

Power Supply for Deuterium Lamps

Model No. MD310/MD330

1. These power supplies are designed for 30W Deuterium Lamps with the following features:

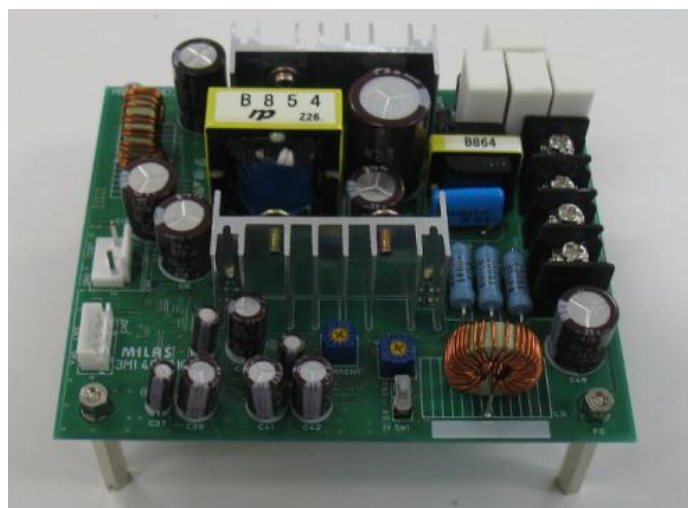
- High stability with high performance current control
- Compact size by using switching type power supply
- Workable with DC24V
- Insulated input for lighting start and output for lighting monitor are available, and those can be easily connected with Logic IC.

2. Characteristics

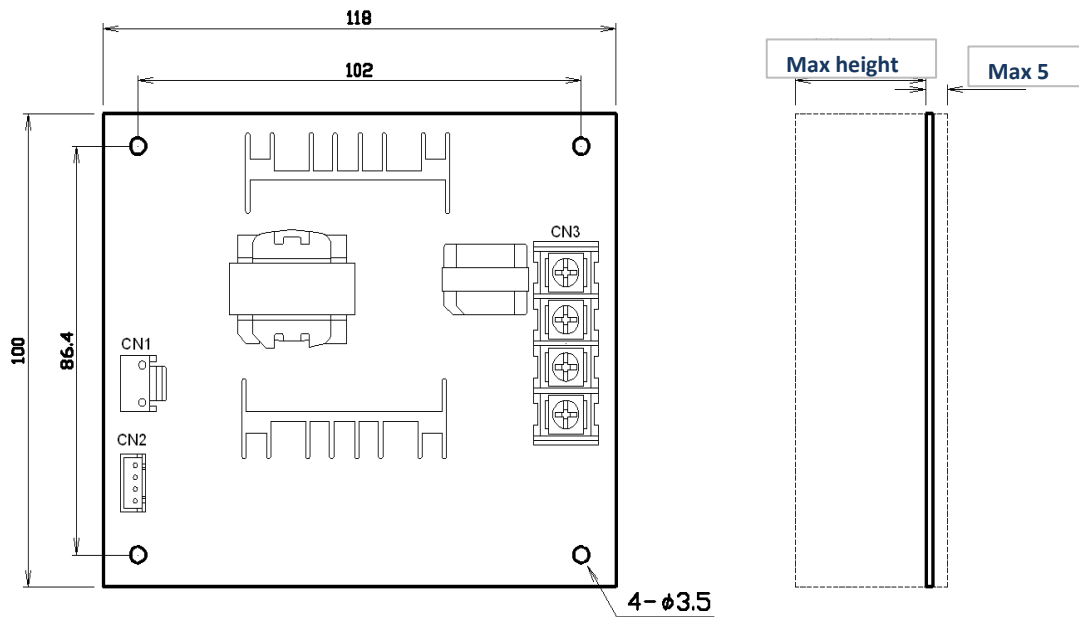
Based on 30 minutes after lighting lamp at the temperature of $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$.

Parameters			Requirement
Input		Input voltage (DC)	$24 \pm 2.4\text{V}$
		Input power during lighting	Max. 50W
Output		Output voltage before lighting	Typ 200V
		Output voltage during lighting	Typ 80V
		Output current	$300 \pm 15\text{mA}$
		Fluctuation of current	Typ 0.005%
		Drift of current	Typ $\pm 0.02\%/h$
		Pre-heating	25 ± 5 sec.
		Trigger voltage	Min. 600V
Filament	For 2.5V MD310	Pre-heating Voltage	$2.5 \pm 0.2\text{V}$
		Pre-heating Current	Typ 4A
		In operation Voltage	$1 \pm 0.1\text{V}$
	For 10V MD330	In operation Current	Typ 1.8A
		Pre-heating Voltage	$10 \pm 0.5\text{V}$
		Pre-heating Current	Typ 1.2A
		In operation Voltage	$7 \pm 0.4\text{V}$
		In operation Current	Typ 1A
Cooling method			Air cooling
Operating ambient temperature			$0 \sim 40^{\circ}\text{C}$
Storage ambient temperature			$-10 \sim 60^{\circ}\text{C}$
Operating & storage ambient humidity			Max 80%Rh
Weight			250g

3. Appearance and External dimensions



Appearance of power supply for Deuterium Lamps



External dimensions

4. Pin assignment of connectors

Connectors		Pin No.	Function
CN1	Power	1	DC24V (note 1)
		2	GND
CN2	Input & Output	1	Lamp's ON/OFF control (note 2)
		2	GND for above
		3	Lighting status in operation (note 3)
		4	GND for above
CN3	Lamp Output	1	Anode
		2	Shield (Sub-anode)
		3	Filament
		4	Filament & Cathode

- note 1) Due to rush current, please use min. 70W power
 note 2) About 10mA current is running at 5V operating voltage
 note 3) 390Ω of open collector output

* These specifications are based on the data as of July 2012 and subject to change without notice.

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