



Burner Controls

LFL1...

Burner controls

- For gas, oil or dual-fuel forced draft burners of medium to high capacity
- For multistage or modulating burners in intermittent operation
- With checked air damper control
- Flame supervision
 - with UV detectors QRA2 / QRA4 / QRA10
 - and ionization probe

The LFL1... and this Data Sheet are intended for use by OEMs which integrate the burner controls in their products!

Use

- Control and supervision of forced draft burners of direct spark flame or interrupted pilot construction
- For medium to high capacity
- For intermittent operation (at least one controlled shutdown every 24 hours)
- For universal use with multistage or modulating burners
- For use with stationary air heaters (WLE)
- For use with dual-fuel burners
- Type-tested and approved in accordance with DIN EN 298

The flame supervision is ensured via a flame detector QRA2 / QRA4 / QRA10 or ionization probe. The difference between 01 series and 02 series is the duration of the safety time for the pilot burner of burners equipped with pilot gas valves. For atmospheric burners of high capacity, use the LFL1.638.

Supplementary documentation

Product type	Type of documentation	Documentation number
LGK16 (burner controls for continuous operation)	Data Sheet	N7785

Warning notes



To avoid injury to persons, damage to property or the environment, the following warning notes must be observed!

Do not open, interfere with or modify the unit!

- All activities (mounting, installation and service work, etc.) must be performed by qualified staff
- Before making any wiring changes in the connection area, completely isolate the plant from mains supply (all-polar disconnection). Ensure that the plant cannot be inadvertently switched on again and that it is indeed dead. If not observed, there is a risk of electric shock hazard
- Ensure protection against electric shock hazard by providing adequate protection for the burner control's connection terminals
- Each time work has been carried out (mounting, installation, service work, etc.), check to ensure that wiring is in an orderly state and make the safety checks as described in «Commissioning notes»
- Press the lockout reset button only manually (apply a force of no more than 10 N), without using any tools or pointed objects
- Do not press the lockout reset button on the unit or the remote lockout reset button (input 21) for more than 10 seconds since this damages the lockout relay in the unit
- Fall or shock can adversely affect the safety functions. Such units must not be put into operation, even if they do not exhibit any damage
- For safety reasons – self-test of the flame supervision circuit, etc. – at least one controlled shutdown must take place every 24 hours
- In the case of flame supervision with UV detectors QRA2 / QRA4 / QRA10, it should be noted that sources of radiation such as halogen lamps, welding equipment, special lamps, ignition sparks, as well as X-rays and gamma radiation, can produce erroneous flame signals

Mounting notes

- Ensure that the relevant national safety regulations are complied with
- Connect the earthing lug inside the terminal base to burner ground using a screw with a lockwasher
- **An ignited UV tube is a source of UV radiation!** In case of flame supervision by means of flame detectors, the detectors must be placed such that there is **no direct visual contact** between them. If this is not observed, there is a risk of loss of safety functions

Installation notes

- Always run the high-voltage ignition cables separately while observing the greatest possible distance to the unit and to other cables
- Do not mix up live and neutral conductors
- Install switches, fuses and grounding in accordance with local regulations
- Do not exceed the maximum permissible current rating of the connection terminals
- The insulation of internal wiring which is subjected to the mains voltage must be able to withstand the electrical loads occurring during proper use