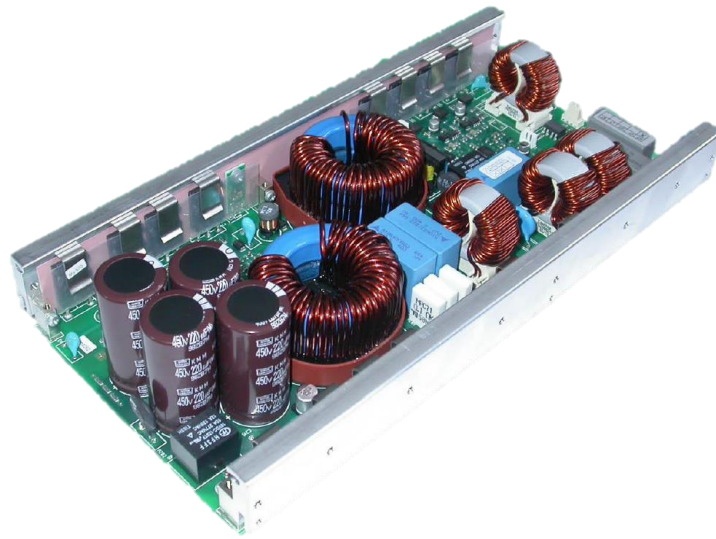


SCHIEDERWERK

Electronic Lamp Power Supply

PVG 12-n AC SB

Technical Specifications



CHARACTERISTICS

- With POWER FACTOR CORRECTOR (PF >0,98) in compliance with DIN EN 61 000 - 3 – 2, Class C
- Auxiliary power output 12V DC / 3W without galvanic isolation, temperature controlled
- Maximum dimensions L x W x H = 282 x 140 x max. 60 mm
- Dependent on the power, capacitors with varying overall height are being used

ORDER NUMBERS

Type	Order No.	Output / W	Thread for mounting on external heatsink	Type
PVG 12-90 AC SB	32 407 1001	900	UNC 6-32	PVG 12-90 AC SB
PVG 12-100 AC SB	32 407 1002	1000	UNC 6-32	PVG 12-100 AC SB
PVG 12-120 AC SB	32 407 1003	1200	M3	PVG 12-120 AC SB
PVG 12-140 AC SB	32 407 1004	1400	UNC 6-32	PVG 12-140 AC SB
PVG 12-170 AC SB	32 407 1703	1700	M3	PVG 12-170 AC SB

LIMITS

Generally all discharge lamps can be supplied within following limits:

