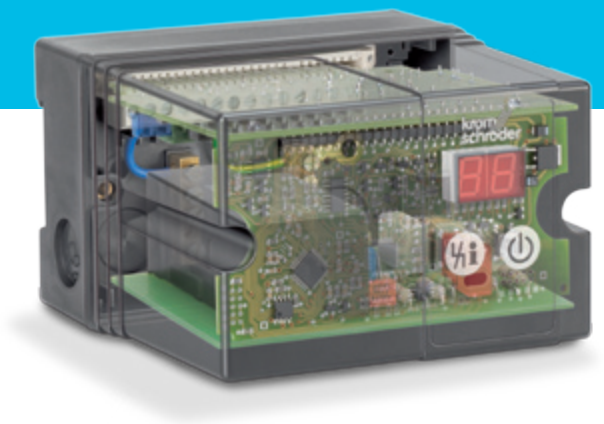
Automatic burner control unit IFD 244

Product brochure · GB
6.1.1.4 Edition 03.08



- For directly ignited burners of up to 350 kW in continuous operation pursuant to EN 746-2
- Continuous self-testing for faults
- Restart following flame failure
- Flame control with ionisation sensor
- Diverse installation possibilities via holes or snap mechanism for DIN rail
- Space-saving installation on site with IFD 244..I with integrated ignition
- Display for program status and flame signal intensity

IFD 244

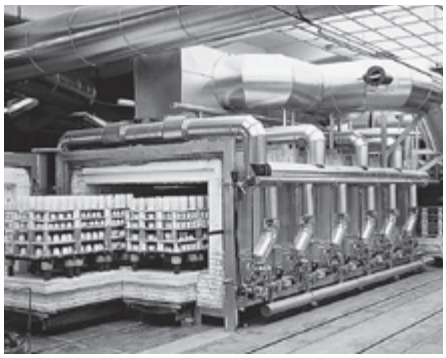
Application

Automatic burner control unit IFD 244 ignites and monitors gas burners in continuous operation. As a result of its fully electronic design it reacts quickly to various process requirements and is therefore also suitable for frequent cycling operation.

It can be used for directly ignited industrial burners in double-electrode operation up to 350 kW.

The program status and the level of the flame signal can be read directly from the unit.

Following a flame failure during operation, a restart is conducted automatically.

