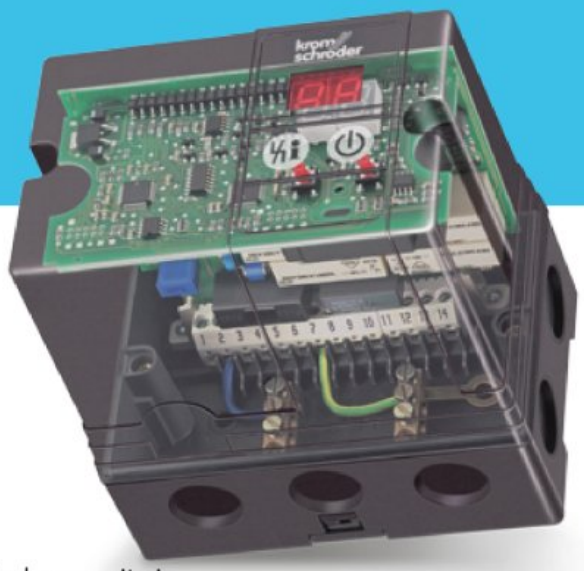
Automatic burner control unit IFD 258

6.1.1.5 Edition 03.12



- For directly ignited burners of unlimited capacity in continuous operation pursuant to EN 746-2
- Continuous self-testing for faults
- Immediate fault lock-out or restart following flame failure available as a switchable function
- Flame control with UV sensor or ionization sensor
- Diverse installation possibilities via holes or snap mechanism for DIN rail
- Space-saving installation on site with IFD 258..I with integrated ignition
- Display for program status and flame signal intensity

Application

Automatic burner control unit IFD 258 ignites and monitors directly ignited industrial gas burners of unlimited capacity. 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 atmospheric burners or forced draught burners in multiple burner applications, where a central control system is used for pre-purge and for monitoring. The burners may be modulating or stage-controlled.

The automatic burner control is suitable for operation in grounded and ungrounded systems.

The program status and the level of the flame signal can be read directly from the unit. The switch-off threshold can be set using a potentiometer.

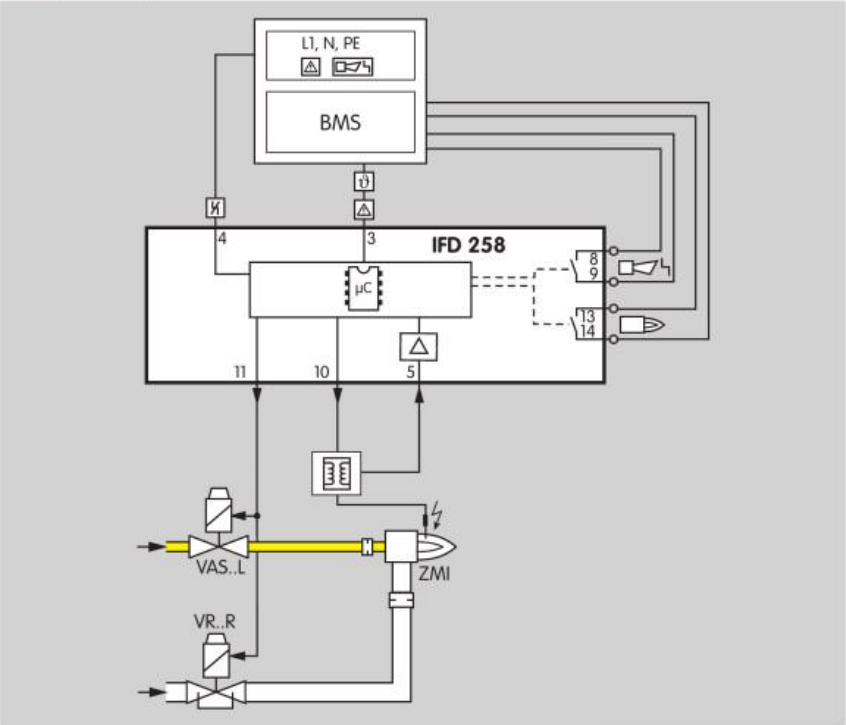
The behaviour in the event of flame failure during operation can be selected using a switch. Either an immediate fault lock-out or a restart occurs.

