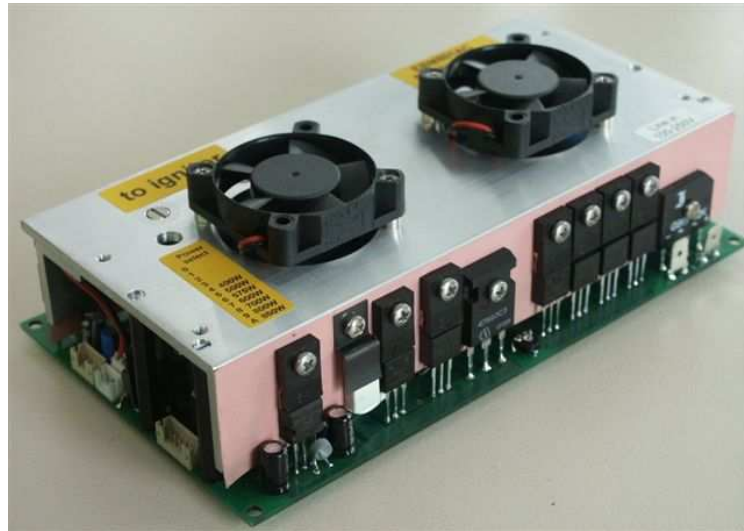


## ECG 800AC

### Electronic Control Gear for AC Lamps 400 – 850W



#### Features

- Power Supply for Metal Halide AC-Lamps or DC-Lamps
- Lamp power range of 400W, 500W, 575W, 600W, 700W, 800 and 850W
- Output power customer selectable by 16-step multimode switch
- integrated lamp lifetime counter - as option-
- Input voltage range from 90V AC to 264V AC, power factor corrected line input
- Special newly designed anti aging and anti abnormal arc control circuit for high optical reliability over extended lifetime
- $\mu$ P controlled, Digital Power Management with high output stability over lamp lifetime
- Output short circuit protected
- Thermal shut off at 90°C
- Shut off function for end of life and lamp fail parameter
- Less than 1% rms light flicker at all frequencies
- Auxiliary regulated 24V/ 0.1A output for fan drive, (only available when lamp lit.)
- optoisolated control interface with: lamp lit OK output, boost input, analog dim input (photofeedback), remote on-off input (invertable by solderbridge), non optoisolated direct uP-control
- Thermal design with integrated fans or for external cooling as option
- Flexible Design: new lamps and functions adaptable only by software

All values are valid at  $25 \pm 5^{\circ}\text{C}$ , unless otherwise noted

### Input Data

Nominal Operation	Symbol	Unit	Nominal	Tolerances	Remarks
Input voltage AC Line	U	V AC	100-240	90 – 264	100V <sub>min</sub> @ 800W
Input voltage DC-Line	U	V DC	100-300	90 - 340	
System wattage	P <sub>LI</sub>	W	400-850		depends on select
Input current	I <sub>LI</sub>	A		2 – 10	depends on select
Line frequency	Fin	Hz	50/60	47 – 63	
Line Power factor	PFC	1	1.0	0.93 to 1.0	

### Lamp Output Data

Ignition	Symbol	Unit	Nominal	Tolerances	Remarks
Ignition voltage	U <sub>ign</sub>	kV <sub>peak</sub>	±		No built-in ignitor
Ignition time automatic restart counter	t <sub>ign on</sub>	sec.	1 5	0.4 – 3.0 --	dynamic attempts

Nominal Operation	Symbol	Unit	Nominal	Tolerances	Remarks
Lamp voltage	U <sub>La</sub>	V	35 to 140	+/-5%	Depends on lamp select
Lamp wattage	P <sub>La</sub>	W	400, 500, 575, 600, 700, 800, 850	+/-2%	Selectable by type (ECG 800xx by switch)
Lamp current	I <sub>La</sub>	A	3 - 12		Depend on select

### LIFETIME DATA

All values for U<sub>u</sub> = 230 V<sub>mrs</sub>  
 Temperature at test point = 70°C

	Symbol	Unit	Nominal	Tolerances	Remarks
ballast lifetime	t <sub>Life</sub>	H	25.000	> 25.000	acc. To MIL HDBK for nominal operation

Geometry and Weight	Symbol	Unit	Nominal	Tolerances	Remarks
Length	l	mm	175	t.b.d.	See dwg.
Width	w	mm	100	t.b.d.	See dwg.
Height	h	mm	38.5	t.b.d.	Above PCB see dwg.
Housing				t.b.d.	Open frame Al- L- profile
Weight	W <sub>B</sub>	Kg	0.75	t.b.d.	with internal fan

Cooling method	Symbol	Unit	Nominal	Remarks
	airflow	meter per second	Built-in fan's or 2m/s from external fan	Must be checked in actual application, see drawing