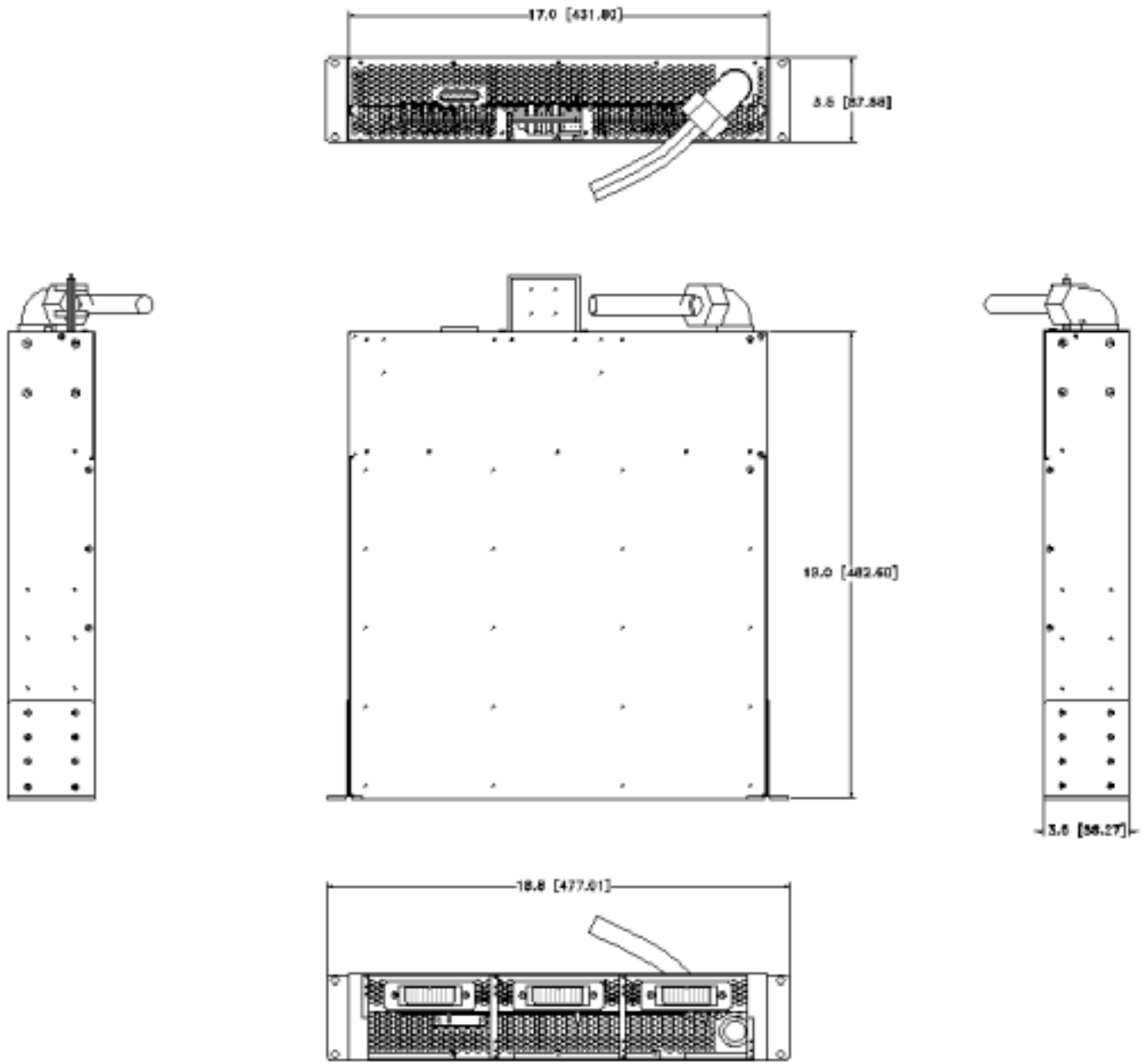
2332 Bay

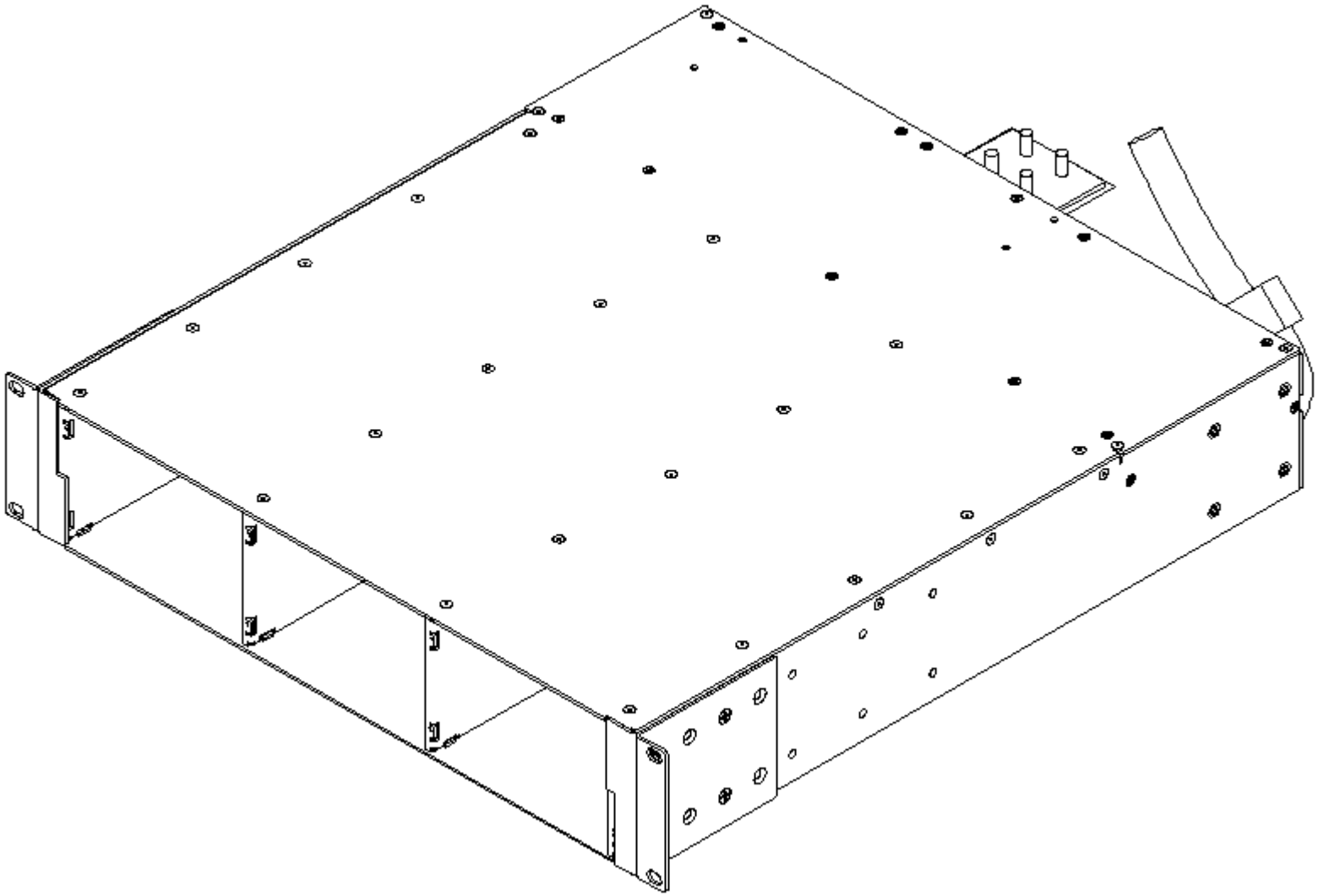
2332 BAY FEATURES

INPUT POWER:	180 Vac - 264 Vac Line to line (3 Ø delta connection), 47 - 63 Hz,
OUTPUT POWER:	7.5 kW Max (48 Vdc @ 156A) with Third Wire current sharing capability.
CONTROL SIGNALS :	Inhibit, Enable/ Interlock and remote sensing
REPORTING SIGNALS:	DC Good 1, DC Good 2, DC Good 3, AC Good 1, AC Good 2, AC Good 3