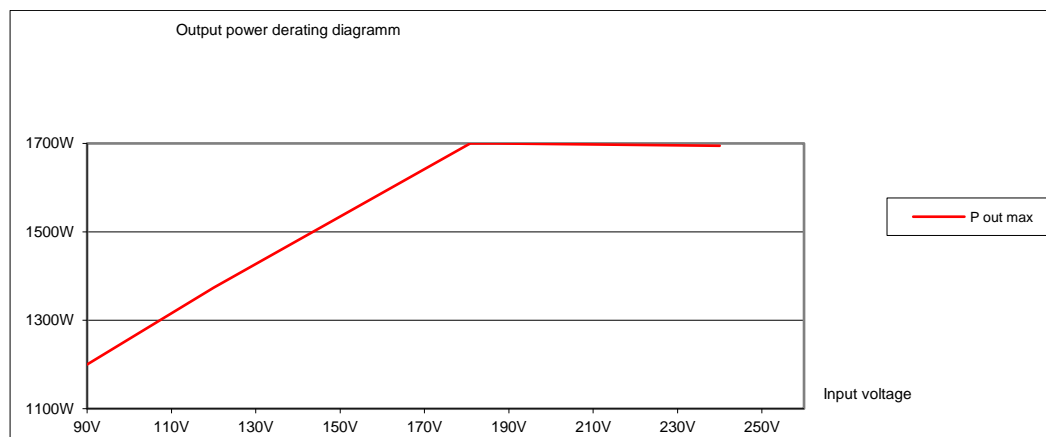
ILmax = 15A

ULmax = 150V

Pmax = 1700W

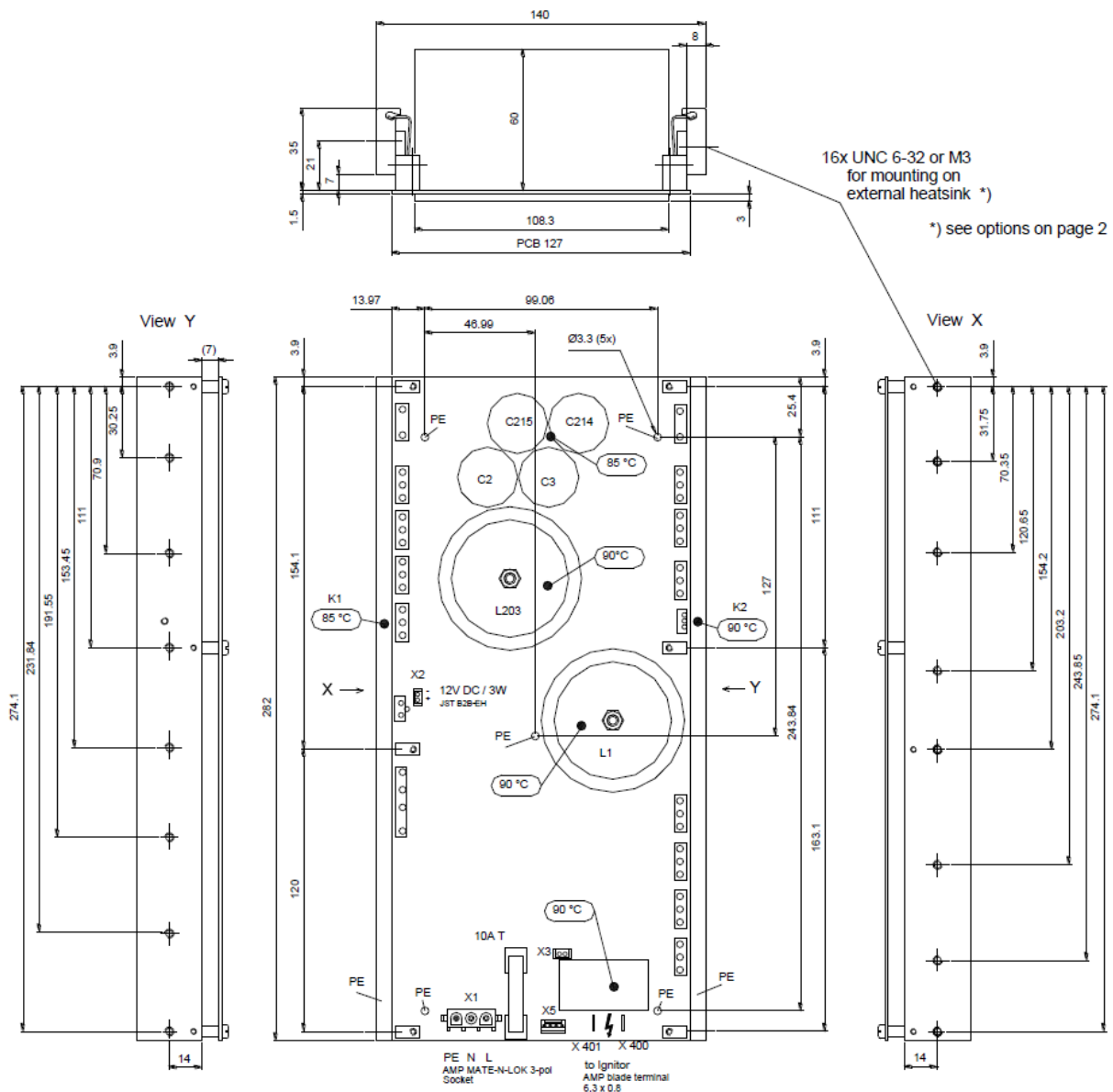
TECHNICAL DATA

Input voltage range:	90 – 264VAC dependent on the output power*
Line frequency	47 – 63Hz
Power factor	> 0,98
Open circuit voltage	400V
Lamp voltage range	80V – 150V square wave
Lamp power	Dependent on type 1700W (maximum)
Lamp current	15A (maximum)
Efficiency	0,9 typ. at 230VAC / 0,85 typ. at 115VAC
Maximum ambient temperature	The specified maximum temperatures must not be exceeded.
EMI	Internal noise filter
Dimmer / ON OFF input via optocoupler	0V = 100% lamp power ((5V PWM signal at 50% = 60% lamp power))) 5V permanent = lamp off By removing jumper X3, the input is being inverted Frequency dimmer signal: 1kHz ±20%
Protection	Overtemperature protection Short circuit protection Open circuit protection Ignition time limitation
Approvals	UL 60950-1 2 nd edition; CSA C22.2 No. 60950-1-07, 2 nd edition



Subject to changes without notice

CONNECTOR WIRING AND MOUNTING DETAILS



The temperatures specified above are maximal values. Exceeding the stated temperature values for capacitors C2 and C3 leads to reducing the service life.

