

Arc Lamp CW Laser Power Supply

Model 2038



Description

The product is a 19" CW Arc Lamp power supply in size 3U and is designed for operation from USA 208/220V 3-ph, 60Hz line supply, for use to output power levels of 6kW.

The unit features 'integrated boost', 'series trigger', and 'automatic ignition' and incorporates many safety features.

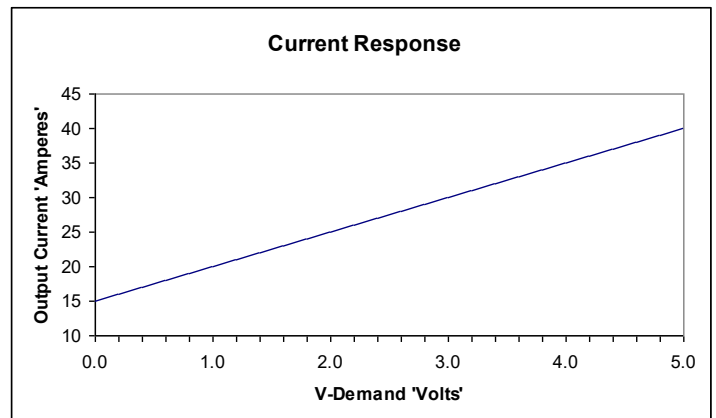
The unit has been designed as a replacement for 'ESKI 150-40-1' power supplies as used in Lumonics Lightwriter laser system using SOLO software.

Highlights

- 6.5kW output power
- 40A Maximum output current
- Robust Design using IGBT technology
- Front panel manual control
- Rear panel remote control
- Fully RoHS compliant
- After sales engineering support.
- Ease of maintenance.
- 2 year warranty
- Compliant with the following safety standards;
 - EN61010-1
- Compliant with the following EMC standards;
 - EN61000-6-2
 - EN61000-6-4
 - EN61000-3-2
 - EN61000-3-3
 - ENV50204

Electrical Characteristics

Line Input 3-Phase	208 – 220 VAC
AC Supply Tolerance	± 10%
Frequency	47 to 63Hz
Power Factor (Full Load)	≥0.9
Crest Factor (Full Load)	≤1.7
Output Ripple (Full Load)	0.1% (peak to peak)
	1kHz Band Width
Line Regulation	0.1% for ± 10% Line Voltage Change
Output Drift	≤0.1% over 8 hour period (with constant temp, load & Line conditions)
Efficiency	≥85%
Ignition Pulse Voltage	25kV, nominal
Boost Voltage	1000V, nominal, two stage
Output Rating	40A/6kW





Control Functions

- Interlock
- Remote Start
- Output Current Demand Voltage 0 - 5VDC
- Output Current Monitor Voltage 0.1V / ampere
- 1mA Current Source

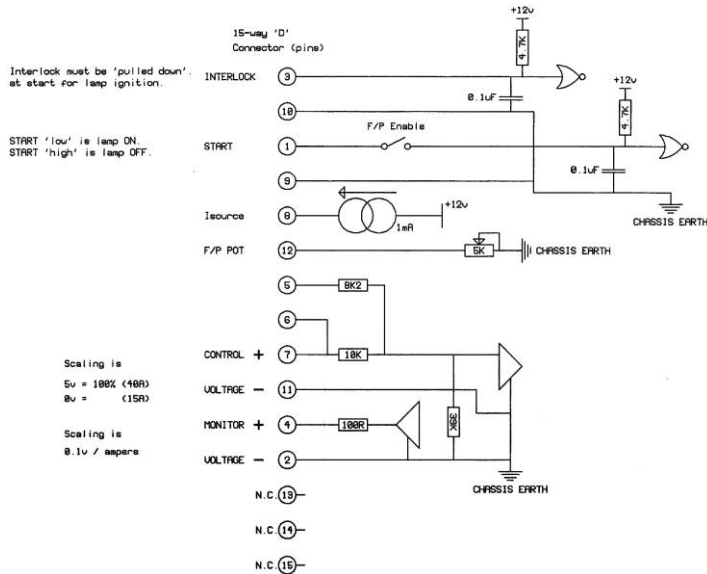
Front Panel Control

- MCB line breaker.
- Start Enable Rocker switch.
- 10-turn potentiometer for lamp current control.
- 3 1/2 Digit LED Display of lamp current.
- Fault indicator.

Rear Panel Connection

The unit is fitted with a 15-way 'D' (Male) connector for remote operation.

Connector Pinout



Safety

All control circuitry is low voltage and wiring has full galvanic isolation from the line supply. The build standards comply with EN61010-1 and conform to the requirements of the Low Voltage Directive 73/23/EEC and carry the CE Mark. Should the lamp fail to ignite the trigger and boost voltages are removed from the output terminals.

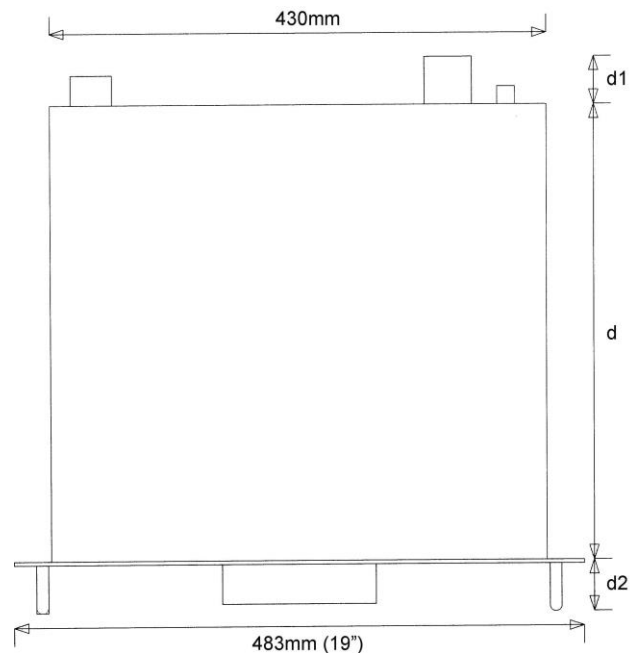
An appropriate EMC Filter is fitted. Units comply with the Emission and Immunity Standards EN50082-2 and EN50081-1 (Class A).

Protection

Protection on the line input is by VDE rated circuit breaker. Output protection is included in the event of a lamp failure or connection to earth. Latching over current limit 'OCL' is included. Thermal protection is included against overload.

Mechanical

Size (mm)	Height	133 (3U)
	Depth (d)	380
	d1	40
	d2	42
	Weight	28kg



Cooling Forced air, entering at the front via a Graded filter and exiting at the rear.

Temperature Continuous in an ambient of 0°C to 60°C with appropriate de-rating above 35°C.

Installation Notes

CAUTION

The installer must ensure that the product is suitable for the application. Care must be taken regarding V-demand and V-monitor scaling. No responsibility will be taken by D.Green Electronics Ltd.

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We manufacture over thirty Standard and OEM power supplies. Please contact us to discuss your requirements.