FRONT PANEL LEDs:	AC OK and DC OK on each power supply
OPERATING AMBIENT:	0 to 50°C
COOLING:	Power supplies provide their own cooling
OUTPUT CONNECTION:	Two bus bars, one for 48V RTN and one for +48V
CONSTRUCTION:	Fully enclosed steel chassis.
NOMINAL SIZE:	19.0”L X 3.5”H X 17.0”W (483 mm X 88 mm X 432 mm)
WEIGHT:	Approx. 24lbs. (measurement excludes AC cord)

MECHANICAL OUTLINE



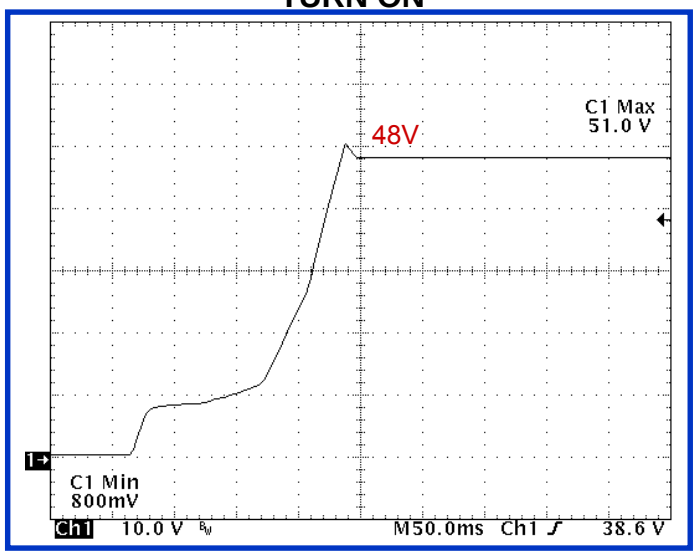
MECHANICAL OUTLINE



