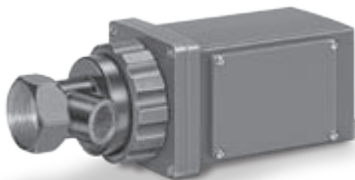


CE

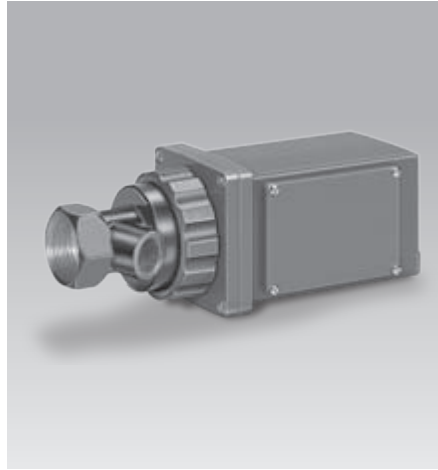


## UV sensors for continuous operation UVD 1, UVD 2

- // Enhanced availability thanks to adjustable flame sensitivity
- // Virtually interference-immune operation owing to insensitivity to daylight, infrared radiation and incandescent bulbs
- // Easy operation with LED display of operating states
- // Fail-safe software and hardware



*Roller hearth kiln*



*UVD for monitoring  
gas burners in con-  
tinuous operation*

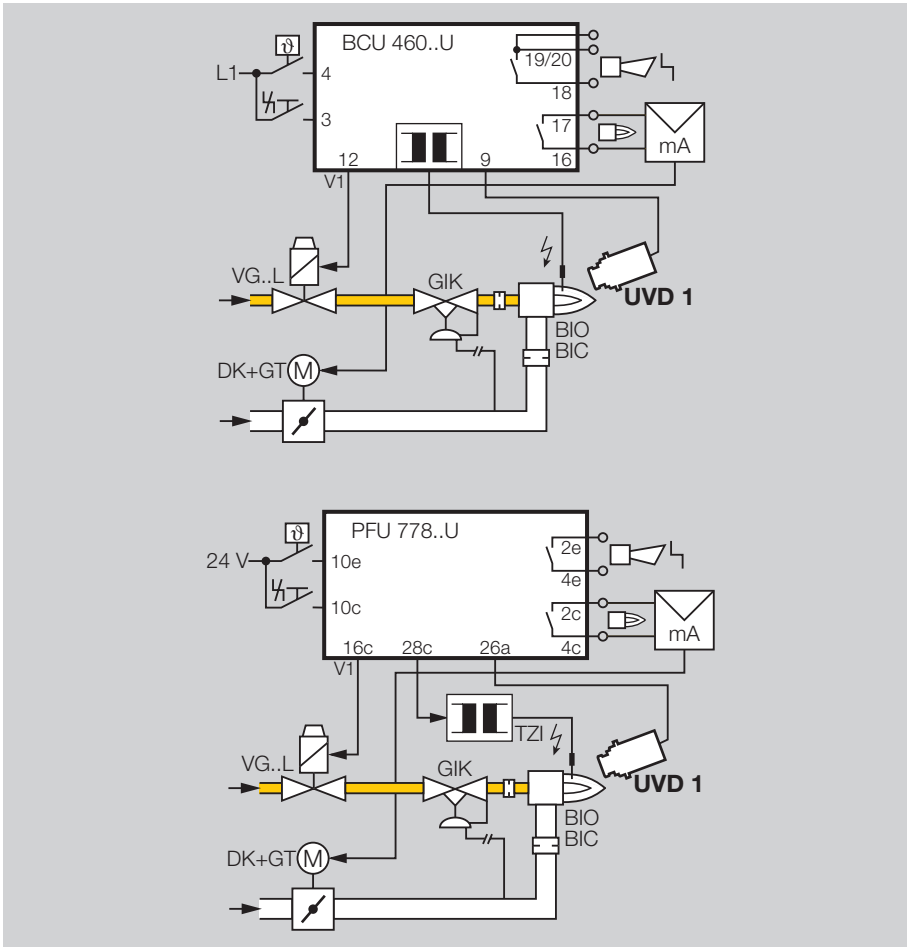
### **Application**

For monitoring gas burners of unlimited capacity with or without fan, on hot-air furnaces, gas-fired boilers, industrial furnaces and excess-gas flaring installations in continuous operation. The burners can either be ignited directly or operated as pilot and main burners.

