ROTEC

DATA SHEET

Made in Germany

HBX 7000

Electronic Modular Power Supply for Xe Lamps

Suiting Ignitors:

- ZG 180Xe with asymmetric ignition (Ri=650 µΩ)
- Anode or Cathode Ground operating
- Designed for Xenon short arc lamps rated **up to 7000W/42V, 160A**
- 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 50V** (switch off @ 52V)
- **Designed according to IEC 61010 and IEC 60601 / HALT tested**
- Input voltage **240V AC, 220V–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, **permanent available**
- line input, built-in EMI-filter: meets CE and FCC

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

ROTEC

HBX7000

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	230V/typ.	220 - 264	
System wattage	P_{LI}	W		Up to 7400	Depends on P select
Input current	I_{LI}	A	30	< 90	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	$I_{LI, Leak}$	A	100	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_{lign}	W	200	<4000	
System wattage standby-operation	P_{LIStby}	W	10	<12	

LAMP OUTPUT DATA

IGNITION	SYMBOL	UNIT	NOMINAL	TOLERANCES	REMARKS
Ignition voltage with ZG180Xe	U_{ign}	kV_{peak}	36-46		Depends on Ignitor
Ignition time	$t_{ign\ out}$	sec.	1	0.9-1.1--	
Automatic restart counter			20		Attempts (Ballast)

RUN-UP OPERATION	SYMBOL	UNIT	NOMINAL	TOLERANCES	REMARKS
Run-up Current = nominal Current	I_{max}	A	200		Inside specified lamp-parameter (select by preset switch)

NOMINAL OPERATION	SYMBOL	UNIT	NOMINAL	TOLERANCES	REMARKS
Lamp voltage	U_{La}	V	25 - 50		After run-up complete
Lamp wattage	P_{La}	W	up to 7000		Factory seting 6700 W
Lamp current	I_{La}	A	up to 160		Depend on set-up
End-Of Life-Cut off voltage	$U_{La, max}$	V	52	+/- 1V	After run-up completed
End-Of-Life-Cut off time	$t_{EOL-Off}$	S	<0.2		
RF-Ripple of output power	ΔP_{La},rip/ P_{La}	%	< 1		
50Hz - 60Hz Ripple		%	< 1	< 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	

Technical modifications and errors excepted.

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

ROTEC Vertriebsgesellschaft für Elektrotechnik mbH
Jurastraße 5
73119 Zell u.A.
Germany
+49 (0) 7164 903 402-0
+49 (0) 7164 903 402-39
info@rotec-gmbh.com