

ECG 200 Series

Electronic HID ballast 150 – 250W

Please read this information carefully, before installing and operating the power supply!



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Features:

- Power supply for metal halide short arc lamps
- Nominal lamp power between 100 to 250W
- Highly compact size
- Wide Range Input (100-240V)
- Stable light output, suitable for visual inspection equipment
- μ P controlled, digital power management with high output stability over lamp lifetime
- Isolated Interface via photo couplers
- Dimmable via potentiometer or PWM-signal

Electrical Data

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	
Input voltage DC-Line	U	V DC	100-300	90 - 340	
System wattage	P_{Li}	W	250	105-290	depends on power set
Input current	I_{Li}	A		0.4 – 3	depends on power set
Line frequency	Fin	Hz	50/60	47 – 63	
Line Power factor	PFC	1	1.0	0.93 to 1.0	

Lamp Output Data

Ignition (ECG 200-XX)	Symbol	Unit	Nominal	Tolerances	Remarks
Ignition voltage	U_{ign}	kV_{peak}	± 14	$\pm 12 - \pm 16$	Load capacity <20pF
Ignition time	$t_{ign on}$	sec.	1	0.9 – 1.1	
automatic restart counter			5	--	Attempts

Ignition (ECG 200-XX k)	Symbol	Unit	Nominal	Tolerances	Remarks
Ignition voltage	U_{ign}	kV_{peak}	± 5	$\pm 3.5 - \pm 6.5$	Load capacity <20pF
Ignition time	$t_{ign on}$	sec.	1	0.9 – 1.1	
automatic restart counter			5	--	Attempts

Ignition (ECG 200-XX i)	Symbol	Unit	Nominal	Tolerances	Remarks
Ignition voltage	U_{ign}	kV_{peak}	n/a	n/a	Depends on ext. ignitor
Ignition time	$t_{ign on}$	sec.	1	0.9 – 1.1	
automatic restart counter			5	--	Attempts

Nominal Operation	Symbol	Unit	Nominal	Tolerances	Remarks
Lamp voltage	U_{La}	V	60-160	+/-5%	Depends on lamp
Lamp wattage	P_{La}	W	150, 200, 250	+/-5%	Depends on power set
Lamp current	I_{La}	A			Depends on power set

LIFETIME DATA

All values for $U_u = 230 V_{mrs}$

Temperature at test point = 70°C (see Fig. 3)

	Symbol	Unit	Nominal	Tolerances	Remarks
ballast lifetime	t_{Life}	h	20.000	> 20.000	acc. To MIL HDBK for nominal operation