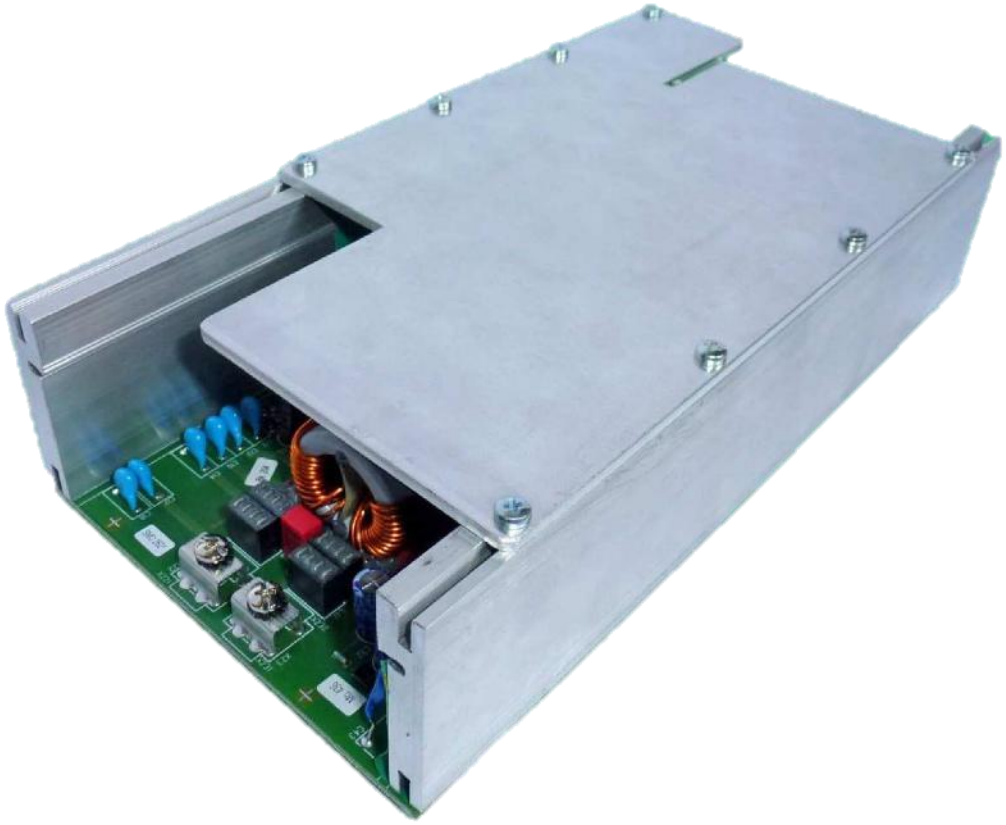
SCHIEDERWERK

Electronic Lamp Power Supply

ELD 15 – 15

Technical Specifications



CHARACTERISTICS

- Flicker-free operation
- Enhanced service time of lamp
- Constant lamp power during service time by power regulation
- Increased light output
- Dim function
- Lamp on/off via opto coupler
- Lamp ok feedback signal via opto coupler

ORDER NUMBERS

Type	Order No.	Output Power / W	Lamps
ELD 15 - 15	32 528 1100	1500 (boosted 1700)	HTI

LIMITS

Generally all discharge lamps can be supplied within following limits:

ILmax = 21A **P_{max} = 1700W**

TECHNICAL DATA

Input DC voltage:	400V VDC (+/-5%)
Max Input DC ripple voltage	20Vpp
Open circuit output voltage	Approx 400V
Lamp voltage range	70V – 110V square wave (1500W), 80-110V (boost mode)
Lamp power	1500W (boosted 1700W)
Lamp current	≤ 21A
Efficiency	≥ 92% @ 80V lamp voltage
Dimmer / ON OFF input via opto-coupler	3.3V, 216Hz. To be defined
Lamp On via opto-coupler	Open collector. Low; Indicates lamp on.
Protection	Over temperature protection Short circuit protection Open circuit protection Ignition time limitation
Operating temperature	[0 to +50°C]; Full operational.
EMC	EN55015 EN55022
ANSI C63.4-2009	
Approvals	UL 60950-1
CAN/CSA C22.2 No. 60950-1-07	
Cooling	Forced cooling
Maximum dimensions	LxWxH 220 mm x 115 mm x 60 mm
Weight in gramm	1290

