



Basic diagram of LMV5... for 2 types of gas

User Documentation

The LMV5... and the present document are intended for use by OEMs which integrate the Burner Management Units in their products!

Supplementary documentation

User Documentation «AZL5... Modbus».....	A7550
User Documentation «Basic diagram of LMV5... for 2 types of gas».....	A7550.1
User Documentation «Basic diagram of LMV5... for 2 types of liquid fuel»	A7550.3
Operation Manual «ACS450 PC software for LMV5»... ..	J7550
Parameter Settings	I7550
Installation Guide LMV5... ..	J7550.1
Data Sheet LMV5.....	N7550
Basic Documentation LMV5.....	P7550
Product Range Overview LMV5... ..	Q7550
User Manual AZL5... (U7550.1) «Service level»	74 319 0296 0
User Manual AZL5... (U7550) «User level»	74 319 0272 0

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1 General

As described in the Basic Documentation of the LMV5... (P7550), the fuel between oil and gas is always selected via input X4-01.1 (gas) and input X4-01.2 (oil). The present document provides additional information for gas-fired applications (X4-01) where changeover between 2 types of gas is made possible during operation by using an external relay circuit.

The basic diagram below shows the basic wiring and fundamental design of the gas train.

For more detailed information, refer to the Basic Documentation of the LMV5... (P7550).



All safety, warning and technical notes given in the Basic Documentation of the LMV5... (P7550) must also be observed in connection with this document.

2 LMV5... for 2 types of gas (example: gas / biogas)

2.1.1 Fuel selection

Fuel selection «Gas1» or «Gas2» is made via an external selector. The valves for both types of gas are controlled during the delay time set on the delay off relays K1 and K2. The drop out delay time should not exceed the safety time set on the LMV5... The LMV5 ... is adjusted on the «gas curve» for both types of gas.

2.1.2 Fuel changeover

Changeover from «Gas1» to «Gas2» can take place while the burner is in operation. Hence, the burner will not be shut down. By contrast, when changing from gas to oil, the burner will be shut down.

2.1.3 Curves

- The LMV5 ... is always set for using the gas curve
- The air curve applies to «Gas1» and «Gas2»
- The fuel valve actuator is used for «Gas1»
- The auxiliary actuator is used for «Gas2»

2.1.4 Gas valve proving

With the LMV5..., gas valve proving is performed during startup and shutdown.

Parameter: *ValveProvingType = VP stup/shd*

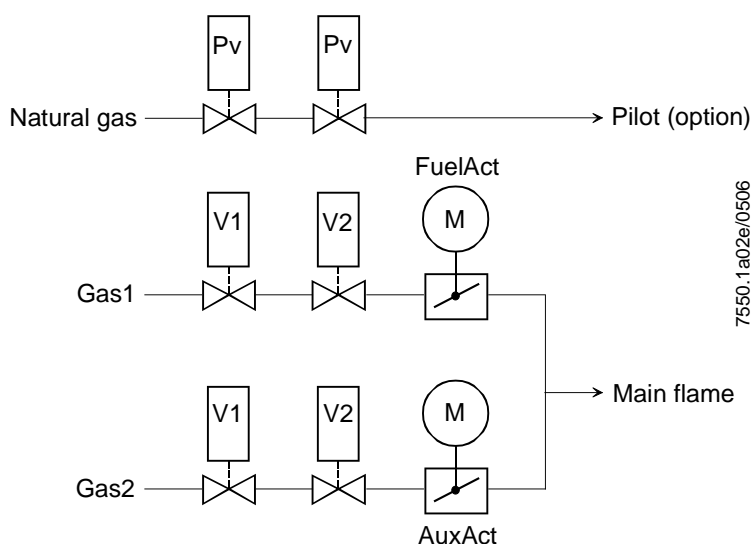
When gas valve proving is carried out, the LMV5 ... set to «Gas1» during startup and to «Gas2» during shutdown.

