Automatic burner control units, burner control units
IFD 244
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 (1191745 BTU/h).
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.
Mains voltage for grounded and ungrounded mains:
- 120 V AC, -15/+10%, 50/60 Hz,
- 230 V AC, -15/+10%, 50/60 Hz.

IFD 258
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 program status and the level of the flame signal can be read directly from the unit.
The cut-off point 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.
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.

IFS 110IM, IFS 111IM
The automatic burner control units IFS 110IM, IFS 111IM ignite and monitor gas burners for intermittent operation.
The IFS 110IM can be used in grounded systems, the IFS 111IM in both grounded and ungrounded systems.
In conjunction with the flame detector IFW 15, it can be used for multi-flame control.
IFS 11xIM
Immediate fault lock-out following flame failure during operation.
IFS 11xIM-W
Automatic restart following flame failure during operation.
IFS 110IM
Mains voltage for grounded systems:
- 110/120 V AC, -15/+10%, 50/60 Hz,
- 220/240 V AC, -15/+10%, 50/60 Hz.
IFS 111IM
Mains voltage for grounded and ungrounded systems:
- 220/240 V AC, -15/+10%, 50/60 Hz.

IFD 450, IFD 454
The automatic burner control units for continuous operation IFD 450, IFD 454 ignite and monitor gas burners. As a result of their fully electronic design they react quickly to various process requirements and are therefore also suitable for frequent cycling operation.
They can be used for directly ignited industrial burners of unlimited capacity. The burners may be modulating or stage-controlled.
The program status and the level of the flame signal can be read directly from the unit.
IFD 450
Immediate fault lock-out following flame failure during operation.
IFD 454
Automatic restart following flame failure during operation.
Mains voltage for grounded and ungrounded mains:
- 220/240 V AC, -15/+10%, 50/60 Hz,
- 110/120 V AC, -15/+10%, 50/60 Hz (on request).
**BCU 440**

Burner control unit BCU 440 controls, ignites and monitors gas burners in continuous operation.

It can be used for directly ignited industrial burners of up to 350 kW (1191745 BTU/h). The BCU is installed near the burner to be monitored.

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

If the local requirements on the burner control unit change, the PC software BCSoft can be adjusted to the unit parameters of the application by using the optical interface.

The service personnel is supported by a convenient visualization system of the input and output signals and the error history.

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

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**BCU 460, BCU 465**

The burner control units BCU 460 and BCU 465 control, ignite and monitor gas burners for intermittent or continuous operation. As a result of their fully electronic design they react quickly to various process requirements and are therefore suitable for frequent cycling operation.

They can be used for directly ignited industrial burners of unlimited capacity. The burners may be modulating or stage-controlled. The BCU is installed near the burner to be monitored.

On industrial furnaces, the BCU reduces the load on the furnace control by taking over tasks that only relate to the burner, for example it ensures that the burner always ignites in a safe condition after it has been restarted.

The optional air valve control on the BCU assists the furnace control for cooling, purging and capacity control tasks.

The BCU 465 is fitted with an air flow monitor and an air supply and air post ventilation for use on recuperative burners.

The program status, the unit parameters and the level of the flame signal can be read directly from the unit. The burner can be controlled manually for commissioning and diagnostic purposes.

If the local requirements on the burner control unit change, the PC software BCSoft can be adjusted to the unit parameters of the application by using the optical interface.

The service personnel is supported by a convenient visualization system of the input and output signals and the error history.

To reduce the installation and wiring costs, Elster Kromschröder offers an optional PROFI-BUS-DP interface to transfer the activation signals and feedbacks so as to expand the remote servicing and diagnostics facilities.

Mains voltage for grounded and ungrounded mains:
- 115 V AC, -15/+10%, 50/60 Hz
- 230 V AC, -15/+10%, 50/60 Hz
The burner control units BCU 480 control, ignite and monitor gas burners for intermittent or continuous operation. As a result of their fully electronic design they react quickly to various process requirements and are therefore suitable for frequent cycling operation.

They can be used for industrial burners of unlimited capacity which are ignited by pilot burners. Pilot and main burners may be modulating or stage-controlled. The BCU 480 monitors pilot and main burners independently. The pilot burner can burn permanently or be switched off. The BCU is installed near the burner to be monitored.

On industrial furnaces, the BCU reduces the load on the central furnace control by taking over tasks that only relate to the burner, for example it ensures that the burner always ignites in a safe condition after it has been restarted.

The air valve control assists the furnace control for cooling, purging and capacity control tasks.

The program status, the unit parameters and the level of the flame signal can be read directly from the unit. The burner can be controlled manually for commissioning and diagnostic purposes.

If the local requirements on the burner control unit change, the PC software BCSoft can be adjusted to the unit parameters of the application by using the optical interface.

The service personnel is supported by a convenient visualization system of the input and output signals and the error history.

To reduce the installation and wiring costs, Elster Kromschroeder offers an optional PROFINET interface to transfer the activation signals and feedbacks so as to expand the remote servicing and diagnostics facilities.