25 PIN D-SUB CONNECTOR PIN OUTS

Pin	Function	Pin	Function
1	Inhibit	14	AC GOOD 1
2	N/C	15	DC GOOD 1
3	N/C	16	AC GOOD 2
4	N/C	17	DC GOOD 2
5	N/C	18	AC GOOD 3
6	N/C	19	DC GOOD 3
7	N/C	20	N/C
8	N/C	21	N/C
9	N/C	22	N/C
10	Current Share	23	- Sense
11	+ Sense	24	N/C
12	N/C	25	N/C
13	N/C		

TURN ON

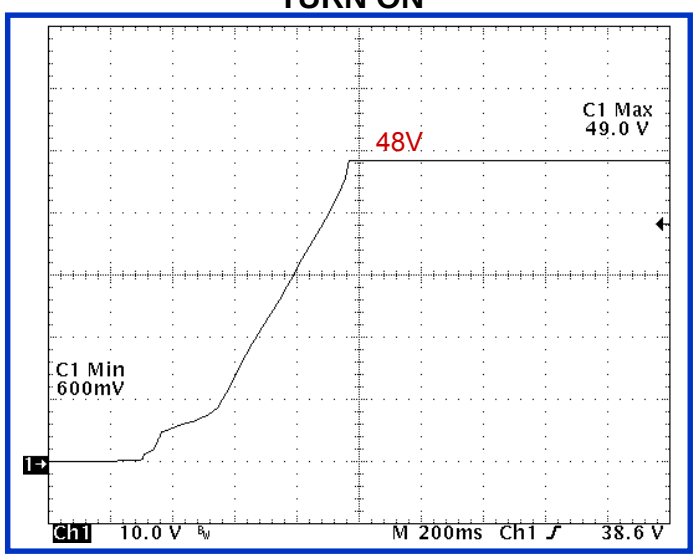


Conditions:
Line: 208 Vac
Load: 1A
Enable activated

Results:
All three power supplies turn on as one.

