SCHIEDERWERK

Electronic Lamp Power Supply

PVG 25-n AC

Technical Specifications



CHARACTERISTICS

- PFC according to DIN EN 61 000-3-2, Class C
- Power factor > 0,98
- Flicker-free operation
- Enhanced service time of lamp
- Constant lamp power over entire service time by power regulation
- Increased light output
- Dim function via opto coupler (PWM)
- Lamp preselection via jumper (2kW/2,5kW)
- Lamp on/off via opto coupler
- Lamp OK via opto coupler

ORDER NUMBERS

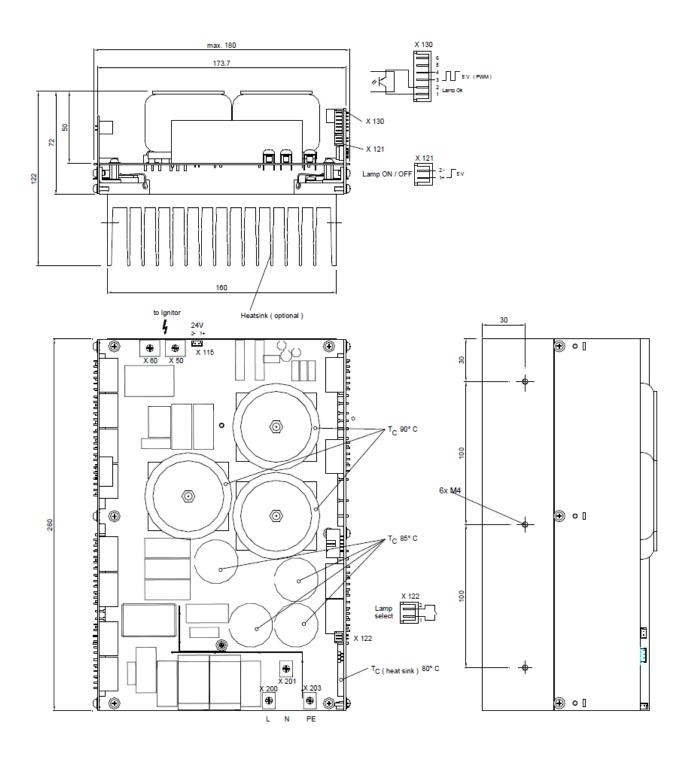
Туре	Order No.	Output / W	Lamps	
PVG 25-25 AC without heat sink	32 526 1000	2000/2500	HTI/HMI 2000	
PVG 25-25 AC KK with heat sink	32 526 1001		HTI/HMI 2500 MSR 2000/2500	
PVG 25-27 AC KK with heat sink	32 527 1000	2000/2700	HTI 2700W Lok-it!	

TECHNICAL DATA

Mains voltage range	195 - 264V
Current consumption (EN61000-3-2 Class A)	max. 16A
Line frequency	47 –63Hz
Lamp arc voltage	80 – 150V, 250Hz square wave
Open circuit voltage	approx. 400V
Lamp current (pre-adjusted)	24A at 2000W 28A at 2500W
Lamp current, maximal	30A
Lamp current ripple	< 10%
Dimming range	50 – 100%
Auxiliary output (earth free)	24V DC / 0,5A max
Output power tolerance	± 5% (max.)
Efficiency	0,90 typ. at 230VAC
Ambient temperature (Forced cooling required)	max. 50°C / 120°F respectively keep max. Tc-Points (see next page)
EMI	Interner Netzfilter Internal noise filter
Dimensions - with optional heatsink - without heatsink	LxWxH (mm): 260 x 180 x 122 260 x 180 x 70
Weight (incl. optional heatsink)	4500 gramm

Subject to changes without notice

CONNECTOR WIRING AND MOUNTING DETAILS AND PERMITTED MAXIMAL OPERATION TEMPERATURES ON COMPONENT SURFACES



CONNECTORS

Mains (input)	Screw clamp 15A X200 X201 X203	L N PE
Ignitor (output)	Screw clamp 30A X50 X60	Ignitor Input Ignitor Input
Lamp On/Off, Lamp OK and dimmer via optocoupler; Lamp select without optocoupler Not galvanically isolated (Description see below)		
Lamp On/Off (input): 5V = Lamp off 0V / n.c. = Lamp on	JST B2B (X121)	Pin 1 = 0V / 5V Pin 2 = GND
Lamp OK (output): Optocoupler pins (high resistant) = Lamp not o.k. / Lamp off Optocoupler pins (low resistant) = Lamp o.k. / Lamp on	JST B6B (X130)	Pin 1 = Optocoupler Collector Pin 2 = Optocoupler Emitter
Dimmer (input): Dimming function with 5V-PWM (Pulse width modulation) 5V = max. dimming function 0V = min. dimming function	JST B6B (X130)	Pin 4 = GND (PWM) Pin 3 = 5V (PWM)
Lamp select via Jumper (input): Closed = high power Open = low power	JST B2B (X122)	
Auxiliary power supply 24V	JST B2B (X115)	Pin 1 = 24V (+) Pin 2 = OV

Accessories

	Description	Order No.
Ignitors	DZG/HZG 28-42, for hot restrike	32 277 1000
Cables/ Connectors	JST 6-pole connector with wires, L= 500mm; for X130	32 520 6120
	JST 2-pole connector with wires, L= 500mm; for X115 / X121	32 520 6130
Heat Sink / Kühlkörper	optional – dimension (mm): 260 x 160 x 50	32 520 6040

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!

<u>Caution:</u> 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:

$$1.5 * \frac{P_{lamp}}{V_{line}} \ge I_{fuse} \ge 1.2 * \frac{P_{lamp}}{V_{line}}$$

Last Update: 03.2.2014