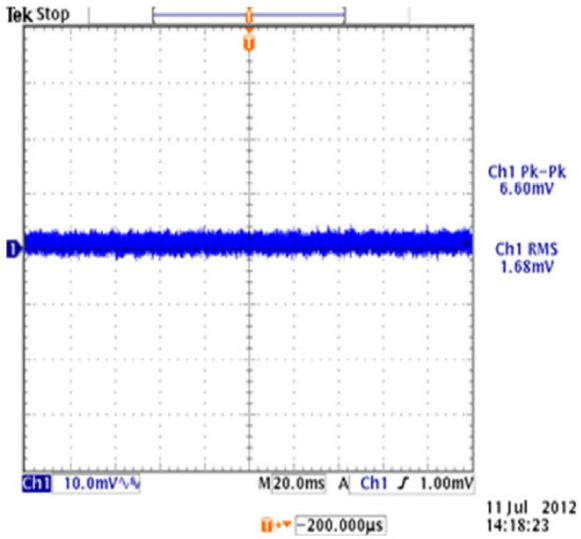
The high efficiency is achieved by using LLC technology, PFC topology minimizing switching losses. Synchronous SCHOTTKY or ultra-fast diode is used as rectifier in CINT1150 family because of high output voltage level.



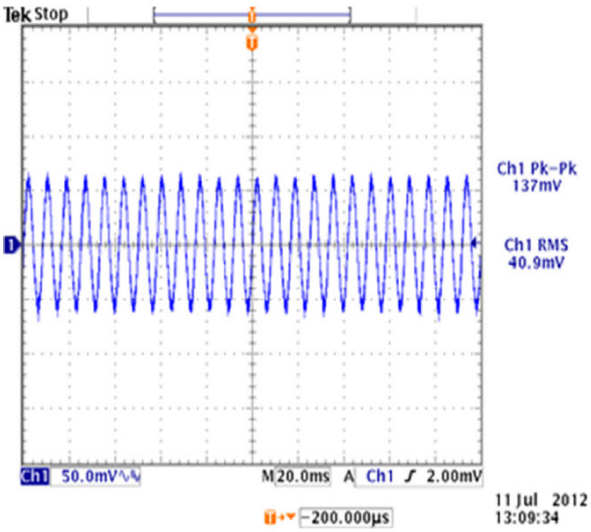
## CHARACTERISTIC CURVES

Ripple & Noise

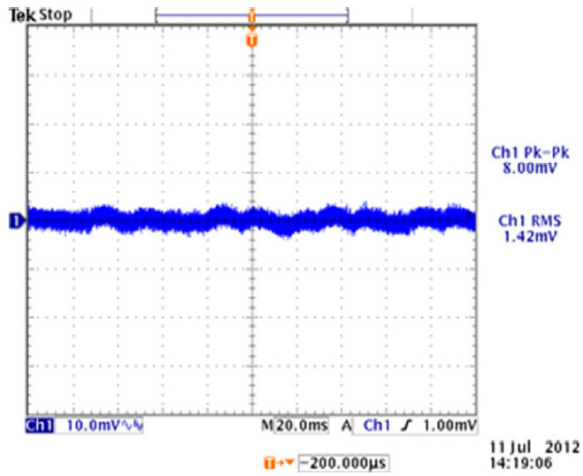
To verify that the output ripple and noise does not exceed the level specified in the product specification. Measured using a scope probe socket with 0.1 uF ceramic and a 10 uF electrolytic capacitor connected in parallel across it, 20 MHz BW.