Intermittent shuttle kiln in the ceramics industry

Roller hearth kiln

Bogie hearth furnace

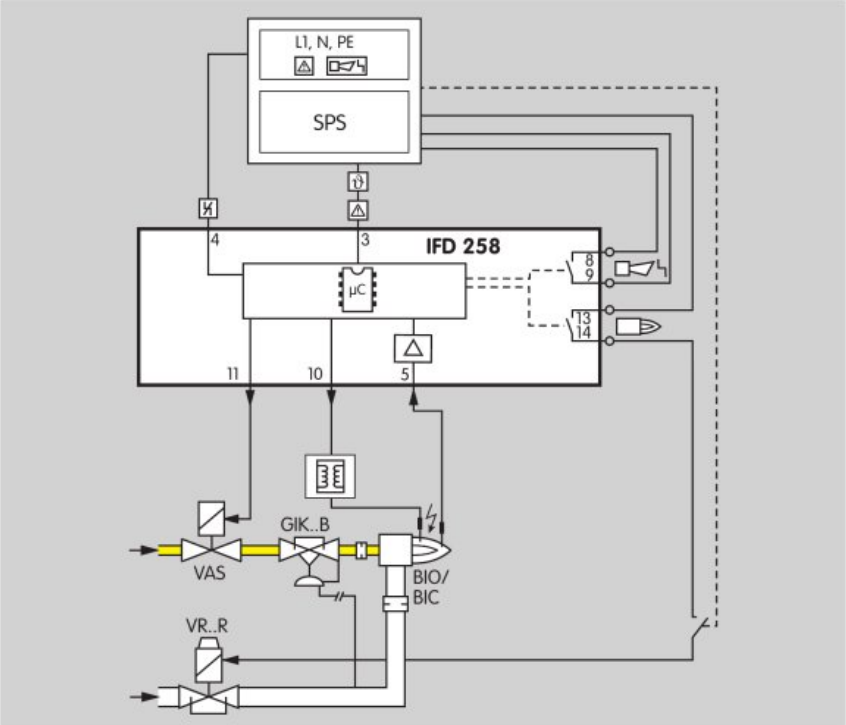
Examples of application



Forced draught burners

Control: ON/OFF

Gas valve and air valve are activated simultaneously. The burner is ignited and monitored by a single electrode. In the event of a flame failure, an immediate fault lock-out occurs.

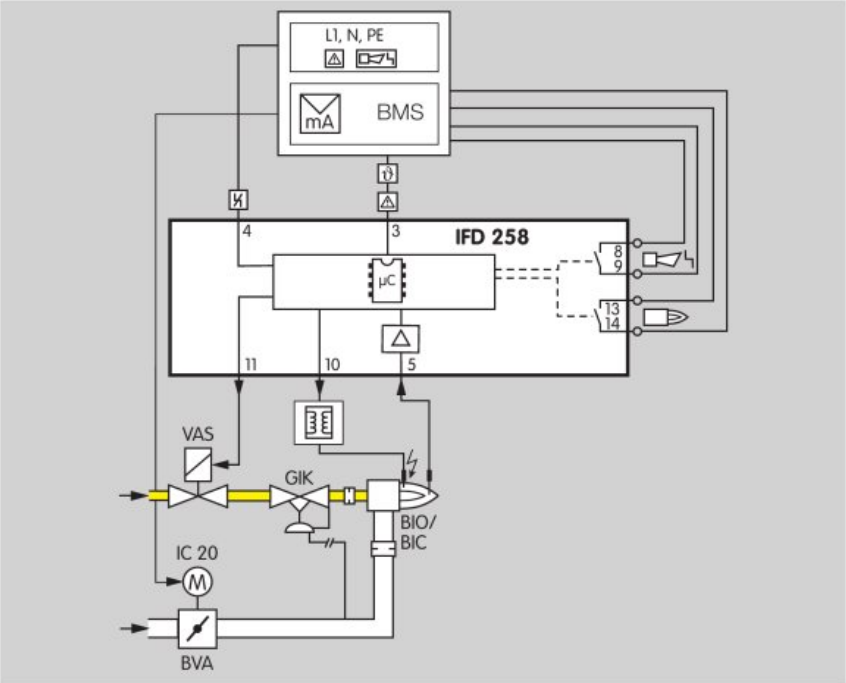


Two-stage-controlled burner

Control: ON/OFF or ON/HIGH/LOW/OFF

The burner BIO/BIC starts at low-fire rate. Once the normal operating state is reached, the automatic burner control unit for continuous operation IFD 258 will release control.

The PLC can now pulse the air solenoid valve VR..R in order to control the capacity between high and low fire.

