

# eUV

## Electronic Power Supplies for UV lamps

### Stepless adjustable from 10 to 100 %

The eUV series is designed for the operation of various UV medium pressure lamps. The lamp voltage has a low frequency rectangular shape.

The power range from 2,5 kW to 36 kW is covered by three sizes. Because of this a broad range of different lamp voltages can be achieved. All devices can be configured via an interface from a PC.

#### Advantages:

- Higher lamp running voltage options are available
- Power pulsing < 3 ms for stepless adjustment of the lamp power, e.g. for step less adjustment of uv-power relative to the speed of a printing machine; or with interrupted processes
- The lamp voltage has a low frequency rectangular shape
- Constant wattage uv-lamp output according to power settings
- Not influenced by mains voltage fluctuations
- Wide range of voltages from 360 to 528 V, 50 and 60 Hz
- 3-phase mains voltage, symmetric, including missing phase detection
- Controlled by DC 0...10 V. all eUVs are available alternatively with CANopen
- Status and fault monitoring via contact, analogue output or via service interface
- Output is protected against ground faults, overload and short circuits, open circuit also causes no problems
- Easy to install and less wiring needed, no phase angle correction and no external ignitor needed
- Can be mounted in cabinet or similar cooled housings, with max. inside temperature of 40°C (protection degree IP 20)
- In accordance to EN 50178 / VDE 0160 and other EN and IEC standards
- CE sign, EMC according to EN 55011, group I, class A (industrial areas)

#### Main technical data:

#### 1. eUV 2,5 to 12 kW (lamp operating voltage up to 450 V):

Type*	Art. No.	Output power	Lamp operating voltage **	Lamp current	Min. Lamp operating voltage ***	Typical lamp arc length	Mains current, max.
		W	V	A	V	cm	A
eUV 25-500 C0 eUV 25-500 C1	A005332 A005346	ca. 250 – 2,500	100 - 450	2 - 22	114	ca. 5 – 60 (2" – 24")	3 x 7.7
eUV 50-500 C0 eUV 50-500 C1	A005333 A005347	ca. 500 – 5,000	100 - 450	2 - 22	227	ca. 10 – 60 (4" – 24")	3 x 11.0
eUV 60-500 C0 eUV 60-500 C1	A005334 A005348	ca. 600 – 6,000	100 - 450	2 - 22	273	ca. 15 - 60 (6" - 24")	3 x 13.2
eUV 75-500 C0 eUC 75-500 C1	A005335 A005349	ca. 750 – 7,500	100 - 450	2 – 22	341	ca. 15 - 60 (6" - 24")	3 x 15.5
eUV 90-500 C0 eUV 90-500 C1	A005336 A005350	ca. 900 – 9,000	100 - 450	2 – 22.0	409	ca. 15 - 60 (6" - 24")	3 x 18.6
eUV 100-500 C0 eUV 100-500 C1	A005337 A005351	ca. 1,000 – 10,000	100 - 450	2 – 28.5	351	ca. 15 - 60 (6" - 24")	3 x 20.9
eUV 110-500 C0 eUV 110-500 C1	A005338 A005352	ca. 1,100 – 11,000	100 - 450	2 – 28.5	386	ca. 15 - 60 (6" - 24")	3 x 23.0
eUV 120-500 C0 eUV 120-500 C1	A005339 A005353	ca. 1,200 – 12,000	100 - 450	2 – 28.5	421	ca. 15 - 60 (6" - 24")	3 x 25,1



1.  
eUV 25-500  
eUV 60-500  
eUV 75-500  
eUV 90-500  
eUV 100-500  
eUV 110-500  
eUV 120-500



2.  
eUV 100-1000  
eUV 100-1100  
eUV 100-1200  
eUV 100-1300



3.  
eUV 200-1100  
eUV 200-1600  
eUV 200-2000



4.  
eUV 120-1450  
eUV 180-2000  
eUV 240-2200



5.  
eUV 320-2700  
eUV 360-2700  
eUV 400-3300

Continued overview main technical data:

