Specifications

(All specs apply from 5% to 100% of rated output. Unit operates down to zero with a slight degradation in performance)

Input: 3 phase 190 to 225 V rms, 48-63 Hz, delta or wye, <12 A per phase.

Output #1:

Output: 0 to 250 mA with a compliance voltage from 0 to 2.5 kV, referenced to chassis ground. Power = 625 watts.

Ripple: Less than, or equal to 21 V p-p @ Full Load

Programming: 0 to 10 V = 0 to 250 mA. Accuracy is 1% of setting +0.5% of rated.

Voltage Monitor: 0 to 10 V = 0 to 2.5 kV. Accuracy is 1% of reading +0.5% of rated. Output Impedance = 1 K ohm

Current Monitor: 0 to 10 V = 0 to 250 mA. Accuracy is 1% of reading +0.5% of rated. Output Impedance = 1 K ohm

Rise Time: Less than or equal to 50 ms time constant.

Output #2:

Output: 0 to 200 mA with a compliance voltage from 0 to 4.0 kV, referenced to output #1. Power = 800 watts.

Ripple: Less than, or equal to 16 V p-p @ Full Load

Programming: 0 to 10 V = 0 to 200 mA. Accuracy is 1% of setting +0.5% of rated.

Voltage Monitor: 0 to 10 V = 0 to 4.0 kV. Accuracy is 1% of reading +0.5% of rated. Output Impedance = 1K ohm

Current Monitor: 0 to 10 V = 0 to 200 mA. Accuracy is 1% of reading +0.5% of rated. Output Impedance = 1 K ohm

Rise Time: Less than or equal to 50 ms time constant.

Output #3:

Output: 0 to 250 mA with a compliance voltage from 0 to 2.5 kV, referenced to output #2. Power = 625 watts.

Ripple: Less than, or equal to 11 V p-p @ Full Load

Programming: 0 to 10 V = 0 to 250 mA. Accuracy is 1% of setting +0.5% of rated.

Voltage Monitor: 0 to 10 V = 0 to 2.5 kV. Accuracy is 1% of reading +0.5% of rated. Output Impedance = 1K ohm

Current Monitor: 0 to 10 V = 0 to 250 mA. Accuracy is 1% of reading +0.5% of rated. Output Impedance = 1K ohm

Rise Time: Less than or equal to 50 ms time constant.

Reference: All programming and monitoring are referenced to common/chassis ground.

Ambient Temperature: 0 to 40 °C operating. -40 to +85 degrees C, storage.

Humidity: 85% max, no condensation **Dimensions:** 7"H x19"W x 24"D

Weight: TBD pounds **Cooling:** air forced

Loop Regulation Technique: pulse width modulation

HV Output Connections: All three outputs are provided on Alden A400Q12 friction lock type bulkhead connectors.

Accessories: Mating Alden A000.220 friction lock connectors for each output with TBD feet of HV cable are provided.

Protection: Automatic current regulation protects against all overloads, including arcs and shorts. Circuit breaker, surge-limiting resistors, and low-energy components provide ultimate protection.

Front Panel Elements: The front panel contains the power switch /breaker, amber power indicator, red HV ON and fault LED indicators, and handles.

Real Panel Elements: The rear panel contains an amber power "ON" indicator, AC input terminal strip with protective cover, 25 Pin female "D" interface connector, interlock terminal strip with jumper link provided, three HV output connectors, air cooling vents, and a ¼"-20 ground stud.

Interlock: Normally Open, external electromechanical type, contact closure to enable HV through a rear panel terminal block:

Pin Function

1 --- Ground 2 --- Common

3 --- Interlock

Digital Signals:

HV Enable: 0 to 1.5 V off, 2.5 to 24 VDC on.

HV Status: Open collector with a 5K pull up to +24 VDC. 0 VDC = HV OFF, +24 VDC = HV ON.

Fault Status: Open collector with a 5K pull up to +24 VDC. 0 VDC = No Fault, +24 VDC = Fault. Faults are typically overtemperature, bad fan, under voltage, etc. Since a fault will inhibit HV generation, the HV status signal will also go low when a fault occurs.

Signal interface: 25 Pin female "D" connector on the rear panel. Signal interface connections:

Pin Function

1 - - - Ground

2 --- Output #1 kV Monitor

3 - - -Output #1 mA Monitor

4 - - - Output #1 mA Program

5 - - - Analog Common

6 - - - Output #2 kV Monitor

7 - - - Output #2 mA Monitor

8 - - - Output #2 mA Program

9 - - - Analog Common

10 - - Output #3 kV Monitor

11 -- Output #3 mA Monitor

12 - - Output #3 mA Program

13 - - Analog Common

14 - -+ 10 V Reference

15 - - Spare

16 - - Spare

17 - High Voltage Enable

18 - - Common

19 - - High Voltage Status

20 - - Common

21 -- Fault Status

22 -- Common

23 - - Spare

24 - - Spare

25 - - Ground

Spare = no connection

