SIEMENS

7550

Product range overview LMV5…

The LMV5… burner management system provides all supervisory functions required for forced draft oil or gas burners of medium to high capacity and facilitates modular system extensions via integrated communication interfaces.

Integrated in the LMV5… basic unit are:

- Burner control, including gas valve proving
- Electronic fuel-air ratio control for a maximum of 6 actuators
- Optional PID temperature / pressure controller (load controller)
- Optional VSD module
- Optional O2 control and an O2 monitor (with PLL52 and QGO2)

This documentation is a brief overview of the most important functions and components of the product family of the LMV5 burner management systems.

Use

- Residential and nonresidential buildings that use hot water or steam boilers
- Industrial plants
- Direct-fired heat production plant

Target groups

- Sales engineers
- In-house personnel
- Burner manufacturers (OEMs)
- Installers
- Planning engineers
- Plant operators

Based on the following software versions:

LMV50...:	V10.20
LMV51... :	V05.10
LMV51.3…:	V05.10
LMV52.2..:	V05.10
LMV52.4...:	V10.20
Int. LR module:	V02.10
Int. VSD module:	V01.50
AZL52...:	V05.00
PLL52...:	V01.50

Functions

	LMV51.0…	LMV51.1…	LMV51.3…	LMV50…	LMV52.2…	LMV52.4…
Electronic fuel / air ratio control						
Fuel oil	●	●	●	●	●	●
Fuel gas	●	●	●	●	●	●
Actuator for: Air damper, fuel damper, actuator 1	●	●	●	●	●	●
Actuator for: Air damper, fuel damper, actuator 3 and VSD			●	●	●	●
Actuator for: Air damper, fuel damper, actuator 1, VSD, actuator 3 or VSD + actuator 3			●	●		
Actuator for: Air damper, fuel damper, actuator 1...3 and VSD					●	●
Up to 15 curvepoints per actuator	●	●	●	●	●	●
Linear interpolation between curvepoints	●	●	●	●	●	●
Supervision of actuator positions	●	●	●	●	●	●
Detection of line interruptions of actuators	●	●	●	●	●	●
Pneumatic fuel-air ratio control						
Using an air actuator and a suitable gas control valve, all types of gas-fired fuel trains (modulating operation) can also be operated as pneumatic fuel-air ratio control systems	●	●	●	●	●	●
Fuel trains						
Gas - direct ignition, modulating operation (G)	●	●	●	●	●	●
Gas - with pilot ignition, one pilot valve, modulating operation (Gp1)	●	●	●	●	●	●
Gas - with pilot ignition, 2 pilot valves, modulating operation (Gp2)	●	●	●	●	●	●
Light oil - direct ignition, modulating operation (LO)	●	●	●	●	●	●
Light oil - direct ignition, 1-stage operation (LO)	●	●	●	●	●	●
Light oil - direct ignition, 2-stage operation (LO)	●	●	●	●	●	●
Light oil - direct ignition, 3-stage operation (LO)	●	●	●	●	●	●
Heavy oil - direct ignition, modulating operation (HO)	●	●	●	●	●	●
Heavy oil - direct ignition, 1-stage operation (HO)	●	●	●	●	●	●
Heavy oil - direct ignition, 2-stage operation (HO)	●	●	●	●	●	●
Dual-fuel burner: Any type of gas-fired fuel train (G), (Gp1) or (Gp2) can be arbitrarily combined with an oil-fired fuel train (LO) or (HO)	●	●	●	●	●	●
Dual-fuel burner: Oil-fired fuel trains (LOGp) and (HOGp) are only suited for ignition with a gas pilot and may only be used for a dual-fuel burner when combined with the gas-fired fuel train (Gp2)	●	●	●	●	●	●
Continuous-operation pilot for all pilot fuel trains (Gp1, Gp2, LOGp, HOGp). The pilot valve continues to be controlled in operation together with the main valve.				●	●	●
Skipping of phases 50 and 52 in the case of direct ignition fuel trains (G, LO, HO)	●	●	●	●	●	●
Flame detectors for intermittent operation						
UV flame detector QRA2…, QRA10… with AGQ1… (only for 230 V versions available)	●	●	●	●	●	●
Photoresistive detector QRB…	●	●	●	●	●	●