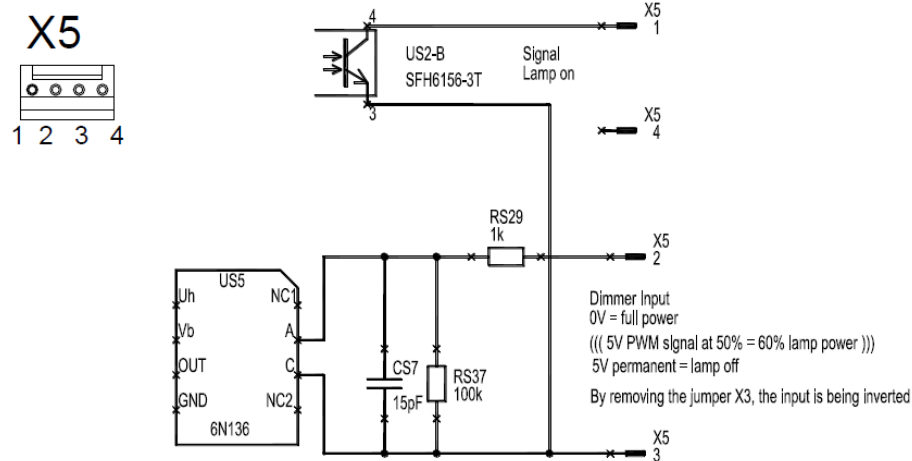
When cooling the device, it must be observed that heatsink K1 is always cooler than heatsink K2, as the temperature shut off is located at heatsink K2. Dimming PWM.

All points in the drawing marked with PE must be connected to protective ground.

Cables and wires must withstand the operating temperatures

CONNECTORS

Lamp ON Signal open collector	LEOCO 2531P04V013	X5,1
Dimming PWM R _{in} =1k		X5,2 X5,3 GND X5,4 not connect
Mains input	Tyco Electronics "MATE-N-LOK" 3-pol., Tyco order no. 826847-3	X1, 1 PE X1, 2 N X1, 3 L
To ignitor	AMP Faston 6,3 x 0,8	X400, X401
Fan	JST B2B	X2



ACCESSORIES

	Description	Order No.
Ignitors	HZG 15-25 for hot restrike	32 119 1030
	HZG 15-30/2 for hot restrike	
	KZG 10-6A, for cold start	
	KZG 12-2.5R for cold start	32 272 1001
	KZG 12-5 for cold start	
	KZG 12-6 for cold start	32 159 1000
	KZG 15-4 for cold start	
	KZG 15-5 for cold start	
	KZG 15-5 GL for cold start	
Cables/ Connectors	Molex 4-pole connectors with wires, L=330mm	32 330 6030
	Mate-N-Lok 3-pole connectors with wires, L=600mm	32 407 6020
	JST EHR 2-pole connectors with wires, L=500mm, black/red	32 520 6130

WARNING NOTICE

Do not attempt to handle or operate an electronic power supply (EPS) and ignitor before completely reading and understanding this notice. Contact Schiederwerk if you are uncertain of hazards associated with these devices.

The ignitor produces starting voltages of up to 60 kV and electromagnetic radiation interference which are hazardous to personnel and sensitive instrumentation. Exercise appropriate care in the handling of high voltages. Do not touch any conductive parts during operation.

Ensure the units are disconnected from the mains before exchanging the lamp connected to the PSU / ignitor resp. to the end application. The residual charge left on the capacitors is a danger to life if the units are still connected to mains!

Caution: The residual charge on the capacitors can be a danger to life even if the units are disconnected from the mains. Please handle with care!

Both electronic lamp ballast and ignitor must never be installed or operated in an explosive or volatile atmosphere. Never use the ballast or ignitor near flammable gases or liquids. See that there will be no moisture, dust or similar which could lead to short circuits or fire.

Before using the ballast or ignitor in any kind of outdoor application you have to take additional measures and observe special requirements. If you are uncertain, contact Schiederwerk.

No potential isolation is provided between line input and output. Accidentally grounding of an output terminal by direct contact or arcing to GND can damage the unit (no warranty replacement).

The unit is designed for case mounting. Due observation of electrical safety and RFI suppression code requirements is mandatory in all applications. See that sufficient cooling of EPS and ignitor is provided.

All installation and repair work on this unit is only permitted by qualified personnel. Always comply with local safety requirements when operating the unit uncased.

Extreme care must be taken when testing the unit live. The use of an isolating transformer is mandatory. On no account may grounded test instruments / meters be used for this purpose!

Schiederwerk does not assume liability for disregarding of this notice, incorrect use of the EPS and ignitor or disregarding of any legal requirements. This product is subject to technical changes without prior notice.

CAUTION:

Mains supply must be fused according to local safety regulations.

Schiederwerk recommends 2 pole fuse (L+N). The appropriate fuse value can be calculated as:

$$1,5 * \frac{P_{\text{lamp}}}{V_{\text{line}}} \geq I_{\text{fuse}} \geq 1,2 * \frac{P_{\text{lamp}}}{V_{\text{line}}}$$

Last Update: 22.12.2014