Mains voltage	360 to 528 V
Mains frequency	50 or 60 Hz
Mains	L1, L2, L3, PE
Lamp duty frequency	50 Hz
Power efficiency ( $\eta$ )	97 %
Max. cable length	50 m
Ambient temperature	0° to 40° C
Dimensions, approx. (WxHxL)	460 x 230 x 80 mm
Weight	ca. 4 kg
Cooling of the unit	by internal fans
Analogue power control input	DC 0...10 V or 0...20 mA (can also be controlled with software)
Analogue output	DC 0...10 V (burning voltage and power also warning and fault detection)

**2. eUV 10 kW (lamp operating voltage up to 1200 V, depending on device):**

Type*	Art. No.	Output power	Lamp operating voltage **	Lamp current	Min. Lamp operating voltage ***	Typical lamp arc length	Mains current, max.
		W	V	A	V	cm	A
eUV 100-750 C0	A006852	ca. 1,000 – 10,000	500 - 650	2 -19.7	510	ca. 40 – 105	3 x 20.9
eUV 100-1000 C0	A005660	ca. 1,000 – 10,000	500 - 900	2 -14.3	702	ca. 40 – 125	3 x 20.9
eUV 100-1100 C0	A006523	ca. 1,000 – 10,000	500 - 1000	2 – 12.8	780	ca. 40 – 125	3 x 20.9
eUV 100-1200 C0	A006524	ca. 1,000 – 10,000	500 - 1100	2 -11.7	858	ca. 40 – 145	3 x 20.9
eUV 100-1300 C0	A006525	ca.1,000 – 10,000	500 - 1200	2 – 10.7	935	ca. 40 – 150	3 x 20.9

  

Mains voltage	360 to 528 V
Mains frequency	50 or 60 Hz
Mains	L1, L2, L3, PE
Lamp duty frequency	50 Hz
Power efficiency ( $\eta$ )	97 %
Max. cable length	50 m
Ambient temperature	0° to 40° C
Dimensions, approx. (WxHxL)	460 x 320 x 80 mm
Weight	ca. 13 kg
Cooling of the unit	by internal fans
Analogue power control input	DC 0...10 V or 0...20 mA (can also be controlled with software)
Analogue output	DC 0...10 V (burning voltage and power also warning and fault detection)

**3. eUV 20 kW (lamp operating voltage up to 2100 V, depending on device):**

Type*	Art. No.	Output power	Lamp operating voltage **	Lamp current	Min. Lamp operating voltage ***	Typical lamp arc length	Mains current, max.
		W	V	A	V	cm	A
eUV 200-1100 C0	A006540	ca. 2,000 – 20,000	500 - 1000	2 -24.8	808	ca. 40 – 125	3 x 41.8
eUV 200-1600 C0	A006541	ca. 2,000 – 20,000	500 - 1500	2 – 16.5	1212	ca. 40 – 200	3 x 41.8
eUV 200-2000 C0	A006542	ca. 2,000 – 20,000	500 - 1900	2 -13.0	1535	ca. 60 – 250	3 x 41.8
Mains voltage			360 to 528 V				
Mains frequency			50 or 60 Hz				
Mains			L1, L2, L3, PE				
Lamp duty frequency			50 Hz				
Power efficiency ( $\eta$ )			97 %				
Max. cable length			50 m				
Ambient temperature			0° to 40° C				
Dimensions, approx. (WxHxL)			460 x 300 x 160 mm				
Weight			ca. 34 kg				
Cooling of the unit			by internal fans				
Analogue power control input			DC 0...10 V or 0...20 mA (can also be controlled with software)				
Analogue output			DC 0...10 V (burning voltage and power also warning and fault detection)				