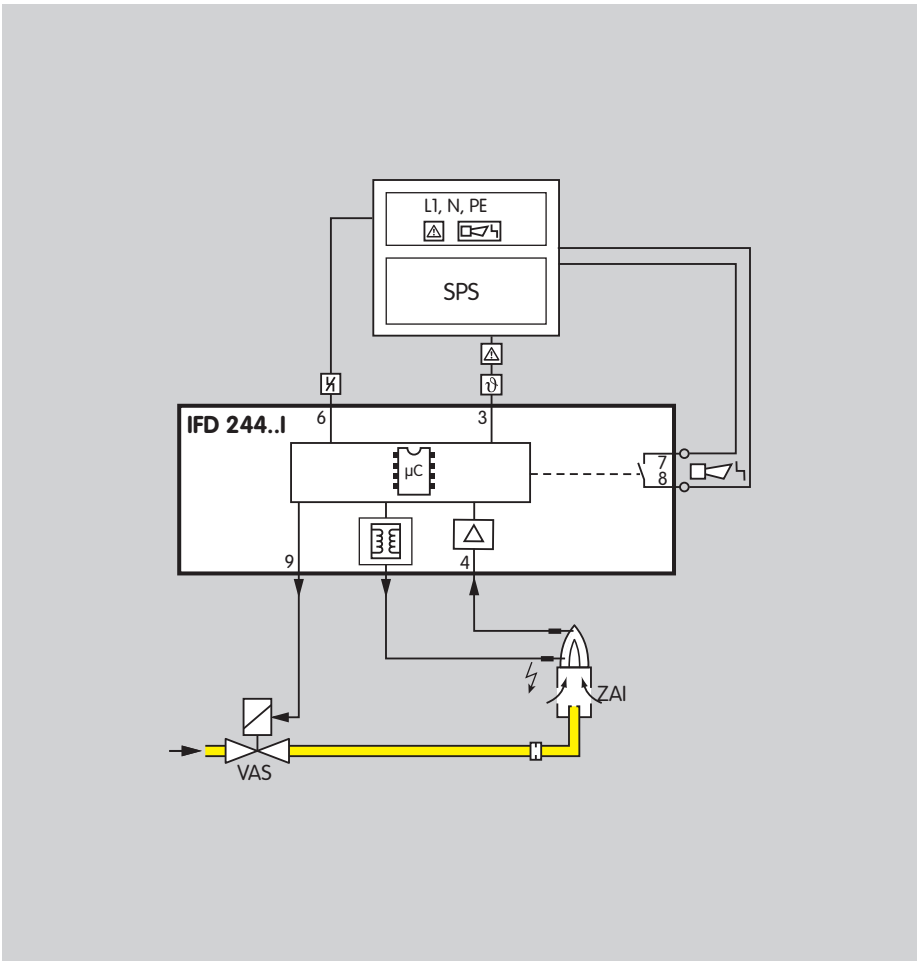


Intermittent shuttle kiln in the ceramics industry

Roller hearth kiln

Roller hearth kiln

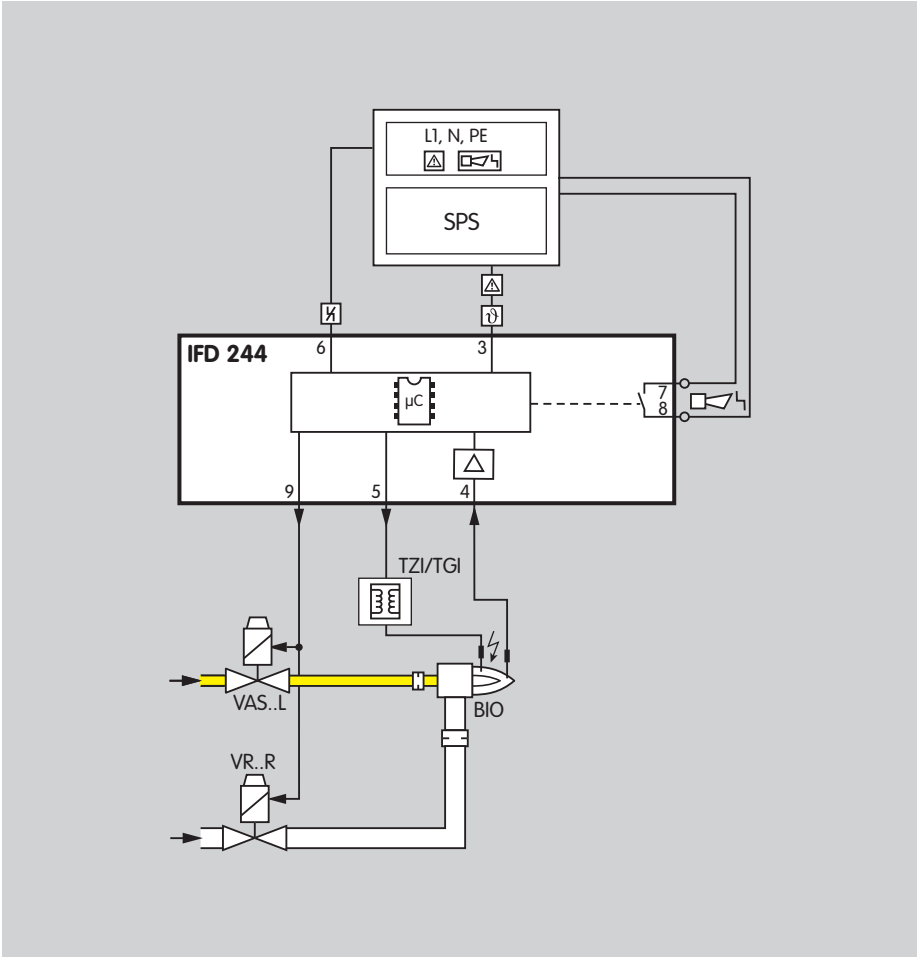
Examples of application



Atmospheric burners

Control: ON/OFF

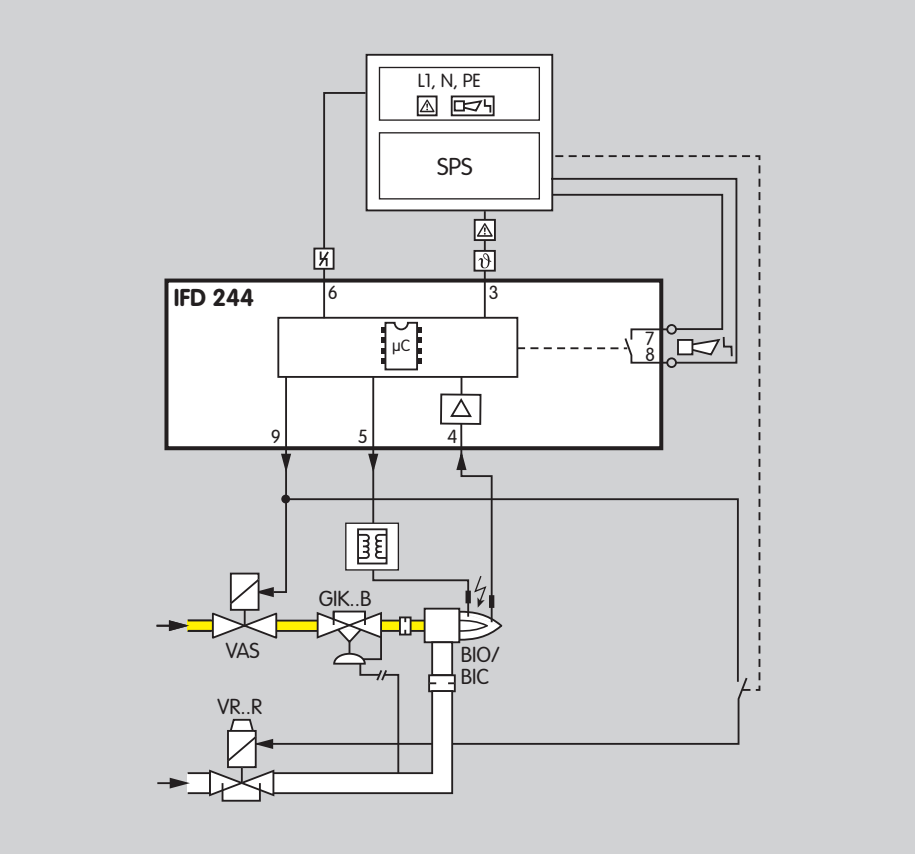
The burner is ignited by the ignition electrode and is monitored by the ionisation electrode. In the event of a flame failure during