	LMV51.0...	LMV51.1...	LMV51.3...	LMV50...	LMV52.2...	LMV52.4...
Flame detectors for continuous operation						
Ionization probe	●	●	●	●	●	●
Infrared flame detector QRI...	●	●	●	●	●	●
UV flame detector QRA7...	●	●	●	●	●	●
Separate flame supervision of pilot and main flames						
Input A: For QRI..., QRA7... or QRB... Input B: For ionization probe				●	●	●
Flame supervision via external, safety-oriented flame monitor						
Connection of an external flame safeguard at input X6-01 pin 3 and X6-01 pin 1				●	●	●
Gas valve proving in connection with a gas pressure switch						
Selectable: Before, after or before, and after startup (can be deactivated)	●	●	●	●	●	●
Gas valve proving function with gas pressure switch and supervision of valve closure contact for oil and gas valves						
Input for valve closure contact (X7-03 pin 2)	●	●	●	●	●	●
Digital inputs / signal loops						
Safety loop	●	●	●	●	●	●
Burner flange (component of safety loop)	●	●	●	●	●	●
Air pressure switch (can be deactivated)	●	●	●	●	●	●
Gas pressure switch valve proving or gas and/or oil valve closing contacts (CPI or POC)	●	●	●	●	●	●
Gas pressure switch-min (can be deactivated)	●	●	●	●	●	●
Gas pressure switch-max (can be deactivated)	●	●	●	●	●	●
Oil pressure switch-min (can be deactivated)	●	●	●	●	●	●
Oil pressure switch-max (can be deactivated)	●	●	●	●	●	●
Reset / manual locking	●	●	●	●	●	●
Heat request (ON/OFF)	●	●	●	●	●	●
Stage 2 or OPEN with 3-position controller	●	●	●	●	●	●
Stage 3 or CLOSE with 3-position controller (stage 3 = OPEN and CLOSE)	●	●	●	●	●	●
Fuel selection oil	●	●	●	●	●	●
Fuel selection gas	●	●	●	●	●	●
Heavy oil direct start (can be deactivated)	●	●	●	●	●	●
Start release oil (can be deactivated)	●	●	●	●	●	●
Start release gas or gas and/or oil valve closing contacts (CPI or POC)			●	●	●	●
Fan contactor contact or pressure switch flue gas recirculation (can be deactivated)	●	●	●	●	●	●
Startup stop Start/Stop in phase 36 for non safety-relevant multi-burner applications	●	●	●	●	●	●

Functions (cont'd)

	LMV51.0	LMV51.1	LMV51.3	LMV50…	LMV52.2	LMV52.4
Digital outputs						
Fuel valve 1 oil (V1)	●	●	●	●	●	●
Fuel valve 2 oil (V2)	●	●	●	●	●	●
Fuel valve 3 oil (V3)	●	●	●	●	●	●
Safety valve oil (SV)	●	●	●	●	●	●
Fuel valve 1 gas (V1)	●	●	●	●	●	●
Fuel valve 2 gas (V2)	●	●	●	●	●	●
Fuel valve 3 gas (V3)	●	●	●	●	●	●
Safety valve gas (SV)	●	●	●	●	●	●
Start signal or pressure switch relieve valve	●	●	●	●	●	●
Ignition	●	●	●	●	●	●
Fan or continuous fan operation	●	●	●	●	●	●
Alarm	●	●	●	●	●	●
Indication of oil firing	●	●	●	●	●	●
Indication of gas firing	●	●	●	●	●	●
Oil pump or magnetic clutch	●	●	●	●	●	●
Inputs for connection of external load controllers						
Heat request (ON/OFF), see also *Digital inputs*	●	●	●	●	●	●
Stage 2 or OPEN with 3-position controller, see also *Digital inputs*	●	●	●	●	●	●
Stage 3 or CLOSE with 3-position controller (stage 3 = OPEN and CLOSE), see also *Digital inputs*	●	●	●	●	●	●
Analog signal input for preset output		●	●	●	●	●
Preset output via Modbus (AZL5...) of BACS	●	●	●	●	●	●
Internal load controller, connections and functions						
Preset output or preset setpoint DC 0...10 V, DC 2...10 V, 0...20 mA or 4...20 mA		●	●	●	●	●
Setpoint changeover		●	●	●	●	●
Temperature or pressure switch input DC 0...10 V, DC 2...10 V, 0...20 mA or 4...20 mA		●	●	●	●	●
Temperature sensor input Pt100		●	●	●	●	●
Temperature sensor input Pt1000 or LG-Ni1000		●	●	●	●	●
Internal adaptive boiler temperature or boiler pressure control function		●	●	●	●	●
Internal temperature switch function		●	●	●	●	●
Cold start shock protection function		●	●	●	●	●
Analog outputs						
Current burner output 4...20 mA		●	●	●	●	●
Burner output, O2 value, temperature, pressure, flame, power or other adjustable values, 0...20 mA or 4...20 mA		●	●	●	●	●
VSD, connections and functions						
Output: VSD control 0...20 mA or 4...20 mA			●	●	●	●
Output: VSD release contact potential-free			●	●	●	●
Inputs: Feedback of fan motor's current speed, e.g. via accessory set AGG5.31...			●	●	●	●
Input: Alarm message from VSD (DC 12...24 V)			●	●	●	●
Additional air pressure switch for VSD operation is possible			●	●	●	●