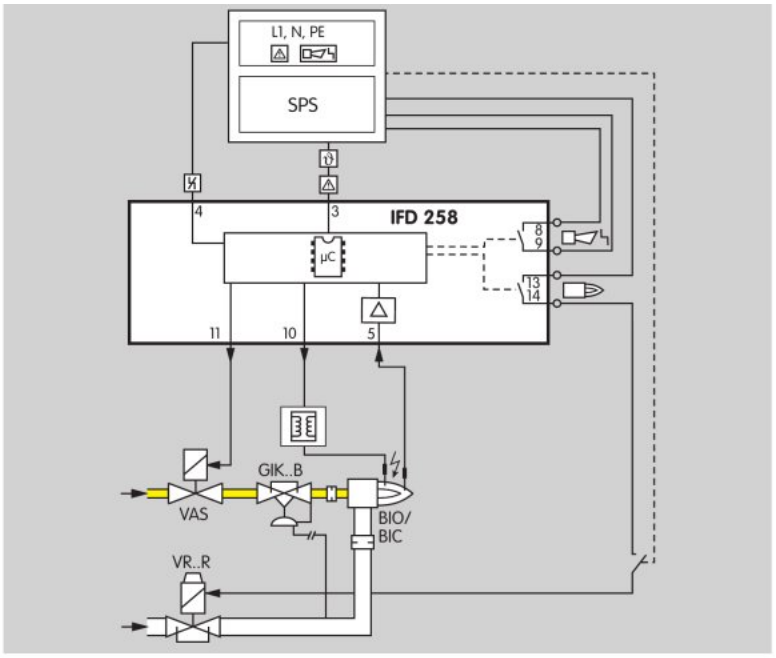


Modulating-controlled burner

Control: ON/OFF/continuous

The PLC uses the actuator IC 20 to move the air butterfly valve BVA to ignition position.

The burner BIO/BIC starts at low-fire rate. Once the normal operating state is reached, the PLC uses the actuator IC 20 and the air butterfly valve BVA to control the burner capacity.



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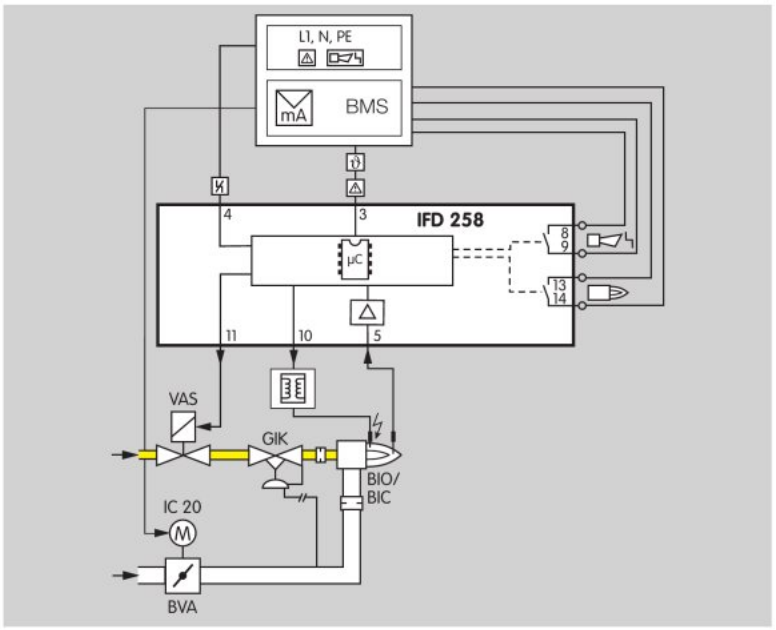

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Technical data

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

Output voltage for valves and ignition transformer = mains voltage.

Flame control:
sensor voltage: approx. 230 V AC,
length of sensor cable:
max. 75 m for ionization control,
max. 100 m for UV control,
sensor current: > 2 µA,
switch-off threshold can be adjusted between 2 and 20 µA,
max. sensor current for ionization control < 25 µA.

Permissible UV sensors:
Elster Kromschröder models UVS 1, 5, 6 and 10 for ambient temperatures from -40 to +80°C (-40 to 176°F).

Valve connections: 1.

Ignition cable:
IFD 258: max. 5 m, recommended < 1 m (with TZI/TGI),
IFD 258..I: max. 1 m, recommended < 0.7 m.

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.

Installation position: any.

Weight:
IFD 258: 610 g,
IFD 258..I: 770 g.

Maintenance cycles

The automatic burner control unit IFD 258 requires little servicing.

Type code

Code	Description
IFD	Automatic burner control unit
2	Series 200
5	With ionization or UV control
8	Immediate fault lock-out or restart, switchable
-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
W	Mains voltage: 230 V AC, 50/60 Hz
Q	120 V AC, 50/60 Hz
Y	200 V AC, 50/60 Hz
P	100 V AC, 50/60 Hz
I*	Integrated electronic ignition

** If "none", this specification is omitted.*

Detailed information on this product
www.docuthek.com

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