start-up, an immediate fault lock-out occurs. Following a flame failure during operation, a restart is conducted.



Forced draught burners

Control: ON/OFF

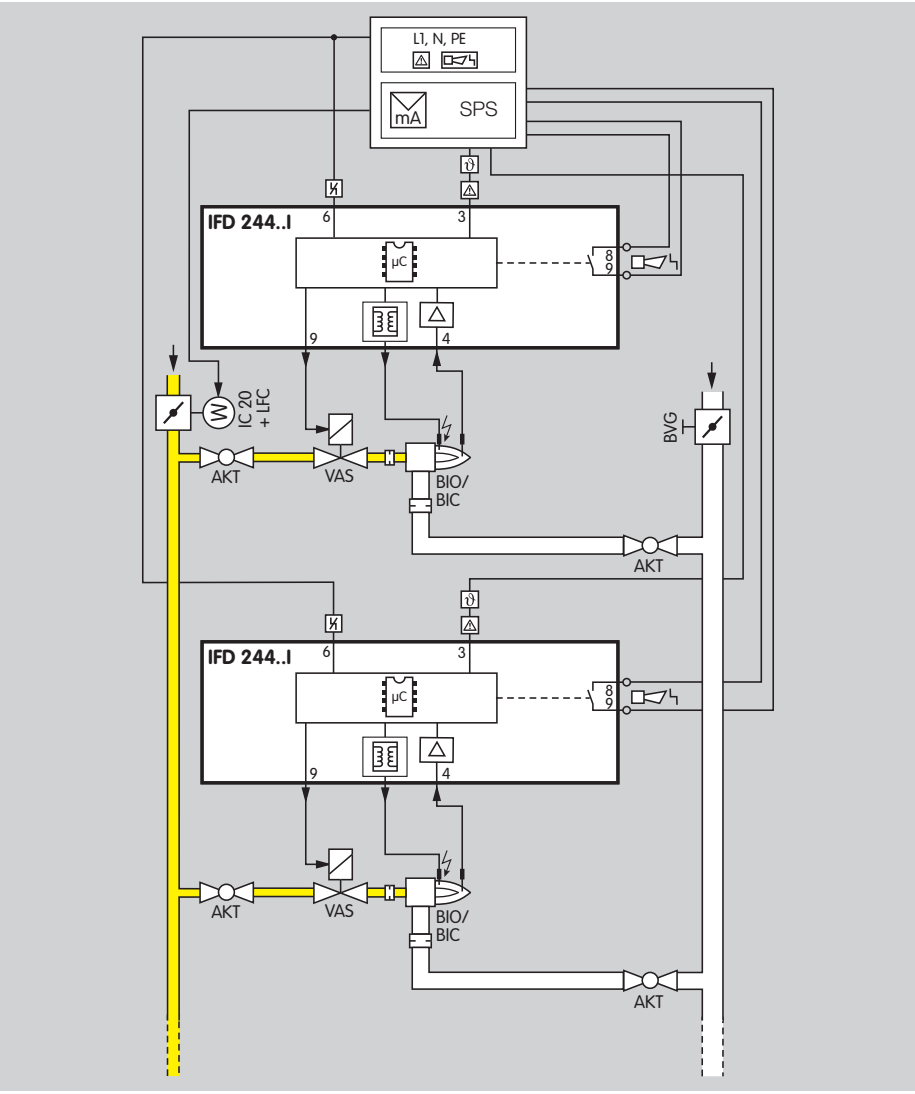
Gas valve and air valve are activated simultaneously. In the event of a flame failure during start-up, an immediate fault lock-out occurs. Following a flame failure during operation, a restart is conducted.