Spec: None

TURN ON

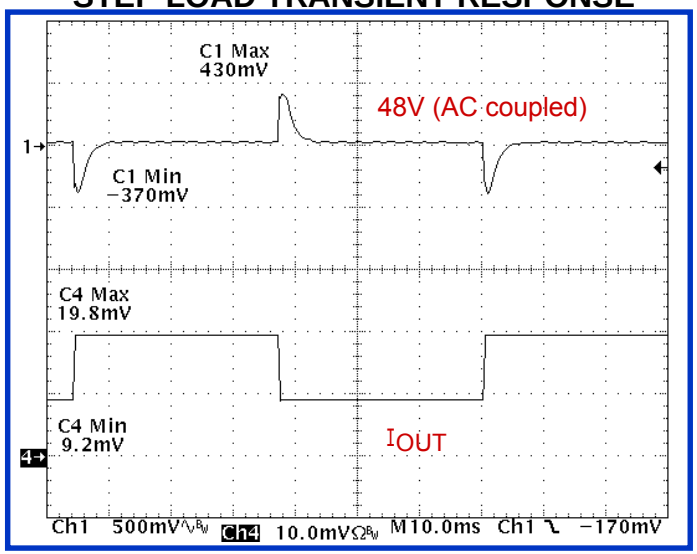


Conditions:
Line: 208 Vac
Load: 158A
Enable activated

Results:
All three power supplies turn on as one.

Spec: None

STEP LOAD TRANSIENT RESPONSE

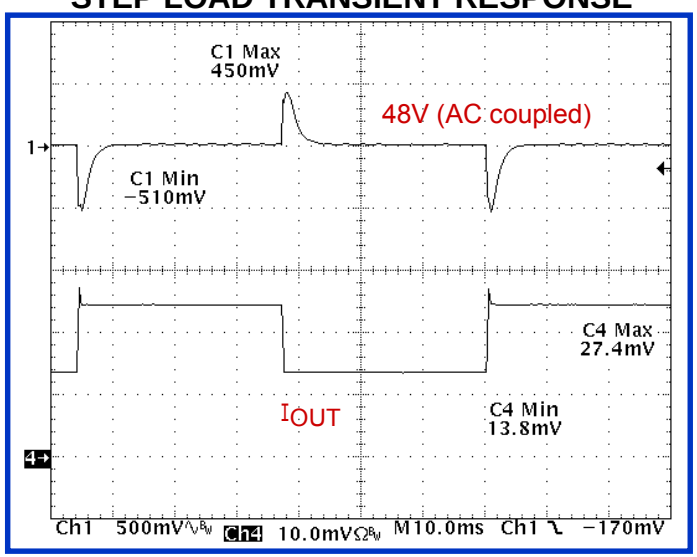


Conditions:
Line: 208 Vac
Transient response from 46A to 99A
Frequency: 30Hz
Current measured with a current probe (50A/div)

Results:
Overshoot: 0.43V
Recovery time: None

Spec: 2.4V max, settling within 1 ms with a 50% step

STEP LOAD TRANSIENT RESPONSE

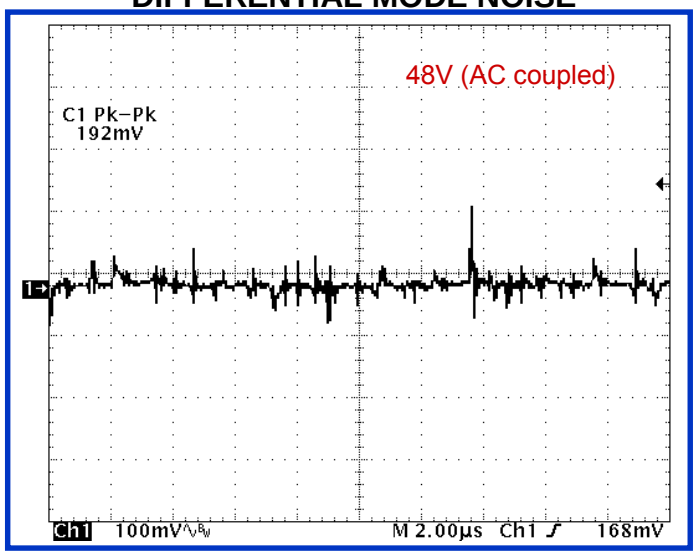


Conditions:
Line: 208 Vac
Transient response from 69A to 137A
Frequency: 30Hz
Current measured with a current probe (50A/div)