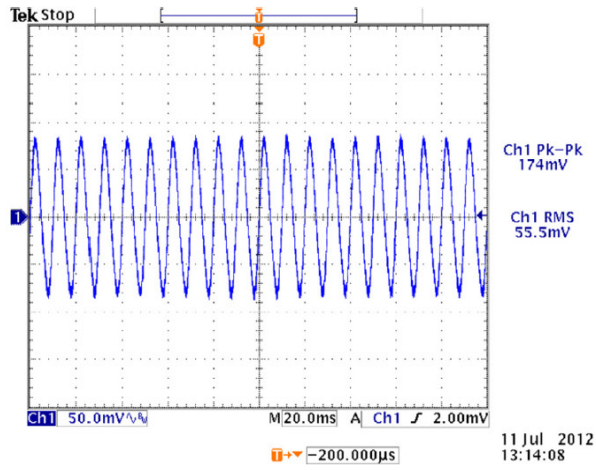

24V OUT, NO LOAD, 90VAC, 60HZ




24V OUT, FULL LOAD, 90VAC, 60HZ




24V OUT, NO LOAD, 264VAC, 50HZ

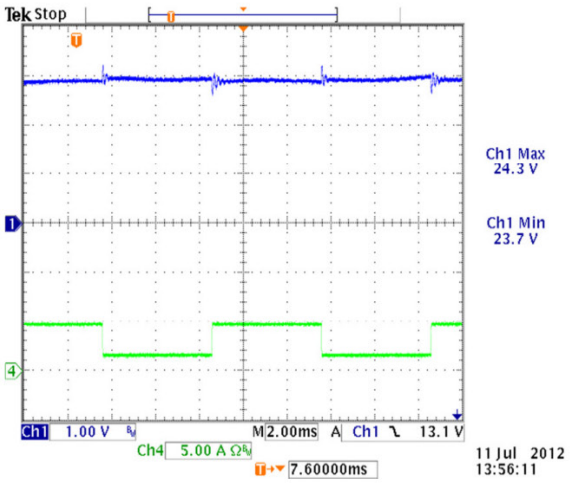



24V OUT, FULL LOAD, 264VAC, 50HZ

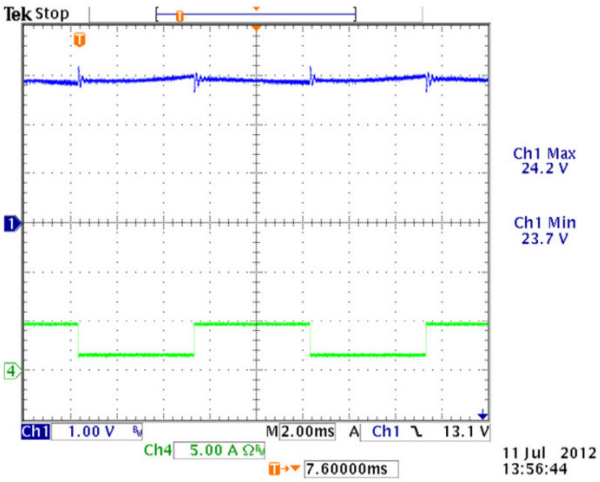
## CHARACTERISTIC CURVES

Output Transient Response

50% load step within the regulation limits of minimum and maximum load, dI/dt< 0.2A/µSec. Recovery time not specified as there is no laps in regulation with a 50% Load Step. Maximum voltage deviation is 3%, This test is performed on the MAIN OUTPUT ONLY.