UVS 1 for flame control only in conjunction with Kromschroder automatic burner control units BCU 370..U1, BCU 460..U, BCU 480..U or PFU..U for continuous UV control.

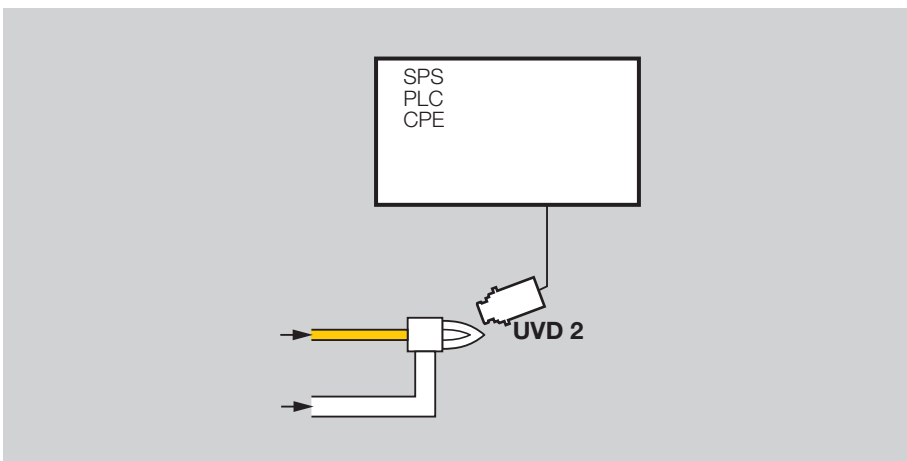
UVD 2 with floating switching contact for flame control with fail-safe, programmable logic control in continuous operation. Not suitable for use in conjunction with Kromschroder automatic burner control units.

**Example applications**



**UVD 1**

In conjunction with automatic burner control units BCU 460..U, BCU 480..U or PFU..U, the UVD 1 monitors gas burners in continuous operation.



**UVD 2**

If the burner is controlled by a fail-safe PLC, UVD 2 can be used for flame control. It features a switching contact which closes as soon as the UV sensor detects a flame.

**Technical data****UVD 1, UVD 2:**

Spectral sensitivity: 185–260 nm.

Supply voltage:

24 V DC,  $\pm 20\%$ , approx. 5 W.

Current output: 0–20 mA,

Load impedance: max. 150  $\Omega$ .

Enclosure: IP 65 (with mounted housing cover only).

Fuses in unit:

F1: 0.315 A, slow-acting, miniature fuse pursuant to IEC 60127-3/4;

F2: 0.5 A, slow-acting, miniature fuse pursuant to IEC 60127-3/4.

Electrical connection: 1 mm<sup>2</sup>.

Viewing tube connection: Rp 1¼.

Purge air connection: Rp ½.

Ambient temperature: -20 to +60°C,  
no condensation permitted.

Weight: Approx. 1.8 kg.

Sensitivity: adjustable in 10 steps.

Reset button.

Analogue output: 0–20 mA for external indication of flame intensity,

Socket (7-pin) supplied.

LEDs: for indication of standby, fault and flame signal.

**UVD 1:** Cable length on BCU max. 5 m,  
max. 50 m on PFU.

**UVD 2:** Switching power of the flame signalling contact: max. 24 V DC; 0.5 A or 250 V AC; 0.5 A;  $\cos \phi = 0.4$  (inductive load).

Safety time: 1 s.

The UV sensor has a floating circuit between power supply circuit (24 V DC) and the device-internal voltage circuit. The current output is electrically connected to the device-internal voltage.

**Certification**

UV sensors UVD 1 and UVD 2 comply with the Low Voltage Directive 73/23/EEC, the EMC Directive 89/336/EEC and the standard EN 298.

**Maintenance cycles**

Service life of the UV tube:

10,000 to 50,000 operating hours.

The UV tube with shutter unit must then be exchanged after this period.

**Detailed information on this product**

[www.kromschroeder.com](http://www.kromschroeder.com)

**Contact** [www.kromschroeder.com](http://www.kromschroeder.com) → Sales

We reserve the right to make technical modifications in the interests of progress.

Kromschroder uses environment-friendly production methods. Please send away for our Environment Report.

G. Kromschroder AG  
Postfach 2809  
D-49018 Osnabrück  
Tel. +49 (0)541 1214-0  
Fax +49 (0)541 1214-370  
[info@kromschroeder.com](mailto:info@kromschroeder.com)  
[www.kromschroeder.com](http://www.kromschroeder.com)