Results:
Overshoot: 0.51V
Recovery time: < 1 ms

Spec: 2.4V max, settling within 1 ms with a 50% step

DIFFERENTIAL MODE NOISE



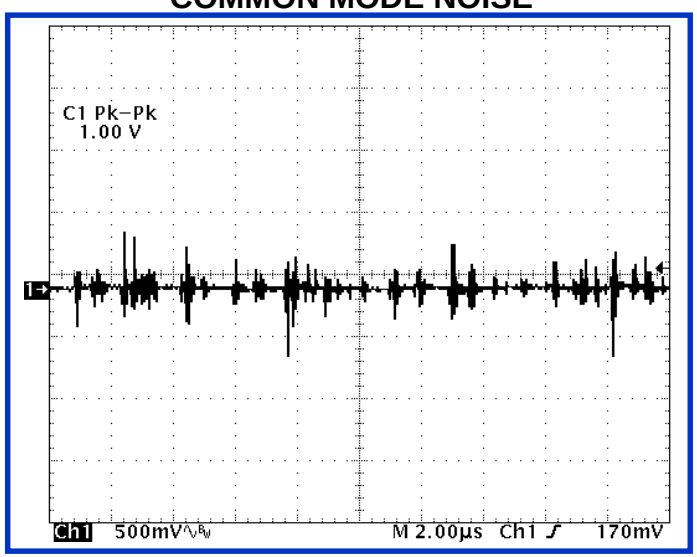
Conditions:
Line: 208 Vac
Load: 158A

Scope probe across buss bars at output of bay.
Scope 100 MHz BW, peak detect mode.
No capacitance added for measurement.

Results:
192 mVp-p

Spec: None

COMMON MODE NOISE



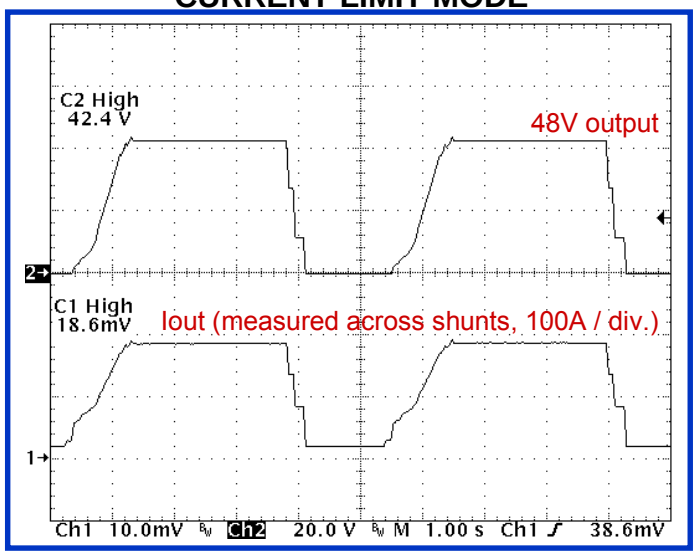
Conditions:
Line: 208 Vac
Load: 158A

Scope probe from chassis to 48V return bus bar.
Scope 100 MHz BW, peak detect mode.
No capacitance added for measurement.