Two-stage-controlled burner

Control: High/Low or High/Low/OFF

The burner BIO/BIC starts at low-fire rate. By opening the air valve, the burner is switched to high fire. An external control system, e.g. a PLC, can now pulse the air solenoid valve VR..R in order to control the capacity between high and low fire. In the event of a flame failure during start-up, an immediate fault lock-out occurs. Following a flame failure during operation, a restart is conducted.



Modulating zone control

Control: ON/OFF/continuous

The air is set to a constant value for each zone using a manual valve. The burner capacity is controlled by the linear flow control LFC and actuator IC 20.

Technical data

Mains voltage for grounded and ungrounded mains:
120 V AC, -15/+10%, 50/60 Hz,
230 V AC, -15/+10%, 50/60 Hz.

Safety time on start-up t_{SA}: 3, 5 or 10 s.

Safety time during operation t_{SB}: < 1 s, < 2 s.

Ignition time t_Z: approx. 2, 3 or 6 s.

Power consumption:
IFD 244: approx. 9 VA,
IFD 244..I: approx. 9 VA + 25 VA during ignition.

Valve connections: 1.

Output voltage for valves and ignition transformer = mains voltage.

Contact rating:
Ignition output: max. 2 A, cos φ = 0.2,
Valve output: max. 1 A, cos φ = 1,
Signalling contacts: max. 2 A, 253 V AC,
Max. number of operating cycles: 250,000.

Max. number of operating cycles:
Reset button: 1000,
Mains button: 1000.

Signal inputs:

Input voltage	120 V AC	230 V AC
Signal "1"	80 – 122.5 V	160 – 253 V
Signal "0"	0 – 20 V	0 – 40 V
Frequency	50/60 Hz	

Input current signal inputs: Signal "1": typ. 2 mA.

Flame control:
Sensor voltage: approx. 230 V AC,
Sensor current: > 2 µA,
Max. sensor current: ionisation < 25 µA.

Length of sensor cable:
max. 75 m.

Ignition cable:
IFD 244: max. 5 m, recommended < 1 m (with TZI/TGI),
IFD 244..I: max. 1 m, recommended < 0.7 m.

IFD 244..I: Ignition voltage: 22 kVpp,
Ignition current 25 mA,
Spark gap: 2 mm, max. 5 mm.

Fuse in unit: F1: T 3.15A H 250 V pursuant to IEC 127-2/5.

Ambient temperature: -20 to +60°C (-4 to +140°F),
Relative humidity: no condensation permitted.

Enclosure: IP 54 pursuant to IEC 529.

Overvoltage category III pursuant to EN 60730.

Cable gland: M16.

Installation position: any.

Weight:
IFD 244: 610 g,
IFD 244..I: 770 g.

Certification

CE

The IFD 244 complies with the requirements of the following directives and standards:

- Machinery Directive (2006/42/EC)
- EN 298
- Low Voltage Directive (2006/95/EC)
- Electromagnetic Compatibility Directive (2004/108/EC)

Certification pursuant to

- Gas Appliances Directive
- FM

is currently being prepared.

Maintenance cycles

The automatic burner control unit IFD 244 requires little servicing.

Selection table

	2	4	4	-3	-5	-10	/1	/2	Q	W	I
IFD	●	●	●	●	●	●	●	●	●	●	○

● = *standard*, ○ = *available*

Order example
IFD 244-5/1W

Type code

Code	Description
IFD	Automatic burner control unit
2	Series 200
4	Ionisation control
4	Restart
-3	Safety time on start-up t_{SA}: 3 s
-5	5 s
-10	10 s
/1	Safety time during operation t_{SB}: 1 s
/2	2 s
	Mains voltage:
Q	120 V AC, 50/60 Hz
W	230 V AC, 50/60 Hz
I	Integrated electronic ignition

Detailed information on this product
www.docuthek.com

Contact
www.kromschroeder.com ➔ Sales

Elster GmbH
Postfach 2809 · 49018 Osnabrück
Strotheweg 1 · 49504 Lotte (Büren)
Germany

T +49 541 1214-0
F +49 541 1214-370
info@kromschroeder.com

www.kromschroeder.com
www.elster.com

Kromschröder, a product brand of the Elster Group

03250759 Druck MM.JJ 0.000