

KROMSCHRÖDER FLAME DETECTOR UNIT

Providing safe, efficient flame
monitoring for gas burners



Honeywell

KROMSCHRÖDER® FLAME DETECTOR UNIT SERIES

Honeywell's all-new Kromschröder Flame Detector Unit (FDU) series provides OEMs, burner manufacturers and end users with a state-of-the-art flame monitoring capability for gas burners across a wide range of applications – from hot-air furnaces and gas-fired boilers to industrial furnaces and excess-gas flaring installations.

Replacing Kromschröder's IFW 15/50, Honeywell's R4343 and BC1000 flame relay models, the new FDUs enable multi-flame control or multi-point monitoring in conjunction with burner control units (BCUs) such as the Kromschröder BCU 560 or a failsafe PLC with a standard-compliant flame monitoring device.

There are two FDU models to choose from: the FDU 510 monitors gas burners in intermittent /non permanent operation (applications of less than 24 hours) while the FDU 520 monitors gas burners in continuous/permanent operation (applications of more than 24 hours). The compact footprint of these units means that they can be easily integrated and mounted with other equipment in a cabinet, providing convenient access for maintenance and repair.



FDU 500 module

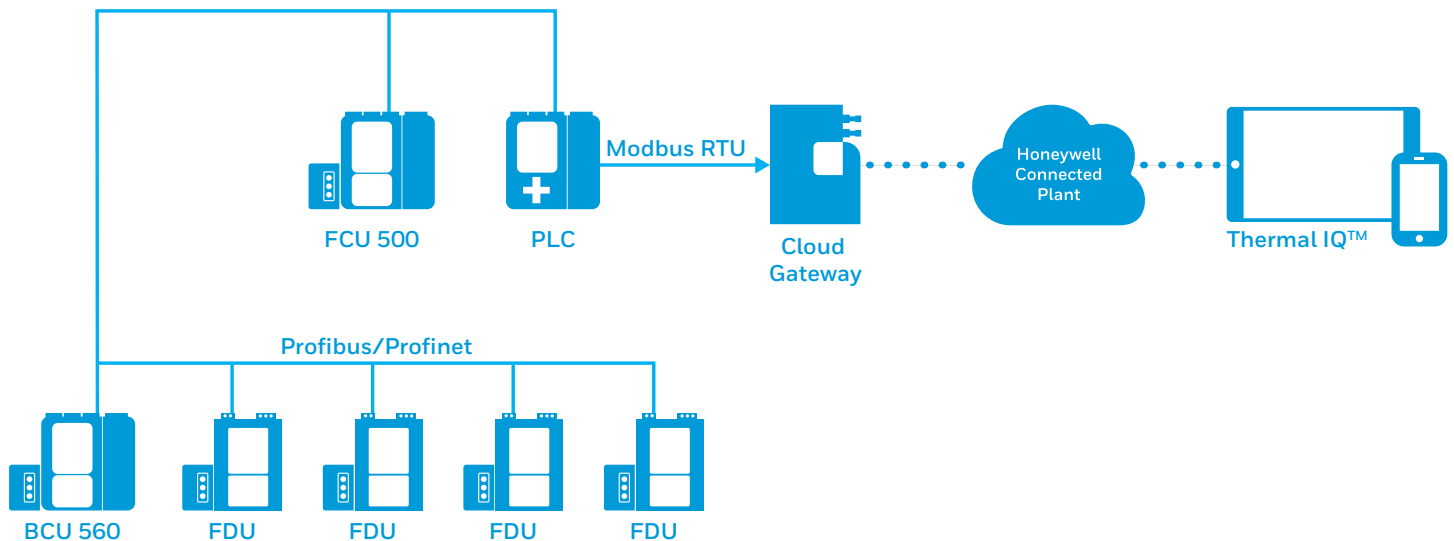
MODEL	FDU 510	FDU 520
Type of operation	Intermittent/non-permanent operations	Continuous/permanent operations
Flame control with flame rod or UVC	Flame rod	Flame rod or UVC
Flame sensing with UVS	✓	Only for non-permanent operation
Flame control with series C7027	✓	—
0–5 V output	Optional	Optional
Bus communications	via BCM 500	via BCM 500

IIOT-READY

The conventional, widespread systems used in industrial furnace and kiln construction must be connected for signal processing. An optional bus module – the BCM 500 – connects the FDU to a fieldbus interface in a Profinet, EtherNet/IP or Modbus TCP network. The BCM 500 is designed to be mounted to the left side of the FDU. A key feature of both the FDU models is seamless integration via the BCM 500 with Honeywell Thermal IQ™, a remote monitoring solution that securely connects combustion equipment to the cloud, making critical thermal process data available anytime, anywhere, on any smart device. With real-time, actionable information such as flame signal, first fault indication, fault statistics and history, and parameters from Thermal IQ, users can implement predictive maintenance, remote control/monitoring and other activities to optimize the safety, reliability and performance of their thermal operations.



BCM 500 module



STANDARDIZED DESIGN

The FDU series also uses a standard fieldbus system that helps to reduce development, installation and commissioning costs compared with conventional wiring or manufacturer-specific, bespoke solutions.

FLEXIBILITY AND UTILITY

Another benefit of the FDU series is that it is compliant with relevant global standards. This, combined with the models' easy programmability and breadth of functionality, means that the FDU 510 and 520 can be quickly and flexibly adapted for use across a spectrum of industrial thermoprocessing equipment in different markets around the world. The result? Users save time, money and relinquish the burden of maintaining high levels of stock to support their thermal operations.



FDU 500 module



Metal



Construction



Automotive



Ceramics



Food



Glass



Paper



Power Generation



Textiles

FIVE KEY FEATURES OF THE HONEYWELL/KROMSCHRÖDER FDU SERIES



Monitors the performance of gas burners in intermittent or permanent/continuous operation



Meets the latest global safety standards for gas flame monitoring



Optional Profinet, EtherNet/IP or Modbus TCP bus communications securely connects thermal equipment to the cloud, enabling advanced Thermal IQ applications that can improve combustion performance and minimize the risk of downtime



Certified for use in multiple markets across the world



Offers easy installation and cabinet mounting capabilities

For More Information

For more information about Honeywell's Flame Detector Unit, please visit [ThermalSolutions.Honeywell.com](https://www.thermalsolutions.honeywell.com) or contact your Honeywell Thermal Solutions representative

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Controls, Honeywell Combustion Safety, Honeywell Combustion Service, Eclipse, Exothermics, Hauck, Kromschröder and Maxon.

Honeywell Process Solutions

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