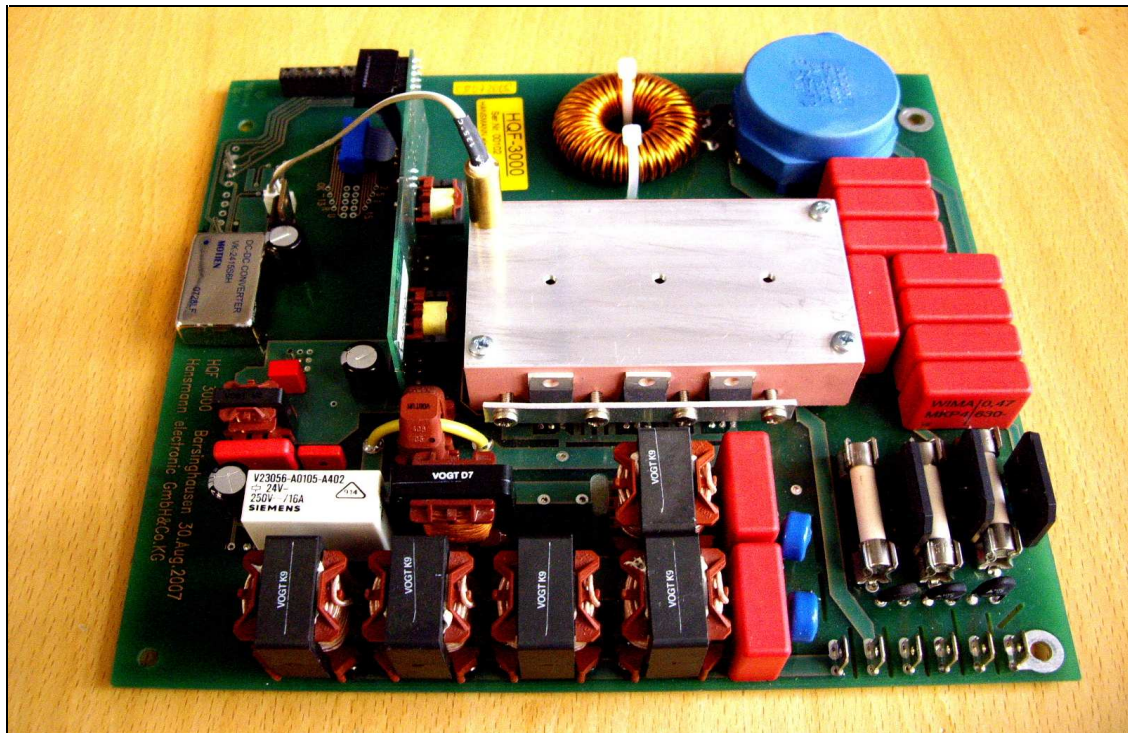


HQF3000

Three Phase Ballast for 1500 to 2600W Discharge Lamps

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



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Features :

- Power Supply for AC-Lamps
- Lamp power of up to 2600W
- Qualified for applications in combination with high speed cameras
- Extremely low light ripple $< \pm 1\%$
- Isolated control interface to control system (24V control voltage supplied internally)

- Thermal Sensor on board
- μP controlled, Digital Power Management with high output stability over lamp lifetime
- Shut off function for end of life and lamp fail parameter

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 L1, L2, L3	U	V AC	440	380 – 480	
System wattage	P_{Li}	W	2700		
Input current	$I_{L1,2,3}$	A	4.1		Per phase
Line frequency	f_{in}	Hz	50/60	47 – 63	Three Phase
Line Power factor	PFC	1	0.82		Per phase

Other Operation Data	Symbol	Unit	Nominal	Tolerances	Remarks
System wattage during ignition	P_{Iign}	W	500		
System wattage standby-operation	P_{LIstby}	W	3	2 – 5	

Lamp Output Data

Ignition	Symbol	Unit	Nominal	Tolerances	Remarks
Ignition voltage	U_{ign}	kV _{peak}	± 3.5	3 – 5	Resonance Ignition
Ignition time automatic restart counter	$t_{ign\ on}$	ms	1200ms 10 attempts	--	

Run-up Operation	Symbol	Unit	Nominal	Tolerances	Remarks
Run-up Current	I_{max}	A	13.5	+/-10%	
In rush Current	I_{max}	A	6	+/-10%	For 1..10s

Nominal Operation	Symbol	Unit	Nominal	Tolerances	Remarks
Lamp voltage	U_{La}	V	200	+/-10%	
Lamp wattage	P_{La}	W	1500 - 2600	+/-2%	
Lamp current	I_{La}	A	Max 13.5A		P-controlled
HF-Ripple of output power	$\Delta P_{La,rip} / P_{La}$	%	100		HF-operation mode
300Hz Ripple		%	< 2% p-p		Typ. <1%
Shift in output power with shift in input voltage	$\Delta P_{La} / \Delta U_{Li}$	1		< 0.01	within nominal values
Open circuit voltage	U_{ocv}	V	3000-5000	+/-10%	Resonant

LIFETIME DATA

All values for $U = 440\ V_{rms}$

Temperature at test point = 70°C

	Symbol	Unit	Nominal	Tolerances	Remarks
ballast lifetime	t_{Life}	h	40.000	> 40.000	acc. To MIL HDBK for nominal operation