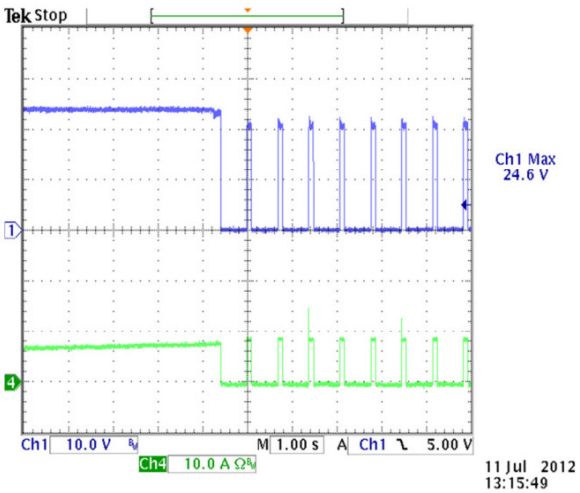

24V OUT, 120VAC, 25% TO 75% LOAD STEP



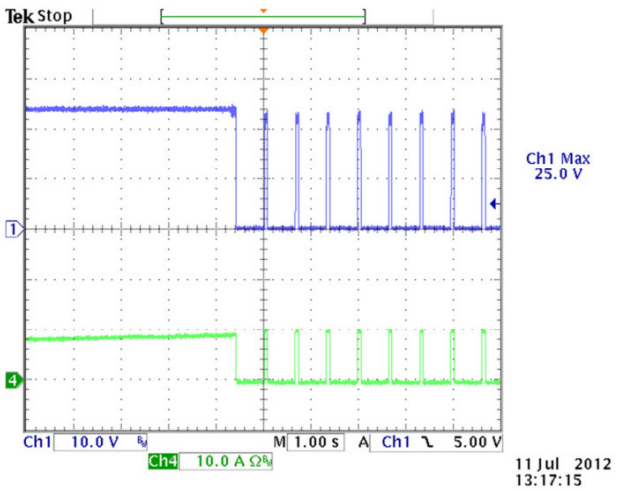

24V OUT, 240VAC, 25% TO 75% LOAD STEP

Output Overload Characteristic

Power supply shall protect itself against Short Circuit conditions. No damage will occur if the output is shorted.




24V OUT, 90VAC

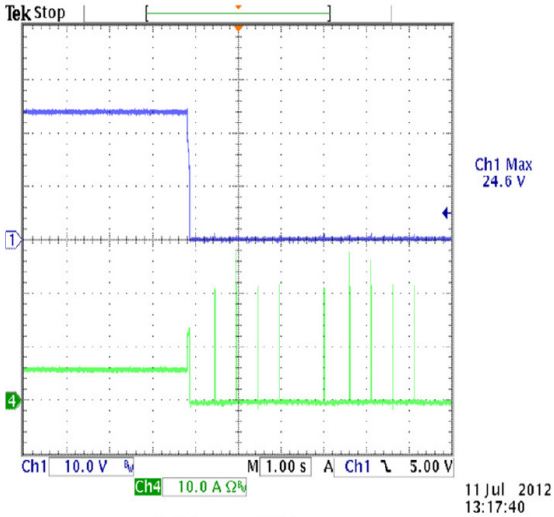



24V OUT, 264VAC

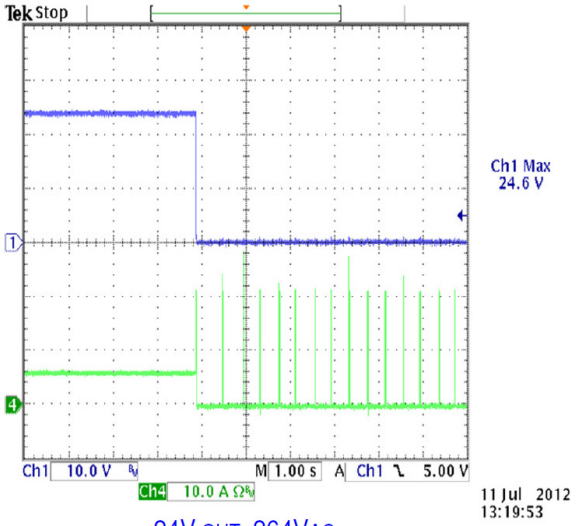
## CHARACTERISTIC CURVES

Short Circuit Protection

Power supply shall protect itself against Short Circuit conditions. No damage will occur if the output is shorted.



