



# Flamonte<sup>®</sup>

BFI AUTOMATION

## The Retrofit Kit **KLC 11/230 cpl.**

for the replacement UV cell FZ 780 for use in combustion controls MMG 8xx, TMG 740-3 or SGU 93



## 1 | Description

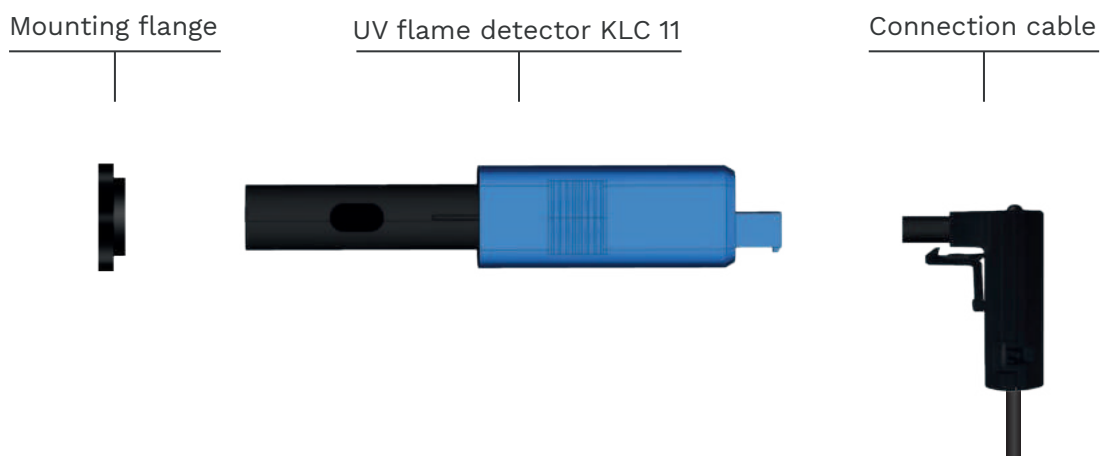
The KLC11 conversion kit has been specially composed for the simple replacement of an existing FR 780 UV cell and includes a KLC11/230 RA compact UV flame detector approved to EN298 for direct connection to the existing burner control box. A connection cable, mounting flanges and detailed conversion instructions are included for easy installation of the KLC11/230 RA flame detector.

The KLC 11 is a compact UV flame detector designed for single flame combustion and produces little light or radiation in the visible spectrum and has a very low flame modulation / flicker frequency. The design of the UV sensor ensures that the flame detector does not react to background radiation from hot refractory or any other infrared light source.

The UV flame detector is equipped with an optical interface that visibly indicates the intensity of the flame signal. The KLC 11 can be connected directly to the ionisation input of the burner control box. The plug-in solution means that the flame detector can be easily replaced.

The internal increase in UV tube voltage immediately after the supply voltage is applied ensures the safety requirements of EN 298 for testing the UV tube for self-ignition.

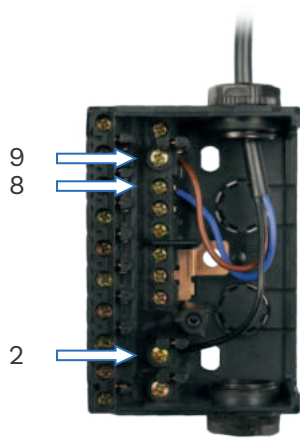
## 2 | Components



### 3 | Replacement instruction

**NOTICE**

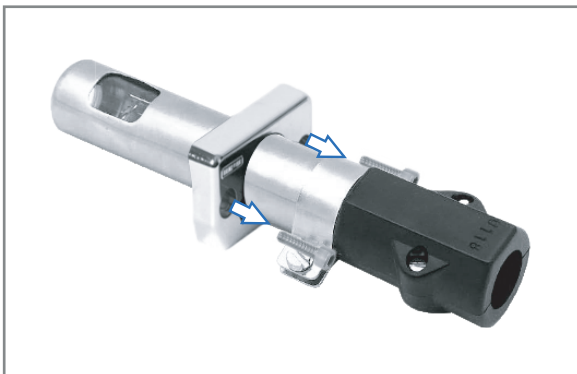
All installation and connection work must only be done by qualified and approved specialist staff! Observe the legal stipulations and adjustment instructions of the plant operator!