Mains voltage for grounded and ungrounded mains:
- 115 V AC, -15/+10%, 50/60 Hz,
- 230 V AC, -15/+10%, 50/60 Hz.
PFU 760

The burner control units PFU 760 control, ignite and monitor gas burners for intermittent or continuous operation. As a result of their fully electronic design they react quickly to various process requirements and are therefore also suitable for frequent cycling operation.

The PFU 760 can be used for directly ignited industrial burners. The burners may be modulating or stage-controlled.

On industrial furnaces, the PFU 760 reduces the load on the central furnace control by taking over tasks that only relate to the burner, for example it ensures that the burner always ignites in a safe condition after it has been restarted.

The burner control unit is used for burners with mechanical combustion air supply where the fan is controlled by a separate logic and for atmospheric burners.

The air valve control on the burner control unit PFU 760L assists the furnace control for cooling, purging and capacity control tasks.

The program status, the unit parameters and the level of the flame signal can be read directly from the unit. The burner can be controlled manually for commissioning and diagnostic purposes.

If the local requirements on the burner control unit change, the PC software BCSoft can be adjusted to the unit parameters of the application by using the optical interface.

The service personnel is supported by a convenient visualization system of the input and output signals and the error history.

To reduce the installation and wiring costs, Elster Kromschroder offers the field bus interface PFA 700 to transfer the control signals and feedbacks via PROFINET-DP.

Mains voltage for grounded and ungrounded mains:
110/120 V AC, -15/+10%, 50/60 Hz,
220/240 V AC, -15/+10%, 50/60 Hz.

PFU 780

The burner control units PFU 780 control, ignite and monitor gas burners for intermittent or continuous operation. As a result of their fully electronic design they react quickly to various process requirements and are therefore also suitable for frequent cycling operation.

The PFU 780 can be used for industrial burners of unlimited capacity which are ignited by pilot burners. Pilot and main burners are controlled and monitored independently. This reduces the main burner start-up time. The pilot burner can burn permanently or be switched off. The main burners may be modulating or stage-controlled.

On industrial furnaces, the PFU 780 reduces the load on the central furnace control by taking over tasks that only relate to the burner, for example it ensures that the burner always ignites in a safe condition after it has been restarted.

The burner control unit is used for burners with mechanical combustion air supply where the fan is controlled by a separate logic and for atmospheric burners.

The air valve control on the PFU 780L assists the furnace control for cooling, purging and capacity control tasks.

The program status, the unit parameters and the level of the flame signal can be read directly from the unit. Pilot and main burners can be controlled manually for commissioning and diagnostic purposes.

If the local requirements on the burner control units change, the PC software BCSoft can be adjusted to the unit parameters of the application by using the optical interface.

To support service personnel, BCSoft offers a convenient visualization system of the input and output signals and the error history.

Mains voltage for grounded and ungrounded mains:
110/120 V AC, -15/+10%, 50/60 Hz,
220/240 V AC, -15/+10%, 50/60 Hz.
Burner control unit BCU 370 controls, ignites and monitors industrial forced draught burners of unlimited capacity in intermittent or continuous operation.

It can be used for directly ignited forced draught burners or forced draught burners ignited with pilot burner. The BCU 370 activates the fan and sets the connected butterfly valve to Pre-purge and Ignition position. After pre-purge and burner start, the Enable signal is issued to an external controller which positions the butterfly valve in accordance with the capacity demand. Post-purge occurs after the end of burner operation. The burner control unit BCU 370 monitors the gas and air pressure. An optionally integrated tightness test function checks the valves with an external gas pressure switch.

Programmability by means of the optical interface and BCSoft PC software guarantees optimum adaptation to the relevant application. Adjustable start-up attempts and automatic restart which can be activated ensure the high flexibility of the burner equipment.

The quick-start option allows standard-compliant start-up of the forced draught burner without pre-purge after a controlled shutdown. This avoids unnecessary admission of air into the combustion chamber. The heat output is available as quickly as possible after a temperature demand.

To reduce the installation and wiring costs, Elster Kromschroder offers an optional Profinet interface to transfer the activation signals and feedbacks.

Mains voltage for grounded and ungrounded mains:
- 120 V AC, ±15%/+10%, 50/60 Hz,
- 230 V AC, ±15%/+10%, 50/60 Hz.
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<th>Requirements of the Standards</th>
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- = standard, o = available

1 The lower value applies for units with integrated ignition transformers, the higher one for units with external ignition.

2 Single-electrode operation is possible only in conjunction with external ignition for BCU 370.
Roller hearth kiln with IFD 450

The tried-and-tested product line IFSi10IM in use

Hardening furnace with lots of industrial burners located side-by-side, controlled by BCU 460

Module subrack BGT for instance serves to accommodate several function units. It is provided with a backplane with screw terminals for simple, reliable wiring.

Detailed information on this product

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