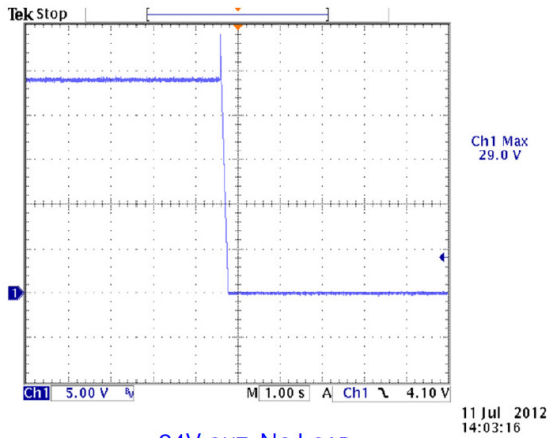

24V OUT, 90VAC



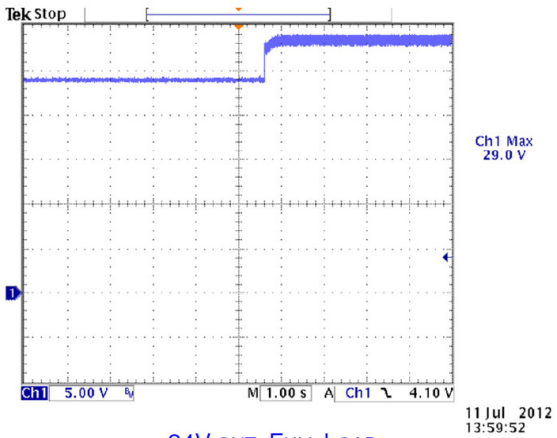

24V OUT, 264VAC

Overvoltage Protection

OVP firing reduces output voltage to <50% of nominal in <50 ms. See models chart for trip ranges.



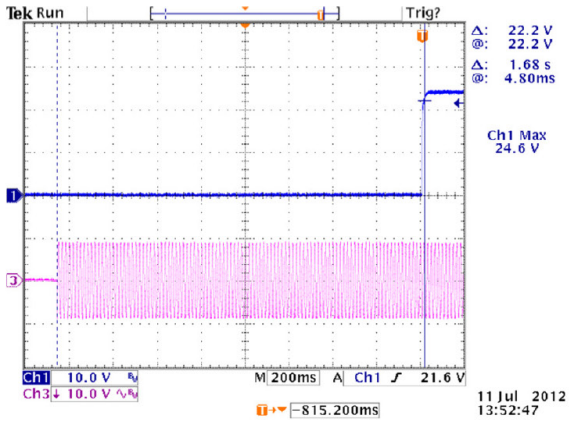

24V OUT, NO LOAD



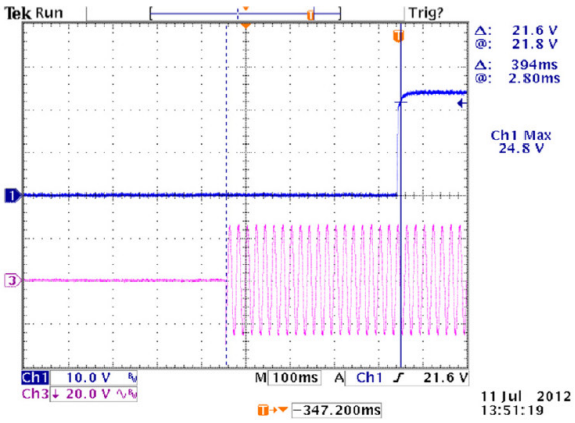

24V OUT, FULL LOAD

## CHARACTERISTIC CURVES

Turn On Time

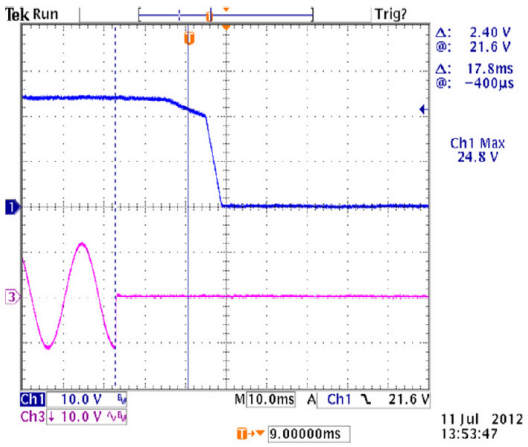



90VAC, FULL LOAD




264VAC, FULL LOAD

Hold Up Time




120VAC, FULL LOAD

## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than four decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE | TRUST

For international contact information,
visit advancedenergy.com.

powersales@aei.com (Sales Support)
productsupport.ep@aei.com (Technical Support)
+1 888 412 7832

Specifications are subject to change without notice. Not responsible for errors or omissions. ©2026 Advanced Energy Industries, Inc. All rights reserved.

ENG-CINT1150-10.22.26