First remove the old cable connection. Once you have disconnected the old cable connection, reconnect the cables as described in chapter 4. Loosen the two screws used to fasten the old mounting flange. The screws must be kept for further assembly. The previous flame monitoring device can now be removed. Then remove the old mounting flange. The KLC mounting flange can be replaced directly and fastened with the old screws.

Now fit the UV flame detector. The viewing angle, especially for sight tubes, must be dimensioned in such a way that the flame radiation is not impaired. The sensor must be protected from other light sources. No new holes required for mounting.

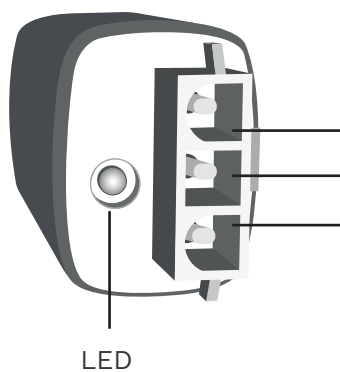
The KLC 11 should be mounted close to the flame in a straight line. The flame scanner should be mounted using the KLC mounting flange or another suitable bracket with a 14 mm opening.



## 4 | Connector Diagram KLC 11

The cable connection of the previous application must be disconnected from the control unit. Then connect the cable as shown in the table. The assignment of the terminals in the control unit depends on the old flame monitoring system.

Further information on maintenance and fault diagnosis can be found in the enclosed operating manual.

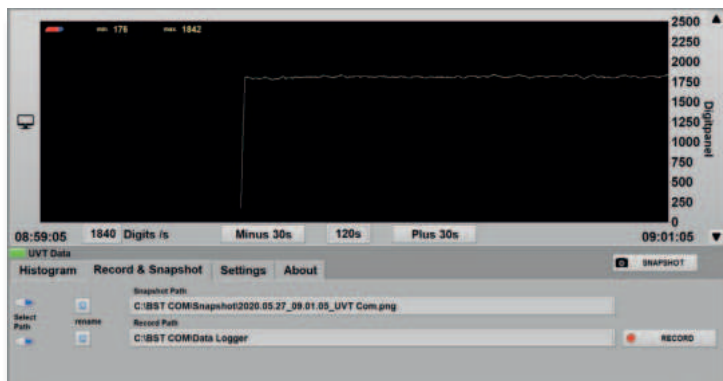


Type of control box	MMG 8xx	TMG740-3 *	SGU930
Blue Terminal no.	8	8	N
Black Terminal no.	2	1	15
Brown Terminal no.	9	20	16/17

\* When using the KLC flame detector, the selector switch must be in the „ION“ position.

## 5 | Diagnostic with BST-Com

With the data interface BST-Com, consisting of optical adapter with cable, USB interface (UVT) and software, the pulses, and thus the flame signal strength, can be read out from the KLC11. Further information can be found in the BST-Com manual.



## 6 | Overview of UV flame detectors and ancillary components available

Part	Version	Part number
Retrofit-Kit KLC 11/230 RA	for the replacement UV cell UVZ780 consisting of a KLC 11/230 RA, 7 mm and 13 mm flange, connection cable 1000 mm and operating manual KLC 11	2001-0020-00
Mounting flange KLC	overall height 7 mm	1550-4220-07
Mounting flange KLC	overall height 13 mm	1550-4220-13
Connection cable KLC	600 mm long	6060-2220-06
Connection cable KLC	1000 mm long	6060-2220-10
Connection cable KLC	2000 mm long	6060-2220-20
Connection cable KLC	Different length	On request
Read out unit UVT-Com	Opto-adapter, USB interface	6040-4832-00
Software BST-Com	via Download	9030-2000-05

### NOTICE

This flame detector version is not suitable for replacing customised versions.



# Flamonitec®

BFI AUTOMATION

## Disposalinformation

The flame detector is equipped with electrical and electronic components and must be disposed separate from household waste. Follow the local and actual regulations for waste disposal.



All data are without guarantee and refer to the product group. Product specific information is contained in the operating instructions. We reserve the right to make technical changes. | © BFI Automation Mindermann GmbH 2024/33

**BFI Automation Mindermann GmbH**

Ruegenstr. 7

42579 Heiligenhaus . Germany

T +49 2056 989 46-0

info@flamonitec-bfi.com

www.flamonitec.com