Gas trains

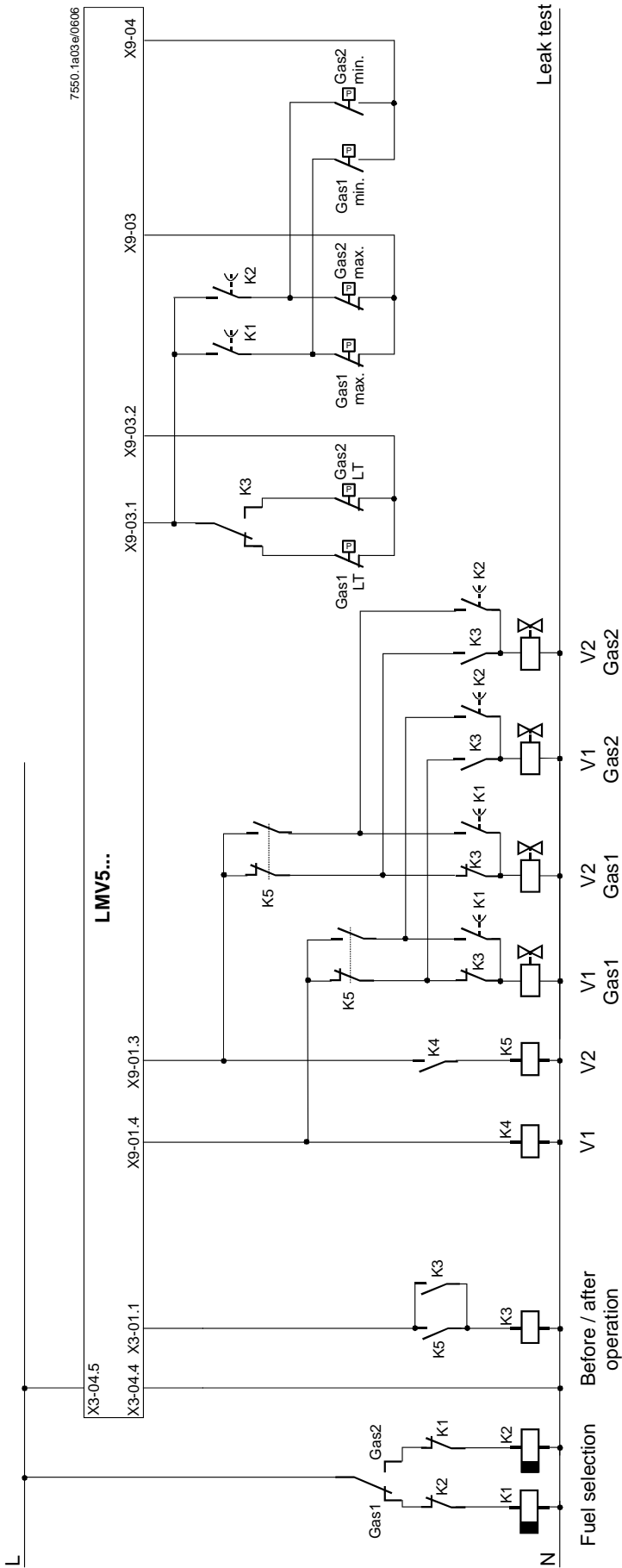
The following types of gas trains are supported:

- Gas direct ignition (G)
- Gas pilot ignition 2 (GP2)

Gas line



3 Basic diagram



Legend:

- K1 Burner operating on «Gas1»
- K2 Burner operating on «Gas2»
- K3 The state of the relay determines «before operation» and «after operation»
- K4 Fuel valve «V1» is live
- K5 Indication «burner in operation» (fuel valve «V2» is live)
- Gas1 Fuel selection
- Gas2 Fuel selection
- V1 Fuel valve «V1»
- V2 Fuel valve «V2»
- LT Leakage test / valve proving

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