NOXMAT
industrial heating technology

Product Information

Control Systems for Gas Burners

Reliability at work

BURNER CONTROL SYSTEM

Decentralized burner controls by NOXMAT have integrated automatic burner control and ignition transformers to ensure safe ignition and control of the burner.
The adapted functional software is specially streamlined to the operation of NOXMAT burners; a plethora of parameterization and diagnosis possibilities also allow for the use of controls by other manufacturers.

Advantages

- Shipping fully wired and preassembled: 16-Pin industrial connector for activation and cable set to connect with the burner and the valves.
- Configuration of the industrial connector is identical from the current generation NOXMAT-E and the precursor model NOXMAT-B - 1:1 exchange is possible.
- Parameterization according to process requirements and 100% output control through NOXMAT, including a test of the BUS signals.
- No switching cycle limit; the controls monitor the outputs internally (fail-safe-outputs). In case of an electrical fault in an output, the controls lock themselves and the customer can exchange the power module (available as a spare part).
- Parameters can be transferred from one control to another device of the same type via parameter chip card.
- Internal storage of data for statistic functions such as switching frequency, shortfall of times, internal device temperatures, malfunctions, and operating hours.
- Very simple activation of manual mode of the burner to enable burner settings and diagnosis when installing burner controls directly on the burner. By default, manual mode is limited to 5 minutes. This is to prevent damage to the burner and furnace parts.
- Exchanging third-party products is possible if assignment of the signal lines and the burner application are known.
- With the optional bus module, diagnosis and statistics data are available as read-out data via a control. This is, for instance, possible with an IIoT control, independent of the furnace control.

Technical features

- Application in grounded and floating voltage systems
- Application on burners in intermittent operation or continuous operation
- Flame monitoring via UV sensor or via ionization in 1- or 2-electrode operation.
- Indication of operational state of the burner and of malfunctions via easy-to-read 4-digit, 7-segment display or online via PROFIBUS / PROFINET / Ethernet/IP.
- Query of programmed parameters, malfunction history, statistics, and operating hours via PC adapter.
- Online data logging via PC adapter or fieldbus communication.
- Flange plates to enable flexible cable routing, i.e. via 16-pin industrial connectors.
- Internal and external fieldbus connectors or cable glands.
- Delivery includes sturdy steel retaining plate to mount directly to the burner, unless desired otherwise.
- Available parameters to adapt the control system to the customer's application:
  - Time sequences of the burner phase
  - Various options for air valve control
  - Behaviors after malfunctions, i.e. purging with air
  - Adjustable switch-off threshold of the flame monitor
  - Air pressure relay functions for pre-purging and burner operation
- Internal storage of data for statistic functions such as switching frequency, shortfall of times, malfunctions, and operating hours.
- Fieldbus connectivity (profibus, profinet, ethernet/IP) via optional bus module

Options

- Opto-adapter for PC connection, together with software for parameterization and diagnosis
- Power module with interface for butterfly valve actuator: direct activation of butterfly valve positions "Purge", "Start", "Low fire" and "High fire" via Noxmat-E.

NOXMAT

industrial heating technology

NOXMAT GmbH
Ringstraße 7, D-09569 Oederan
Tel: +49 37292 65 03 0
Fax: +49 37292 65 03 29
E-Mail: info@noxmat.de

www.noxmat.com