Functions (cont'd)

	LMV51.0	LMV51.1	LMV51.3	LMV50…	LMV52.2	LMV52.4
Meters and counter / statistics functions						
Fuel meter oil (input on the VSD's PBC)			●	●	●	●
Fuel meter gas (input of the VSD's PBC)			●	●	●	●
Hours run meter separately for oil and gas	●	●	●	●	●	●
Startup counter separately for oil/gas	●	●	●	●	●	●
Error message counter	●	●	●	●	●	●
Error history	●	●	●	●	●	●
Life cycle display	●	●	●	●	●	●
Residual oxygen (O2) trim control together with PLL52... and QGO20...						
O2 trim control function					●	●
Input for On/Off switching of O2 control					●	●
Specific O2 control functions for Super Low NOx burner (Mesh burner)						●
O2 limit function					●	●
Combustion air and flue gas temperature detection together with PLL52						
Warning when flue gas temperature is too high					●	●
Calculation of technical combustion efficiency factor					●	●
Flue gas feedback function						
With time or temperature threshold			●	●	●	●
Temperature-compensated						●
Other functions						
Alarm with start prevention	●	●	●	●	●	●
Gas shortage program	●	●	●	●	●	●
Program stop function	●	●	●	●	●	●
Forced intermittent operation (can be deactivated)	●	●	●	●	●	●
Partial load shutdown	●	●	●	●	●	●
Continuous fan operation	●	●	●	●	●	●
Temperature limiter		●	●	●	●	●
Cold start thermo shock protection		●	●	●	●	●
Auxiliary actuator (can be deactivated)	●	●	●	●	●	●
Actuators (can be deactivated)	●	●	●	●	●	●
Startup of low-fire position beginning in phase 50	●	●	●	●	●	●
Air pressure switch and flue gas recirculation air pressure switch parameterizable to *don´t care*	●	●	●	●	●	●
Start point operation parameterizable	●	●	●	●	●	●
Long postpurge time (tn3) parameterizable				●		●

Functions (cont'd)

	LMV51.0	LMV51.1	LMV51.3	LMV50…	LMV52.2	LMV52.4
Display and operating unit AZL5...						
Parameter setting and display functions	●	●	●	●	●	●
Storage of fault and error history	●	●	●	●	●	●
Real time clock with backup (e.g. to acquire the points in time faults occur)	●	●	●	●	●	●
Contrast of display (can be set)	●	●	●	●	●	●
User language (can be selected) (several language groups available, each with a maximum of 6 languages)	●	●	●	●	●	●
Shutdown by pressing a combination of buttons	●	●	●	●	●	●
Reset	●	●	●	●	●	●
Parameter backup and restore function	●	●	●	●	●	●
Update of AZL5... software	●	●	●	●	●	●
4 access levels, 3 of them with password protection	●	●	●	●	●	●
Display of technical combustion efficiency factor (if combustion air and flue gas temperature sensors have been connected)					●	●
Communication interface of AZL5...						
RS-232 for operation via PC and software ACS450	●	●	●	●	●	●
Modbus, eBus or data output interface for connection to building automation systems or for data output	●	●	●	●	●	●
Industry variant with specific functions						
High-temperature operation • No flame supervision and prepurging if combustion chamber temperature >750 °C • Instead of flame supervision, temperature supervision takes place via an external safety limit thermostat				●		
Maximum times for safety time 1 and safety time 2 (TSA1/TSA2), are parameterizable to 5 seconds for gas or 10 seconds for oil				●		
Repetition parameterizable in the case of *no flame at end of safety time 1*				●		
Cooling function in standby mode The cooling function is started by a mains voltage signal at input X5-03 Pin 3: - The fan is switched on and is monitored as in the case of *continuous purging* - The air-setting drives are moved to their postpurge positions.				●		

Burner management system

LMV5...