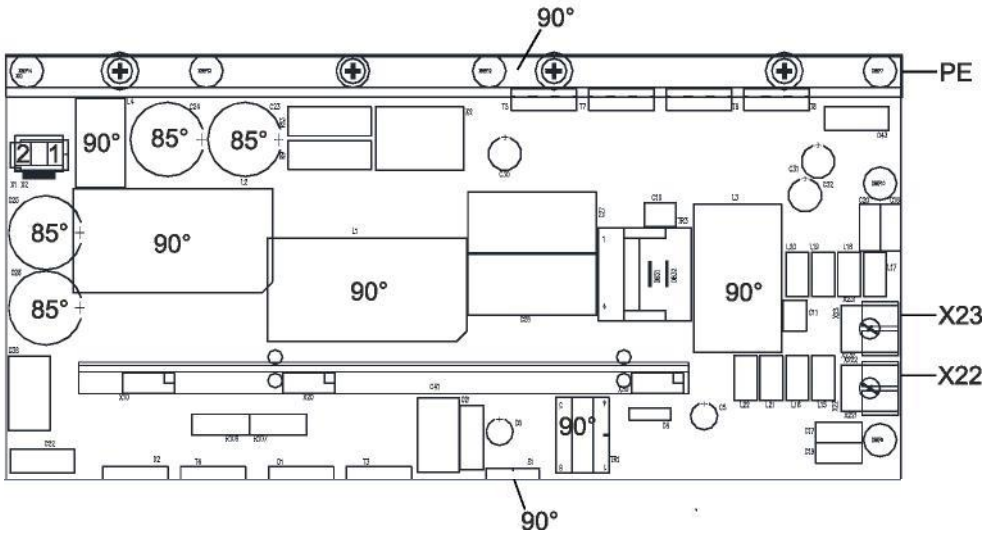
If not noted the test conditions are: T_{amb}=25°C, Vi_n=400VDC, PO=1700W and VLamp=80V.

CONNECTOR WIRING

Name connection	Connector name	Pin configuration
Power input	X1 (main board,JST B2P3-VH 2POL or equiv.)	pin 1 DC Input voltage pin 2 GND
Control input	X405 (control board. JST B-EH 6POL or equiv.)	pin 1 Lamp on signal pin 2 pin 3 ON/OFF (5V = ON) pin 4 pin 5 Dimmer (PWM 216HZ) pin 6
Connection to igniter	X22 (main board) X23 (main board)	To gniter To gniter
Name connection	Connector name	Pin configuration

