SCHIEDERWERK

Electronic Lamp Power Supply PVG 1.5 - 15

Technical Specifications



CHARACTERISTICS

- With POWER FACTOR CORRECTOR (PF >0,95) in compliance with DIN EN 61 000 3 2, Class C
- μP control for various parameter
- Flicker free operation
- Longer lamp service time
- Constant light output over entire lamp service time by power regulation
- Higher light intensity than magnetic ballasts
- Compact shape, low weight
- Wide mains voltage range
- Auxiliary output 12V DC/ 500 mA,
- SELV EN 60950
- Linear dimming is available by connecting a 500k Ohm potentiometer to plug 5.

Warning: The connection is not galvanically separated from mains. Always observe the applicable safety instructions!

ORDER NUMBERS

Туре	Order No.	Output Power / W	Remarks	Lamps
PVG 1.5 -15	32 499 1000	150W	Power performance adjustable see drawing	CDM 70 CDM 150 MHR 100 MHR 150
PVG 1.5 -15	32 499 1070	70W	Power performance adjustable see drawing	CDM 70

LIMITS

Generally all discharge lamps can be supplied within following limits:

Ishort = 2,4A ULmax= 135V Pmax= 150W

TECHNICAL DATA

Mains voltage function range	90V – 265V AC	
Line frequency	47Hz – 63Hz	
Power factor	>0.97 at 230V >0.98 at115V	
Earth leakage current 230V, 50-	< 0,7mA	
60Hz		
Lamp voltage range	70V – 250V square wave	
Lamp voltage frequency	250 Hz	
Igniter voltage	4,5 kV	
Open circuit voltage	250 V	
Dimming range	50-100%, dependent on lamp type	
Efficiency	0,88 at 230V / 0,85 at 115V typ.	
Ambient temperature	max. 50°C, forced cooling necessary, $v \ge 2m/s$	
Output power tolerance	± 5%	
Protection	Thermal cut off at 90°C heatsink temperature	
	Short circuit protected	
	Open circuit protection	
Maximum dimensions	LWH 162 x 100 x 40	
EMC	EN 55015, FCC 18	
Approvals	UL 1029 Fifth Edition	
	UL 935 Tenth Edition	
	CSA Standard, C22.2, No. 74	

Subject to changes without notice

Connections and Dimension



Belegung der 10 poligen Stiftleiste

Nr.	Function	
1 2	For company use only	
3	Open	= 70W /
4	Open	I _{short} =1,3A
3	Closed	= 150W /
4	Open	I _{short} =2,4A
5	Closed	P _{max} =100%
	Open	P = 50%

Accessories

JST connectors with 2 wires 340mm long	Order No. 32 039 6060, black
Sor connectors with 2 wires 540mm long	Order No. 32 090 6250, red/blue

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 <u>danger to life</u> 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 dis-regarding 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: P_{lamp}

 $2,1 * \frac{P_{lamp}}{V_{line}} \ge I_{fuse} \ge 1,85 * \frac{P_{lamp}}{V_{line}}$

Last Update: 13.02.2014