RΩTEC

Made in Germany

HBX2000

Electronic Modular Power Supply for Xe and Hg Lamps

Features

· Designed for Xenon short arc lamps rated up to 2200W/ 102A

· Output power selectable by control Voltage 0-5V and/or presetting by Hex switch and adjustment Pot

· Capable to drive lamp voltage range up to 40V (switch off @ 41V)

· Ballast boards inside has IEC(UL) 60601 approval

· Input voltage range from 110V AC to 240V AC, (90V-262V) PF corrected

· µP controlled, digital power management with high output stability over lamp Lifetime

· Output short circuit protected and "Arc to Ground" protected

· Operation with Cathode or Anode to Ground/PE possible

· Galvanic separation of lamp output to line input, thermal shut off at 90°C

· Shut off function for end of life and lamp fail parameter

· PSUs cascadable for use for higher wattage Xenon lamps

· Auxiliary regulated 24V/ 0.15A output for Subsystems, permanently available

· line input, built-in EMI-filter: meets CE and FCC

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

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All values are valid at 25 ± 5∞C, unless otherwise noted

INPUT DATA

NOMINAL OPERATION	SYMBOL	UNIT	NOMINAL	TOLERANCES	REMARKS
Input voltage AC Line	U	V AC	110-240	90-264	
Input voltage DC Line	U	V DC	150-320 certified, DC-input is possible but not certified		
System wattage	P_{Li}	W		1000-2400	Depends on P select
Input current	I_{LI}	A		32	Depends on P select
Line frequency	Fin	Hz	50/60	47-63	
Line power factor	PFC	1	1.0	0.93 to 1.0	
Line inrush current limiting	Apeak		50		Limiting Element will be shorted by Relais
Leakage Current to PE	I_{Leak_SA}	µA	<1000@230 V		Standalone

OTHER OPERATION DATA	SYMBOL	UNIT	NOMINAL	TOLERANCES	REMARKS
System wattage during ignition	P_{Iign}	W	100	<150	
System wattage standby-operation	P_{LIStby}	W	5	<6	

LAMP OUTPUT DATA

IGNITION	SYMBOL	UNIT	NOMINAL	TOLERANCES	REMARKS
Ignition voltage withZG120Xe	U_{ign}	kV_{peak}	36-46		Depends on Ignitor
Ignition time automatic restart counter	$t_{ign\ out}$	sec.	1 20	0.9-1.1 -	Attempts (Ballast)

RUN-UP OPERATION	SYMBOL	UNIT	NOMINAL	TOLERANCES	REMARKS
Run-up Current = nominal Current	I_{max}	A	102		Inside specified lamp-parameter (select by preset switch)

NOMINAL OPERATION	SYMBOL	UNIT	NOMINAL	TOLERANCES	REMARKS
Lamp voltage	U_{La}	V	22-40		PSU output NOT Ignitor input
Lamp wattage	P_{La}	W	1100 to 2200		Factory set-up 2000W
Lamp current	I_{La}	A	Up to 102		Depend on set-up
End-Of Life-Cut off voltage	$U_{La,\ max}$	V	41	+/- 1V	After run-up completed
End-Of-Life-Cut off time	$t_{EOL-Off}$	S	<0.2		
RF-Ripple of output power	$\Delta P_{La},rip/P_{La}$	%	< 1		
50Hz-60Hz Ripple		%	< 1 p-p	< 4 p-p	
Shift in output power with shift in input voltage	$\Delta P_{La}/\Delta U_{LI}$	1		< 0.005	With nominal values
Open circuit voltage for ignition	U_{OCV}	V	110	105-160	

For detailed information please contact **ralf@rotec-gmbh.com** or **info@rotec-gmbh.com**

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