LMV5 – the strong burner management system

Highlights

- Optimum systems for demand-related solutions
- Global approvals (UL, CSA, FM, CE) and 20 operation languages
- Backup/restore function for fast commission and service
- Modbus interface
- Combustion optimization via O_2 trim control

The LMV5 burner management system demonstrates its capabilities not only in operation but also when it comes to the development and design of new generations of burners.
The compact basic unit can be fitted directly in or on the burner or in a control panel. Since mechanical linkage is no longer required, electronic air-fuel ratio control offers a new kind of flexibility when it comes to adjusting actuators. And of course, system integration of functions cuts mounting and comissioning costs. The usage of the LMV5 system for heat supply of large building complexes or industrial process heat generations and the excellent price-performance ratio are only 3 reasons for the LMV5 and offers the opportunity to switch from mechanical to electronical air-fuel ratio control.

Technical data (extract)

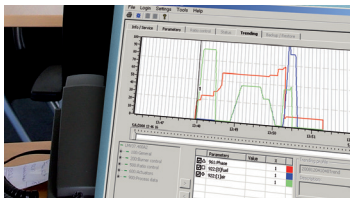
For further information, see basic documentation P7550.

Mains voltage	AC 120 V +10% / -15% AC 230 V +10% / -15%
Cable length	
- Mains line	Max. 100 m (100 pF/m line capacitance)
- Analog line	Max. 100 m (100 pF/m line capacitance)
- CAN bus	Total length max. 100 m
Flame detector	
- QRI (infrared)	Connecting cable max. 180 cm, auxiliary detector cable max. 100 m
- QRA7 (UV)	Max. 10 m, 6 wire cable, signal cable no. 3, 4 and 5 Max. 100 m (lay separately from L, N and PE in shielded cable)
- Ionization	Max. 100 m (Ground, 100 pF/m) lay separately
- QRB (visibl. light)	Max. 100 m (Ground, 100 pF/m) lay separately
- QRA2 + AGQ1 (UV)	Max. 100 m (Ground, 100 pF/m) lay separately

AZL5 - support for LMV5

The LMV5 burner management system is operated and programmed via the AZL5 display and operating unit or the PC tool. Using the Modbus of the AZL5, the LMV5 system can be integrated into a complex data network (e.g. for process control). This means that functions, such as visualization of plant states, plant control and reporting, can be implemented.

The ACS450 tool, required for that purpose, is connected directly to the AZL5 and serves for the display and storage of LMV5 data plus parameter settings.



Standards and certificates (extract)

Conformity to EC directives

- Electromagnetic compatibility EMC (immunity) 2004/108/EC
- Gas-fired appliances directive 90/396/EC
- Low-voltage directive 2006/95/EC
- Directive for pressure devices 97/23/EC

ISO 9001: 2008
ISO 14001: 2004

Manufacturer declaration for SIL3

Siemens AG
Building Technologies Division
Control Products & Systems
Berliner Ring 23
76437 Rastatt
Germany
Tel +49 7222 598 279
Fax +49 7222 598 269

www.siemens.com/buildingtechnologies-oem

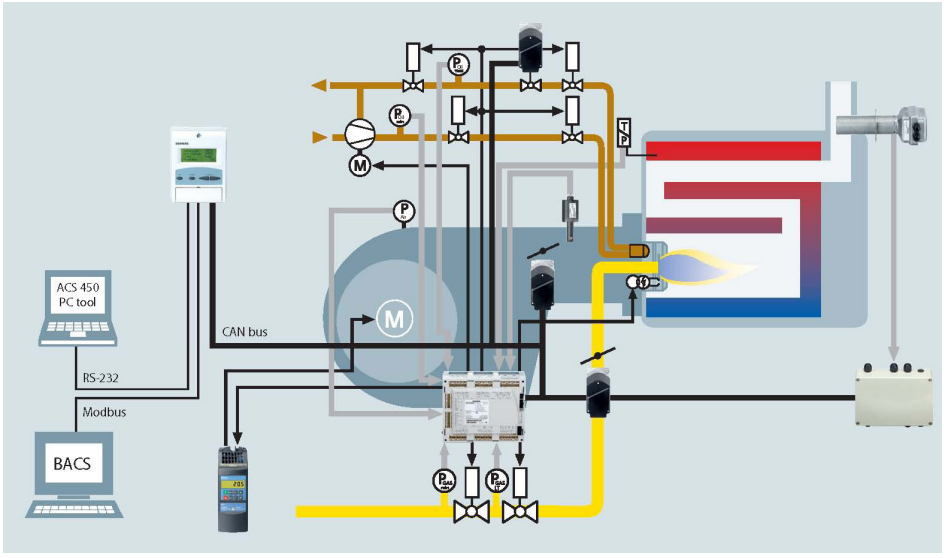
Type reference (extract)

Further information, see data sheet CC1N7550.

Type reference	Mains voltage	Parameter set	Max. number of actuators	Automatic adaptation of controller's characteristics	Limit thermostat	Fuel meter input	Integrated gas valve proving	Integrated PID load controller	Control of VSD	Analog output	O2 trim control	Safety time TSAmax. Gas	Safety time TSAmax. Oil
LMV50.320B2	AC 230 V	LMV50	5 *)	●	●	●	●	●	●	●	---	10 s	10 s
LMV51.000C2	AC 230 V	Europe	4	---	---	---	●	---	---	---	---	3 s	5 s
LMV51.040C1	AC 120 V	US / Canada	4	---	---	---	●	---	---	---	---	10 s	15 s
LMV51.100C1	AC 120 V	Europe	4	●	●	---	●	●	---	●	---	3 s	5 s
LMV51.100C2	AC 230 V	Europe	4	●	●	---	●	●	---	●	---	3 s	5 s
LMV51.140C1	AC 120 V	US / Canada	4	●	●	---	●	●	---	●	---	10 s	15 s
LMV51.300B1	AC 120 V	Europe	5 *)	●	●	●	●	●	●	●	---	3 s	5 s
LMV51.300B2	AC 230 V	Europe	5 *)	●	●	●	●	●	●	●	---	3 s	5 s
LMV51.340B1	AC 120 V	US / Canada	5 *)	●	●	●	●	●	●	●	---	10 s	15 s
LMV52.200B1	AC 120 V	Europe	6	●	●	●	●	●	●	●	●	3 s	5 s
LMV52.200B2	AC 230 V	Europe	6	●	●	●	●	●	●	●	●	3 s	5 s
LMV52.240B1	AC 120 V	US / Canada	6	●	●	●	●	●	●	●	●	10 s	15 s
LMV52.240B2	AC 230 V	US / Canada	6	●	●	●	●	●	●	●	●	10 s	15 s
LMV52.400B2	AC 230 V	Europe	6	●	●	●	●	●	●	●	●	3 s	5 s
LMV52.440B1	AC 120 V	US / Canada	6	●	●	●	●	●	●	●	●	10 s	15 s

* When the VSD module is activated, only 3 SQM4... actuators can be controlled!

Overview of the burner management system LMV5



Communication variety