**4. eUV 12 to 24 kW:**

Type*	Art. No.	Output power	Lamp operating voltage **	Lamp current	Min. Lamp operating voltage ***	Typical lamp arc length	Mains current, max.
		W	V	A	V	cm	A
eUV 120-1450 C0	A005341	ca. 1,200 – 12,000	500 - 1,400	2 – 9.6	1,250	ca. 40 – 175 (16" – 69")	3 x 25.1
eUV 120-1450 C1	A005356						
eUV 180-2000 C0	A005342	ca. 1,800 – 18,000	500 - 1,900	2 – 13.0	1,385	ca. 60 - 230 (24" – 90")	3 x 37.6
eUV 180-2000 C1	A005357						
eUV 240-2200 C0	A005344	ca. 2,400 – 24,000	500 - 2,100	2 – 13.0	1,860	ca. 80 – 270 (31" – 106")	3 x 50.1
eUV 240-2200 C1	A005365						
Mains voltage			360 to 528 V				
Mains frequency			50 or 60 Hz				
Mains			L1, L2, L3, PE				
Lamp duty frequency			250 Hz				
Power efficiency ( $\eta$ )			96 %				
Max. cable length			50 m				
Ambient temperature			0° to 40° C				
Dimensions, approx. (WxHxL)			550 x 225 x 350 mm				
Weight			37 kg (eUV120: 25 kg)				
Cooling of the unit			by internal fans				
Analogue power control input			DC 0...10 V or 0...20 mA (can also be controlled with software)				
Analogue output			DC 0...10 V (burning voltage and power also warning and fault detection)				

## 5. eUV 32 to 40 kW:

Type*	Art. No.	Output power	Lamp operating voltage **	Lamp current	Min. Lamp operating voltage ***	Typical lamp arc length	Mains current, max.
		W	V	A	V	cm	A
eUV 320-2700 C0	A005343	ca. 3,200 –	700 - 2,500	2 – 16.0	1,980	ca. 90 – 300	3 x 66.8
eUV 320-2700 C1	A005358	32,000				(35" – 118")	
eUV 360-2700 C0	A005345	ca. 3,600 –	700 - 2,500	2 – 17.8	2,030	ca. 90 – 300	3 x 75.2
eUV 360-2700 C1	A005359	36,000				(35" – 118")	
eUV 400-3300 C0	A006682	ca. 4,000 –	700 - 3,100	2 – 14.4	2,780	ca. 90 – 400	3 x 79.1
eUV 400-3300 C1	A006683	40,000				(35" – 157")	
Mains voltage			360 to 528 V				
Mains frequency			50 or 60 Hz				
Mains			L1, L2, L3, PE				
Lamp duty frequency			250 Hz				
Power efficiency ( $\eta$ )			96 %				
Max. cable length			50 m				
Ambient temperature			0° to 40° C				
Dimensions, approx. (WxHxL)			590 x 270 x 350 mm				
Weight			55 kg				
Cooling of the unit			by internal fans				
Analogue power control input			DC 0...10 V or 0...20 mA (can also be controlled with software)				
Analogue output			DC 0...10 V (burning voltage and power also warning and fault detection)				

- \*: eUVs with the identification **C0** have analog inputs and analog/digital outputs. eUVs with the identification **C1** can be controlled via **CANopen** or alternatively analog/digital. A PDO list is available.
- \*\* : Possible UV lamp voltage tolerances must be considered.
- \*\*\*: To achieve the maximum output power the unit requires minimal lamp voltage, which can be calculated with the ratio of maximum output power and maximum lamp current.
- \*\*\*: All eUVs are available with Modbus interface (identification **C2**). Please feel free to contact us.

## 6. Options:

For eUVs with the identification C0 and C1 adapter cable A005494 is available (adapter set eUV CANopen – PC USB). Herewith the device via optional PC software OPA (Operational Performance Analyzer) can be configured. The maximum lamp output, the high load current, etc. can be preset, for example.



Electronic ballasts for different lamp voltages and power levels not shown here are available upon request.