Results:
1 Vp-p

Spec: None

CURRENT LIMIT MODE



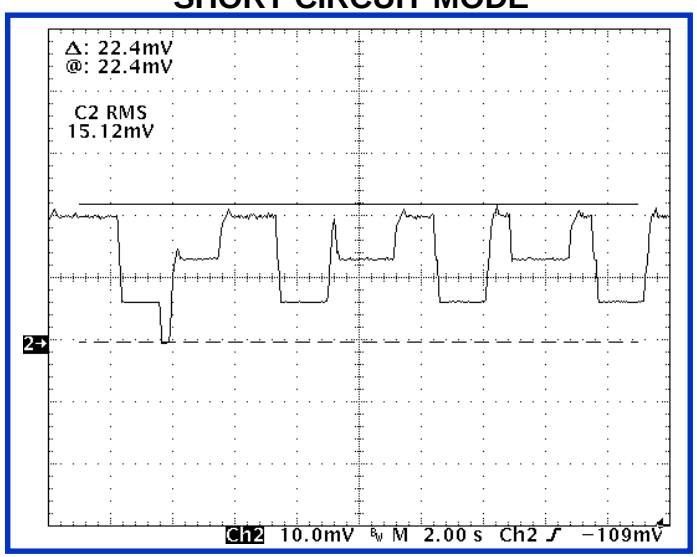
Conditions:
Input Voltage: 208 Vac
Load: 186A

Tektronix TDS 420A oscilloscope used for measurement.

Results:
All three power supplies go into Hiccup mode

Spec: Power supply must protect itself.

SHORT CIRCUIT MODE

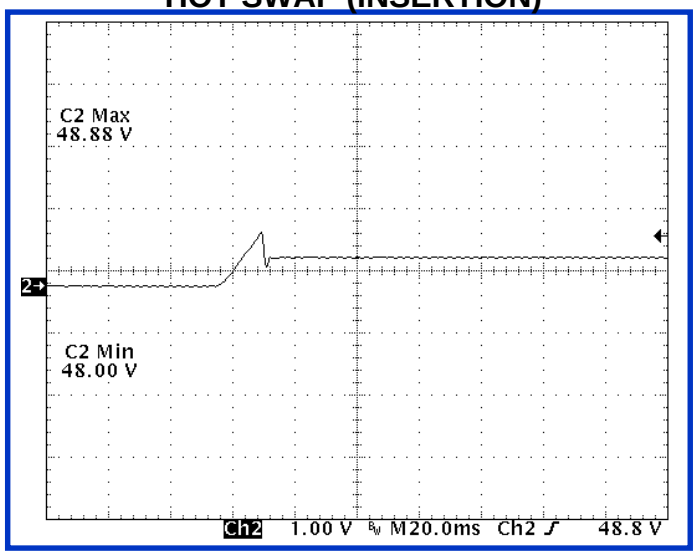


Conditions:
Line: 208 Vac
Load: Shorted output

Results:
All units go into Hiccup mode
Peak current value = 224A
RMS current = 151A

Spec: Power supply must protect itself.

HOT SWAP (INSERTION)



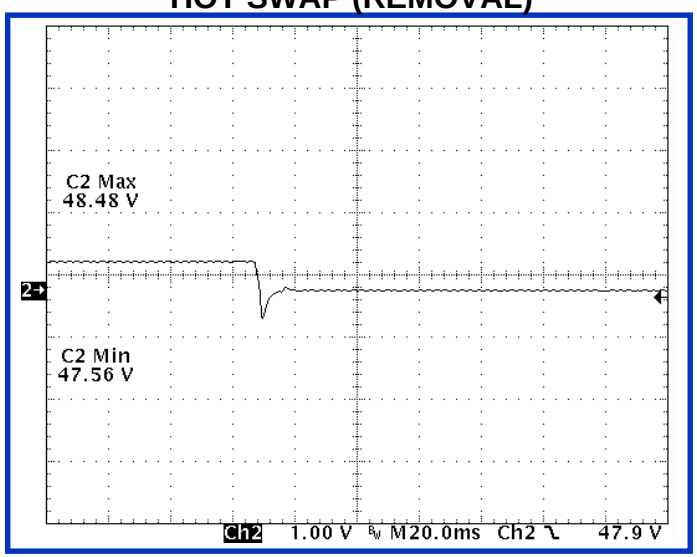
Conditions:
Line: 208 Vac
Load: 105A
Power supply A set point = 48.5V
Power supply B and C set point +48V
Scope is on DC coupling with a 48V offset

Power supply B and C are in bay
Power supply A is inserted

Results: $\Delta V = 0.9V$

Spec: Insertion and removal of a power supply shall not disrupt the system.