Service tool

ACS450

Display and operating unit

AZL52...

Actuators

SQM4...

SQM9...

Sensors and detectors

Temperature sensor

FGT-Pt1000

QAE21...

Pressure sensor

QBE2002-P...

O2 sensor

QGO20...

Intermittent operation

Only for AC 230 V: Ionization alternatively with AGQ1...

QRA2...

QRA4...

QRA10...

QRB...

Continuous operation

Ionization

QRA7...

QRI...

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Burner management system

LMV50 (industry variants)
As LMV51, but …
- with load controller
- with VSD operation
- with flue gas recirculation function without temperature compensation
- with industry-specific functions, such as e.g. high-temperature operation

LMV51…
Burner control with integrated fuel-air ratio control for a maximum of 4 actuators and load control for forced draft burners.
LMV5… is a burner management system including a microprocessor-based burner control with matching system components for the control and supervision of forced draft oil or gas burners of medium to high capacity.

LMV51.0...
Same as LMV51..., but
- without load controller

LMV51.1...
Same as LMV51, but ...
- with load controller

LMV51.3...
Same as LMV51..., but
- with load controller
- with VSD operation
- with flue gas feedback function without temperature compensation

LMV52…
Burner control with integrated fuel-air ratio control for a maximum of 6 actuators and a VSD for the fan, plus load control for forced draft burners with additional O2 trim control.
LMV5… is a burner management system including a microprocessor-based burner control with matching system components for the control and supervision of forced draft oil or gas burners of medium to high capacity.

LMV52.2...
Same as LMV52..., but
- with load controller
- with VSD operation
- with flue gas feedback function without temperature compensation
- with O2 trim control (with PLL52... and QGO20...)

LMV52.4...
Same as LMV52..., but
- with load controller
- with VSD operation
- with flue gas feedback function with temperature compensation
- with O2 trim control (with PLL52... and QGO20...)
- with specific O2 control functions for Super Low NOx burner (Mesh burner)

Overview	Product no. (ASN)	Parameter set	Mains voltage
LMV50.3 (industry variant) - with load controller - with VSD operation - with flue gas recirculation function without temperature compensation - with industry-specific functions, such as e.g. high-temperature operation	LMV50.320B2	Industry	AC 230 V
LMV51.0... without load controller	LMV51.000C2	Europe	AC 230 V
	LMV51.040C1	US / Canada	AC 120 V
LMV51.1... with load controller	LMV51.100C1	Europe	AC 120 V
	LMV51.100C2	Europe	AC 230 V
	LMV51.140C1	US / Canada	AC 120 V
LMV51.3... - with load controller - with VSD operation - with flue gas feedback function without temperature compensation	LMV51.300B1	Europe	AC 120 V
	LMV51.300B2	Europe	AC 230 V
	LMV51.340B1	US / Canada	AC 120 V
LMV52.2... - with load controller - with VSD operation - with flue gas feedback function without temperature compensation - with O2 trim control (with PLL52... and QGO20...)	LMV52.200B1	Europe	AC 120 V
	LMV52.200B2	Europe	AC 230 V
	LMV52.240B1	US / Canada	AC 120 V
LMV52.4... - with load controller - with VSD operation - with flue gas feedback function with/without temperature compensation - with O2 trim control (with PLL52... and QGO20...) - with specific O2 control functions for Super Low NOx burner (Mesh burner)	LMV52.400B2	Europe	AC 230 V
	LMV52.440B1	US / Canada	AC 120 V

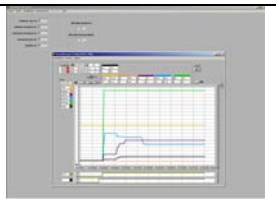
O2 module

PLL52.110A100
CAN bus module for O2 trim control with LMV52..., AC 120 V, for use with QGO20..., inputs for flue gas and combustion air temperature.

