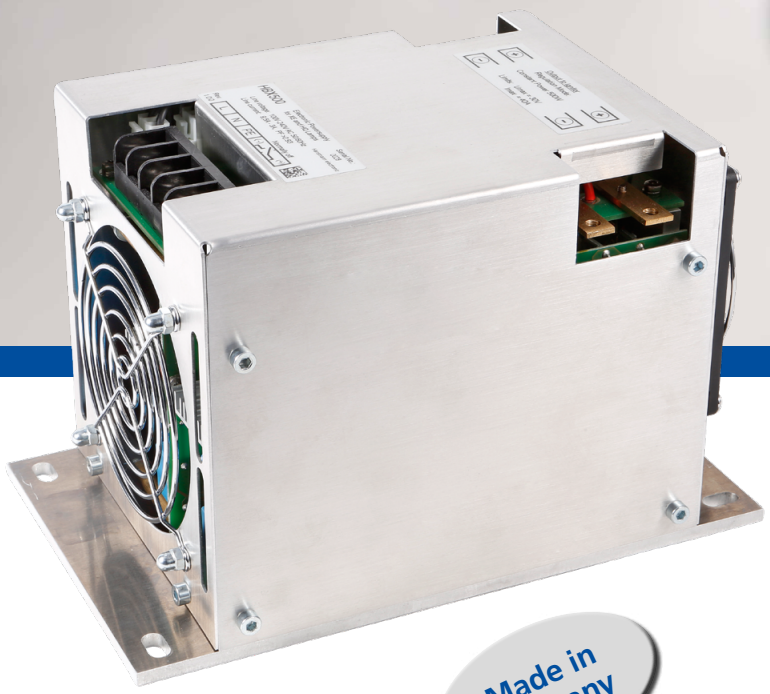
ROTEC

DATA SHEET



Made in Germany

HBX 500

Electronic Power Supply for Xenon Lamps

Igniters

- ZG 30 Xe-S 35 Amps Igniter with symmetrical ignition, no anode or cathode ground operating
- ZG 30 Xe-A 35 Amps Igniter with asymmetrical ignition, anode or cathode ground operating

Features

- Power supply for xenon filled short arc lamps, GL VI-7-2 approved
- Designed for xenon short arc lamps rated up to 500 W / 44 A
- Output power customer selectable by controle voltage 0 to 5 V
- Capable to drive lamp voltage ranges from 15 to 29 V
- Length x width x height (mm) 220 x 132 x 141, 2.125 kg
- PSU boards inside IEC (UL) 60601 approved and HALT tested
- Input voltage range from 90 V AC to 264 V AC, power factor corrected line input, built-in EMI-filter: meets CE and FCC part "A"
- 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 and line input, thermal shut off at 90°C
- Shut off function for end of life and lamp fail parameter
- Ballast cascadable for use for higher wattage xenon lamps
- Auxiliary regulated 24 V / 0.2 A output for subsystems, permanent available
- Flexible design: new lamps and functions adaptable by software

Adapted for the following manufacturer

· Osram lamps · Ushio lamps · Luxtel lamps · Perkin Elmer lamps

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

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ELECTRICAL DATA · 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	100 - 240	90 - 264	DC-Voltage
Input voltage DC-Line	U	V DC		DC-input is possible but not certified	
System wattage	P_{LI}	W		300 - 600	Depends on select
Input current	I_{LI}	A		5 - 14	Depends on select
Line frequency	Fin	Hz	50/60	47 - 63	
Line power factor	PFC	1	1.0	0.92 - 1.0	
Line inrush current limiting	A_{peak}		13	Limiting	Element will be shorted by relais
Leakage current to PE	I_{Leak_SA}	µA	< 500 @ 230 V		Standalone
Other Operation Data					
System wattage during ignition	P_{lign}	W	25	< 30	
System wattage standbyoperation	P_{LIStby}	W	1.5	0.5 - 2.0	

OUTPUT DATA

Ignition	Symbol	Unit	Nominal	Tolerances	Remarks
Ignition voltage	U_{ign}	kV_{peak}	30 - 35		Depends on Igniter
Ignition time	$t_{ign\ on}$	sec.	1	0.9 - 1.1	
Run-up Operation					
Run-up current @ 15 V Lamp-voltage	I_{max} I_{max}	A A	66	+ 10% max.	Inside specified lamp- parameter (select by internal mode-switch)
In rush current	I_{max}	A	80		0 to 1 ms
Nominal Operation					
Lamp voltage	U_{La}	V	10 - 29	± 5%	Depends on lamp select
Lamp wattage	P_{La}	W	500	± 2%	Fixed factory set-up 500 W
Lamp current	I_{La}	A	Up to 44 Amps		Depend on set-up
End-Of Life-Cut off voltage	$U_{La,\ max}$	V	30	± 1 V	After run-up completed
End-Of-Life-Cut off time	$t_{EOL\text{-}Off}$	S	< 0.2		
RF-Ripple of output power	$\Delta_{PLa,rip} / P_{La}$	%	< 1 p-p		15,5 V - 30 V
50 Hz - 60 Hz ripple		%	< 1 p-p	< 4 p-p	13 V - 30 V
Shift in output power with shift in input voltage	$\Delta P_{La} / \Delta U_{LI}$	1		< 0.005	Within nominal values
Open circuit voltage for ignition	U_{ocv}	V	110	105 - 120	

GEOMETRY AND WEIGHT

	Symbol	Unit	Nominal	Tolerances	Remarks
Length x width x height	L x W x H	mm	220 x 132 x 141	± 1	
Housing					Closed AL
Weight	W_B	kg	2.125		

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

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