HOT SWAP (REMOVAL)



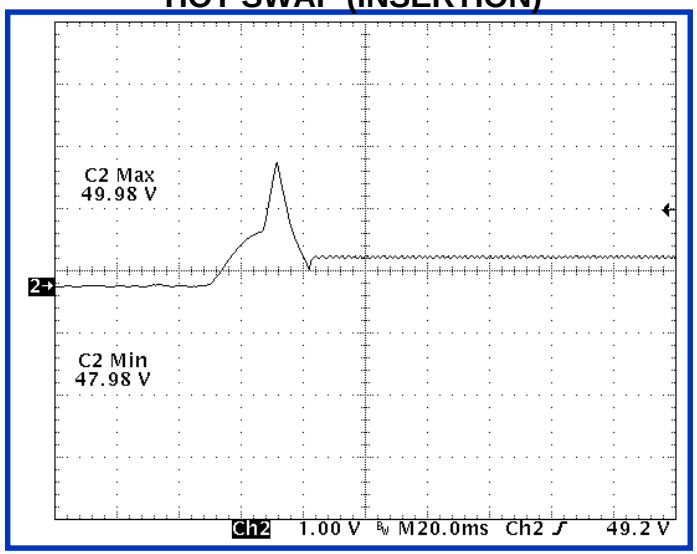
Conditions:
Line: 208 Vac
Load: 105A
Power supply A set point = 48.5V
Power supply B and C set point +48V
Scope is on DC coupling with a 48V offset

Power supply A is removed
Power supply B and C are in bay

Results: $\Delta V = 0.5V$

Spec: Insertion and removal of a power supply shall not disrupt the system.

HOT SWAP (INSERTION)



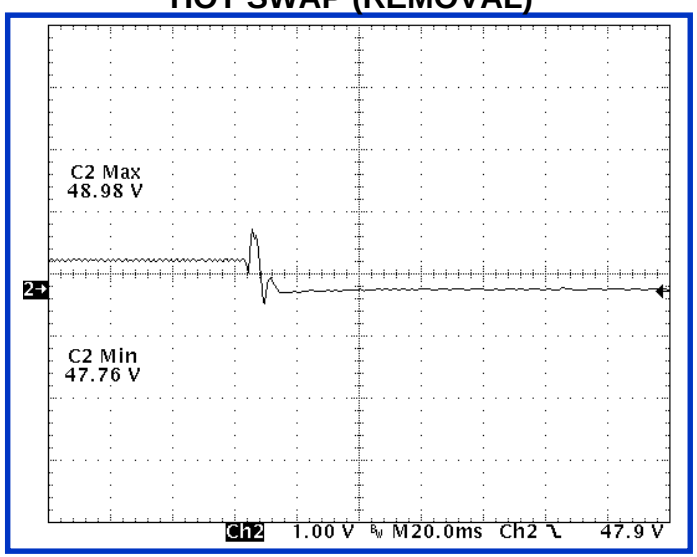
Conditions:
Line: 208 Vac
Load: 1A
Power supply A set point = 48.5V
Power supply B and C set point +48V
Scope is on DC coupling with a 48V offset

Power supply B and C are in bay
Power supply A is inserted

Results: $\Delta V = 2V$

Spec: Insertion and removal of a power supply shall not disrupt the system.

HOT SWAP (REMOVAL)



Conditions:
Line: 208 Vac
Load: 1A
Power supply A set point = 48.5V
Power supply B and C set point +48V
Scope is on DC coupling with a 48V offset

Power supply A is removed
Power supply B and C are in bay

Results: $\Delta V = 1V$

Spec: Insertion and removal of a power supply shall not disrupt the system.