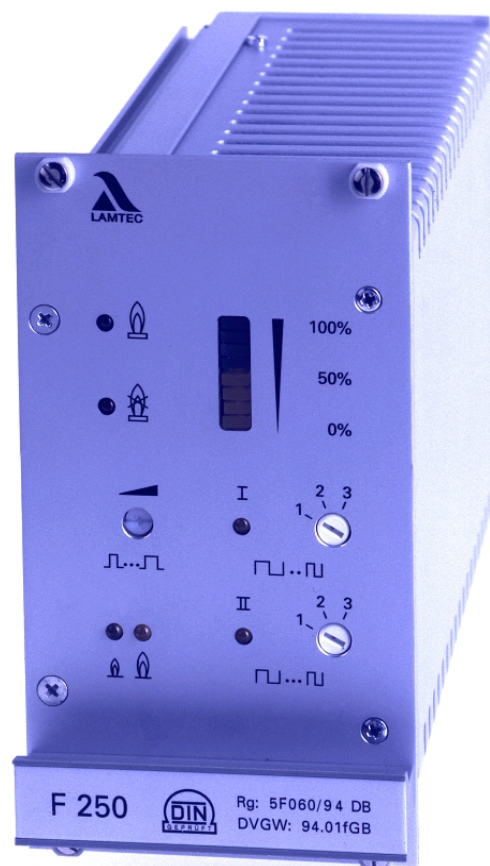


# Installation and Commissioning Instructions

Flame Monitoring System F 250



Prototype proofed

**DIN EN 230** for oil operation  
**DIN EN 298** for gas operation  
**72-hours-TRD 604 operation**

Registered numbers

DIN-CERTCO-Reg.-No.: **5F060/99**  
DIN-DVGW -No. : **NG-2530AP1025**  
Prod.-Ident-No.: **CE-0085AQ0813**

**LAMTEC Leipzig GmbH & Co KG**

Schlesierstr. 55, D-04299 Leipzig, Telefon (+49) 03 41 / 86 32 94 00, Telefax (+49) 03 41 / 86 32 94 10

<b>LAMTEC Leipzig GmbH &amp; Co KG</b>	<b>Installation and Commissioning Instructions Flame Safeguard F250 / FFS 05</b>	Ausgabe: 03/00 Blatt-Nr.: 2
--	--	--------------------------------

The flame monitoring device F 250 combined with the flame sensors FFS 05 ... is a safety device and complies with DIN EN 230 and DIN EN 298.

It is primarily used for selective flame monitoring with multiburner installations. Its safe functioning mainly depends on the correct installation of the flame sensor and a proper adjustment of the flame monitoring device. Both the installation instructions of the flame safeguard and the instructions of the burner manufacturer have to be observed.

Technical data of the flame safeguard, which cannot be found in the installation and commissioning instructions, such as dimensional drawings and connecting plans, can be gathered from the Technical Description of the flame safeguard.

## 1 Technical data

### 1.1 Parameters of flame sensor

Necessary input values from flame radiation to generate '*Flame In*' message.

- Spectral radiation range = 260 ... 400 nm (FFS 05 UV1, FFS 05 UV1 Ex)
- Spectral radiation range = 210 ... 380 nm (FFS 05 UV2, FFS 05 UV2 Ex)
- Spectral radiation range = 850 ... 1200 nm (FFS 05-1, FFS 05-1 Ex)
- Spectral radiation range = 1200 ... 2800 nm (FFS 05, FFS 05 Ex)
- Pulse frequency ca. 10...200 Hz

### 1.2 Parameters of flame monitoring device

Output values

Output contact	change-over switch (terminal 4,5,6)
Admiss. switching voltage	max. 250 V a.c., 30 V d.c. min. 6 V a.c./d.c.
Admiss. switching current	max. 0.5 A min. 1 mA
Switching capacity d.c.	max. 15 W
Switching capacity a.c.	max. 250 VA with $\cos \varphi = 0.4$
Safety time ' <i>Operation</i> '	$t \leq 1$ s, other safety times up to max. 5 s on request only, internally adjusted.

Auxiliary energy

Mains voltage	230 V AC -15 % +10 % when using the FN 01 power pack
Mains frequency	45...55 Hz
Power input	10 VA
Direct current voltage	24 V DC +20 % -15 %
Power input	8.5 W