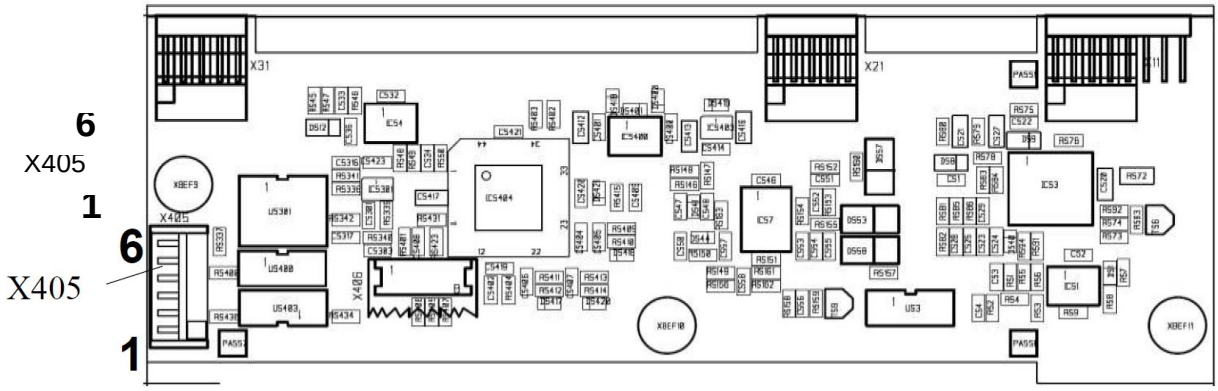
CONNECTORS

MAINBOARD

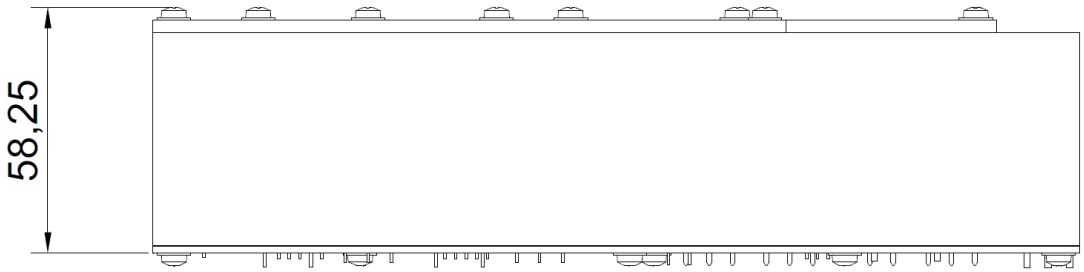


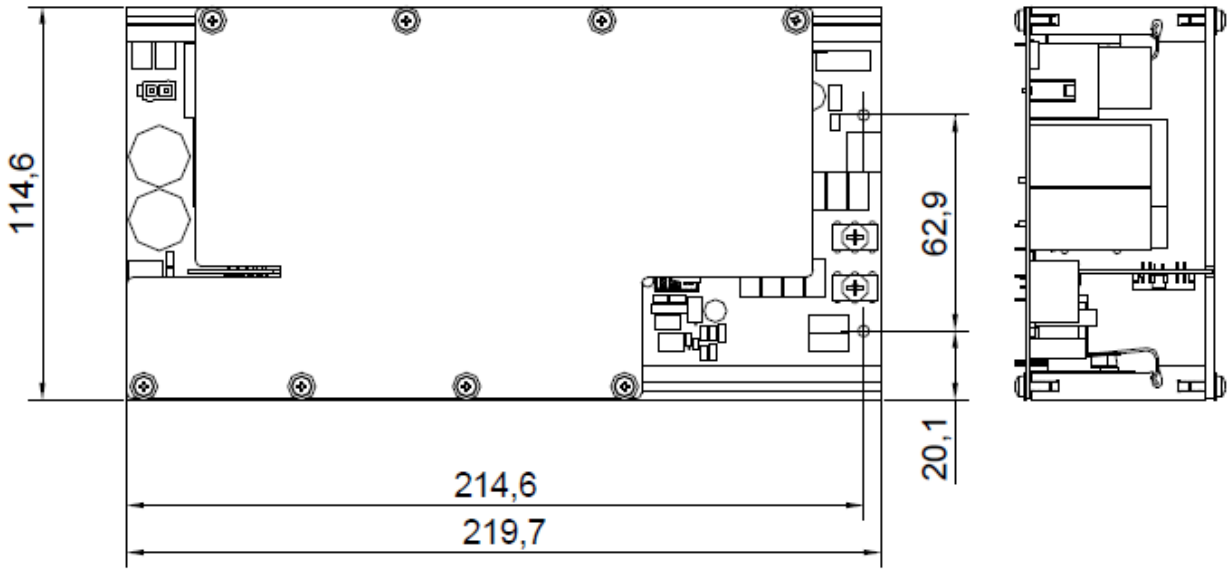
All points in the drawing marked with PE must be connected to protective ground

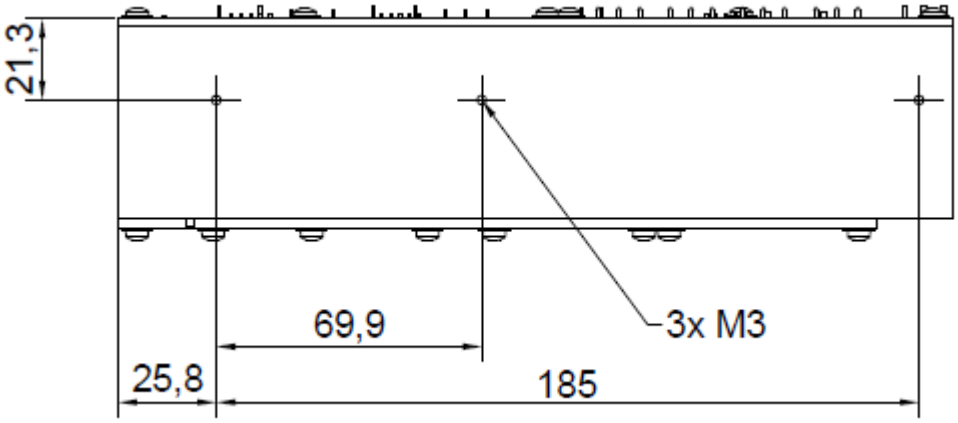
CONTROL BOARD



MOUNTIG DETAILS






21,3
69,9
3x M3
25,8
185

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 6 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.

Last Update: 30.10.2014