PLL52.110A200
CAN bus module for O2 trim control with LMV52..., AC 230 V, for use with QGO20..., inputs for flue gas and combustion air temperature.

Service tool

ACS450
PC tool for convenient programming and burner settings, process visualization, data recording, AZL5..., software update AZL5...



Display and operating units

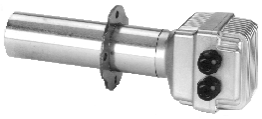
AZL52…
Detached unit for flush panel mounting, with backlit text display, 4 x 16 characters, 4 buttons, real-time clock, Modbus and eBus interface for connection to BACS, 6 languages.

Product no. (ASN)	Country group	Languages
AZL52.00B1	Western Europe 1	English (en), German (de), French (fr), Spanish (es), Italian (it), Portuguese (pt)
AZL52.01B1	Eastern Europe 1	English (en), Polish (pl), Hungarian (hu), Czech (cs), Croatian (hr), Slovenian (sl)
AZL52.02B1	Western Europe 2	English (en), Dutch (nl), Danish (da), Swedish (sv), Norwegian (no), Finnish (fi)
AZL52.09B1	Eastern Europe Cyrillic	English (en), Russian (ru), German (de) Bulgarian (bg), Turkish (tr), Romanian (ro)
AZL52.40B1	Western Europe 1 (American parameter sets)	English (en), German (de), French (fr), Spanish (es), Italian (it), Portuguese (pt)

The languages for the country groups can be exchanged with an update of ACS450 (without Eastern Europe Cyrillic).

Sensors and detectors

QGO20...
O2 sensors, the QGO20... are used for acquiring the residual oxygen content in flue gases of natural gas or light oil combustion plant. Together with the control unit, the QGO20... monitors and controls the combustion process.



QRA2…
UV flame detectors, the QRA2... are used for the supervision of gas flames, yellow- / blue-burning oil flames and ignition spark proving in connection with LMV5… burner controls.

QRA4...
UV flame detector, the QRA4... are used for the supervision of gas flames, yellow- / blue-burning oil flames and ignition spark proving in connection with LMV5… burner controls.

QRA7…
UV flame detectors, the QRA7... are used for the supervision of gas flames, yellow- / blue-burning oil flames and ignition spark proving in connection with LMV5… burner controls.

QRA10…
UV flame detectors, the QRA10... are used for the supervision of gas flames, yellow- / blue-burning oil flames and ignition spark proving in connection with LMV5… burner controls.

QRB1…
Photoresistive flame detectors for the supervision of yellow-burning oil flames in connection with LMV5…burner controls, suited for frontal or lateral (90°) illumination.

QRB3…
Photoresistive flame detectors; the QRB3... are used for the supervision of yellow-burning oil flames in connection with LMV5…burner controls, suited for frontal or lateral (90°) illumination.

Sensors and detectors

QRI2A2...
Infrared flame detectors, universal detectors for oil and gas flames, suited for both intermittent and continuous operation, with integrated flame signal amplifier and prefabricated connecting cable of 180 cm, **frontal illumination**.

QRI2B2...
Infrared flame detectors, universal detectors for oil and gas flames, suited for both intermittent and continuous operation, with integrated flame signal amplifier and prefabricated connecting cable of 180 cm, **lateral illumination**.

QAE21…
Immersion temperature sensors, passive sensor for acquiring the water temperature in pipes and vessels.

FGT-PT1000
Flue gas temperature sensor for acquiring the flue gas temperature in heating plant.

QBE2002-P...
Pressure sensors, for acquiring static and dynamic positive pressures in heating, ventilation or air conditioning plants, particularly in hydraulic and pneumatic systems using liquid or gaseous media (steam applications).

Actuators

SQM45.291A9
Actuator, rated torque **3 Nm** (reduced holding torque 1.5 Nm), running time 10...120 s, control and feedback signal via CAN bus, stepper motor, front mounting, groove for Woodruff key.

SQM45.295A9
Actuator, rated torque **3 Nm** (reduced holding torque 1.5 Nm), running time 10...120 s, control and feedback signal via CAN bus, stepper motor, front mounting, drive shaft type D.

