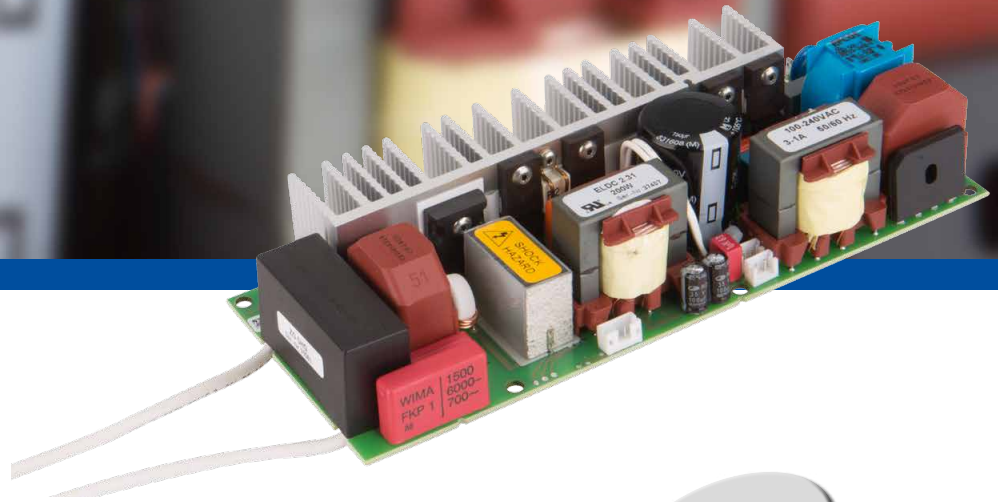


DATA SHEET



Made in
Germany

ECS 200 DC (TYPE ELDC 2.31)

Electronic Control System for DC Lamps 100 – 200 W

Features

- Power Supply for Metal Halide DC-lamps, Xenon and Mercury, in the power range of 100 W to 200 W
- Operating Voltages between 36 and 98 V, other ranges possible with modifications
- Output power selection by solder bridges in 6 steps / 20 W
- Certified by USHIO
- 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"
- Special newly designed anti aging and anti abnormal arc control circuit for high optical reliability over extended lifetime.
- uP 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
- Photo feedback terminal
- less than 1% rms light flicker at all frequencies under full load
- auxiliary 24 V / 200 mA output at 2 terminals for fan drive, only available when the lamp is in operation.
- UL60950-1 certified, UL 60601 compliant

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

ECS 200 DC (TYPE ELDC 2.31)

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	
Input voltage DC-Line	U	V DC	DC input not allowed, fuse is only rated for AC		
System wattage	P_{Li}	W	200	100 - 200	Depends on preset
Input current	I_{Li}	A		1 - 3	
Line frequency	f_{in}	Hz	50/60	47 - 63	
Power factor	PFC	1	1.0	> 0.93	

Other Operation Data					
System wattage during ignition	P_{Ign}	W	25	< 30	
System wattage standby-operation	P_{LISby}	W	1	0.5 - 2.0	

OUTPUT DATA					
Ignition	Symbol	Unit	Nominal	Tolerances	Remarks
Ignition voltage	U_{Ign}	kV _{peak}	± 14V	± 12 - ± 16	Load capacity < 20 pF
Ignition time	$t_{Ign on}$	sec.	1	0.9 - 1.1	

Run-up Operation					
Run-up current	I_{max}	A	5.7	5.6 - 5.8	<= 20 V U_{La}
	I_{max}	A	5.7	5.6 - 5.8	20 V < U_{La} < 36 V
In rush current	I_{max}	A	6	± 10%	For 1..10 s

Nominal Operation					
Lamp voltage	U_{La}	V	60	36 - 95	
Lamp wattage	P_{La}	W	100 - 200		Presetable in 6 steps continuous variable from preset to 200 W by optocoupler
Lamp current	I_{La}	A		$I_{max} = 5.7 A$	
End-Of-Life-Cut off voltage	$U_{La, max}$	V	98	99 - 101	
End-Of-Life-Cut off time	$t_{EOL-Off}$	s	< 0.2		
HF-Ripple of output power	$\Delta P_{La, rip} / P_{La}$	%		< 1 rms	40 V U_{La} 80 V
Shift in output power with shift in input voltage	$\Delta P_{La} / U_{Li}$	1		< 0.005	Within nominal values
Open circuit voltage	U_{ocv}	V	240	230 - 260	

LIFETIME DATA · All values for $U_u = 230 V_{rms}$, Temperature at test point = 70°C					
	Symbol	Unit	Nominal	Tolerances	Remarks
Ballast lifetime	t_{Life}	H	25.000	> 25.000	Acc. To MIL HDBK for nominal operation

GEOMETRY AND WEIGHT					
	Symbol	Unit	Nominal	Tolerances	Remarks
Length x width x height	L x W x H	mm	180 x 71 x 40		
Housing					
Weight	W_B	kg	427		