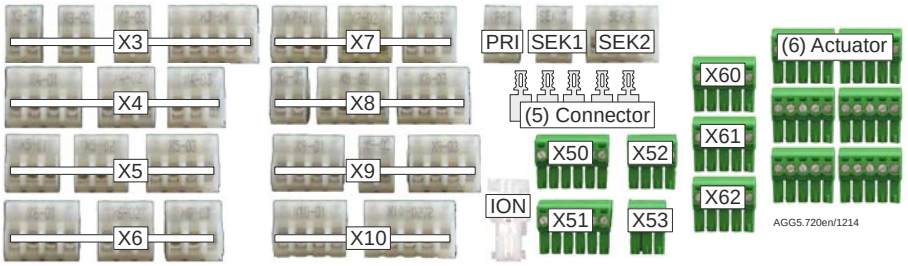
SQM48.497A9
Actuator, rated torque **20 Nm**, running time 30...120 s, control and feedback signal via CAN bus, stepper motor, front mounting, groove for parallel key.

SQM48.697A9
Actuator, rated torque **35 Nm**, running time 60...120 s, control and feedback signal via CAN bus, stepper motor, front mounting, groove for parallel key.

SQM91.391A9
Actuator, rated torque **up to 60 Nm**,
running time 30...120 s, control and feedback signal via CAN bus, stepper motor, front mounting, groove for parallel key.

Connector sets

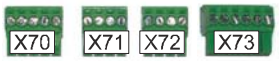
AGG5.720
Standard connector set LMV5... for gas/oil applications with up to 3 actuators.



AGG5.721
Extension connector set LMV5... (complementing AGG5.720, all connection options covered).

Power transformer
AGG5.2…

Flame detector
QRB…



- VSD
- Fuel meter

Actuator
SQM45…
SQM48…
SQM9…

Type	Type of plug	Terminal	Example
AGG9.202	RAST5	X3-01	
AGG9.203	RAST5	X3-02	
AGG9.204	RAST5	X3-03	
AGG9.205	RAST5	X8-01	
AGG9.207	RAST5	X9-02	
AGG9.208	RAST5	X10-03	
AGG9.218	RAST5	Primary I	
AGG9.219	RAST5	Secondary I	
AGG9.304	RAST5	X4-02	
AGG9.305	RAST5	X4-03	
AGG9.306	RAST5	X5-01	
AGG9.307	RAST5	X5-02	
AGG9.308	RAST5	X6-02	
AGG9.309	RAST5	X6-03	
AGG9.310	RAST5	X7-01	
AGG9.311	RAST5	X7-02	
AGG9.312	RAST5	X7-03	
AGG9.402	RAST5	X4-01	
AGG9.403	RAST5	X5-03	
AGG9.404	RAST5	X6-01	
AGG9.406	RAST5	X8-02	
AGG9.407	RAST5	X8-03	
AGG9.408	RAST5	X9-01	
AGG9.409	RAST5	X9-03	
AGG9.410	RAST5	X10-01	
AGG9.417	RAST5	Secondary II	
AGG9.501	RAST5	X3-04	
AGG9.502	RAST5	X10-02 pin 1	
AGG9.503	RAST5	X10-02 pin 2	
AGG9.831	RAST3.5	3-pole	
AGG9.841	RAST3.5	4-pole	
AGG9.853	RAST3.5	5-pole	
AGG9.861	RAST3.5	6-pole	

X5-03

Accessories

AGG5.110
CAN bus connection shield, angled, for connecting the CAN bus to the basic unit.

AGG5.210
Mains transformer for AC 120 V mains voltage, for CAN bus users, capacity matched to LMV5... system.

AGG5.220
Mains transformer for AC 230 V mains voltage, for CAN bus users, capacity matched to LMV5... system.

AGG5.310
Speed sensor kit for LMV51.2... and LMV52... systems, consisting of sensor disk 50 mm dia., sensor and mounting kit.

AGG5.315
Speed sensor kit for LMV51.2... and LMV52... systems, consisting of sensor disk 92 mm dia., sensor and mounting kit.

KF8893…
Demo case with LMV5... system, including LMV51.100B…, AZL52.00B1, 2 x SQM45.295A9, AGG5.2…, operating buttons for simulation, electronic simulation of controller system, burner graphics and LEDs.
Supplier: Klein Solutions, Kanadastr. 4, D-58675 Hemer

AGO20...
Flue gas collector, accessory for O2 sensor QGO20... for use with LMV52... systems.

AGQ1.2
UV adapter, ancillary unit for UV supervision, cable length 300 mm

AGQ1.3
UV adapter, ancillary unit for UV supervision, cable length 350 mm / 1200 mm

Accessories (cont'd)

Cables

AGG5.631
- CAN bus connecting cable between LMV5... and system components
- Shielded 5-core cable
- Feed lines 2 x 0.5 mm²
- Length 100 m

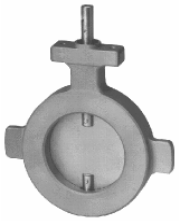
AGG5.641
- CAN bus connecting cable between LMV5... and system components
- Shielded 5-core cable
- Feed lines 2 x 1,25 mm²
- Length 100 m

AGG5.633
CAN bus connection cable between basic unit and AZL5, complete with RAST3.5 plug and Sub-D connector (45°, angled), cable length 1 m.

AGG5.635
CAN bus connection cable between basic unit and AZL5, complete with RAST3.5 plug and Sub-D plug (straight), cable length 3 m.

Gas damper with mounting kit

VKF41…C
Butterfly valves



ASK33.4
Mounting kit for fitting SQM45.295A9 to butterfly valve VKF41...C

Transformer

A5Q20002669
Transformer to increase ionization voltage for AC 120 V devices

Available documentation

Product no. (ASN)	Description	Documentation no.
A5Q20002669	Ionization current supervision for AC 120 V automatic units	CC1A7541.2
ACS450	PC tool, software	CC1J7550
AGG5.110	CAN bus connection shield	CC1P7550
AGG5.210	Mains transformer	CC1P7550
AGG5.220	Mains transformer	CC1P7550
AGG5.310	Accessory kit speed acquisition	CC1M7550.1
AGG5.315	Inductive sensor	CC1P7550
AGG5.631	CAN bus connecting cable	CC1P7550
AGG5.635	CAN bus connecting cable	CC1P7550
AGG5.641	CAN bus connecting cable	CC1P7550
AGG5.720	Standard connector set	CC1P7550
AGG5.721	Extended connector set	CC1P7550
AGO20…	Flue gas collectors	CC1N7842
AGQ1.2...	UV adapter	CC1P7550
AGQ1.3...	UV adapter	CC1P7550
ASK33.4	Mounting kit	74 319 0916 0
AZL52…	**Display and operating units**	
	AZL52... Modbus User Manual	CC1A7550
	LMV5 User Documentation	A7550.1
	LMV5 User Documentation	A7550.3
	LMV5 User Documentation	A7550.4
	LMV52 User Documentation	A7550.5
	AZL52... / LMV50... User Manual heating expert	CC1U7550.4
	AZL52... / LMV50... User Manual end user	CC1U7550.5
	AZL52... / LMV51... User Manual heating expert	CC1U7550
	AZL52... / LMV51... User Manual end user	CC1U7550.1
	AZL52... / LMV52... User Manual end user	CC1U7550.2
	AZL52... / LMV52... User Manual heating expert	CC1U7550.3
	Communication via Modbus with S7	CC1J7553
	Communication via Modbus with S7-1200	CC1J7556
FGT-Pt1000	Flue gas temperature sensor	CE1N1846
KF8893…	Demo case	CC1B7988
LMV5…	**Burner management system**	
	Setting and error lists	CC1I7550
	Data Sheet	CC1N7550
	Basic Documentation	CC1P7550
	Product range	CC1Q7550
	Installation basics	CC1J7550.1
QAE21…	Immersion temperature sensors	CE1N1781
QBE2002-P…	Pressure sensors	CE1N1909
QGO20…	**O2 sensors**	
	Data Sheet	CC1N7842
	Basic Documentation	CC1P7842
QRA2…	UV flame detectors	CC1N7712
QRA4...	UV flame detector	CC1N7711
QRA7…	UV flame detectors	CC1N7712
QRA10…	UV flame detectors	CC1N7712
QRB1…	Photoresistive flame detectors	CC1N7714
QRB3…	Photoresistive flame detectors	CC1N7714
QRI2…	Infrared flame detectors	CC1N7719

PLL52…	CAN bus modules	CC1P7550
SQM4…	Actuators	CC1N7814
SQM9...	Actuators	CC1N7818
VKF41...	Double dampers	CC1N7632
	Assembly of a gas damper VKF41	74 319 0916 0