



LME – user-friendly burner controls

Highlights

- Program versions for atmospheric and forced draft gas burners
- Multicolor indication of operating status and fault status messages
- Controlled intermittent mode after 24 hours of continuous operation
- Limitation of the number of repetitions
- Remote reset facility
- Times can be parameterized
- Suitable for applications according to EN676 or EN746-2
- Approvals based on AGA and EN298:2012

LME burner controls ensure reliable operation and supervision of 1- or 2-stage gas burners with intermittent operation. The products have proven their reliability since many years and excel in a high level of safety while offering ease of operation.

Burner controls of the LME line feature a redundant, 2-channel microprocessor system and 2 independent shutdown paths for safety-related functions. An ionization probe or UV sensor is used for flame supervision.

Finally the PC software tool ACS410, for data analysis and parameterization, completes the range. The PC tool can be used with all product variants.

Technical data (extract)

For further information, see data sheets CC1N7101 and CC1N7106.

Mains voltage	AC 120 V +10 % / -15 % AC 230 V +10 % / -15 %
Perm. cable length ION	Max. 1 m at 100 pF/m line capacitance Max. 3 m at 15 pF/m line capacitance
Perm. cable length from QRA... to AGQ3...A27	Max. 20 m at 100 pF/m (lay separate cable)
Remote reset/alarm	Max. 20 m at 100 pF/m (lay separate cable)
Cable length UV-sensor QRC	Bis 700 mm
Cable lengths to valves/fan/LP	Max. 3 m at 100 pF/m

Power and performance in a small package

The AZL2 display and operator units are designed for use with LME39 burner controls to be mounted directly on the burner or in control panels close to the burner.

They are designed for the display, operation and parameterization of specific safety and non-safety-related burner functions. Key plant data and lockout codes can be called up and displayed.

Alternatively the ACS410 software tool can be used with all standalone LME burner controls. It serves as a tool to display data, to set parameters and to store data.

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



ISO 9001: 2008
ISO 14001: 2004



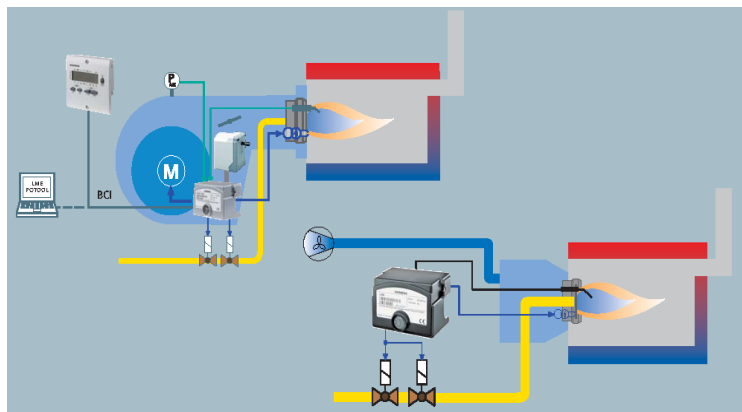
Type reference (extract)

Without information to plug-in bases and flame detectors. For further information, see data sheets CC1N7101 and CC1N7106.

Flame detector	Type reference	Mains voltage	Prepurge/Purge min. s	Safety time max. s	Preignition time approx. s
Burner controls for 1-stage burners (up to 120 kW output)					
Ionization probe (ION)	LME11.230C2	AC 230V	20	3	2
	LME11.330C2	AC 230V	30	3	2
Burner controls for 2-stage burners, without actuator control					
Ionization probe (ION) or flame detector QRA... ¹⁾ with AGQ3...A27	LME21.130C2	AC 230 V	7	3	2
	LME21.230C2	AC 230 V	20	3	2
	LME21.330C2	AC 230 V	30	3	2
	LME21.350C2	AC 230 V	30	5	2
Burner controls for 2-stage burners, with actuator control					
Ionization probe (ION) or flame detector QRA... ¹⁾ with AGQ3...A27	LME22.131C2	AC 230 V	7	3	3
	LME22.232C2	AC 230 V	20	3	3
	LME22.331C2	AC 230 V	30	3	3
Blue flame detector QRC...	LME23.331C2	AC 230 V	30	3	3
	LME23.351C2	AC 230 V	30	5	1
Burner controls for atmospheric burners					
Ionization probe (ION) or flame detector QRA... ¹⁾ with AGQ3...A27	LME41.051C2	AC 230 V	1	5	1
	LME41.053C2	AC 230 V	10	5	1
	LME41.091C2	AC 230 V	1	10	10
	LME44.05xC2	AC 230 V	9	5	2
Burner controls for 2-stage burners, with actuator control and communication					
Ionization probe (ION) or flame detector QRA... ¹⁾ with AGQ3...A27	LME39.100C2	AC 230 V	Times can be parameterized		
			0...75	1...5	1...38
Burner controls for atmospheric, 2-stage burners without actuator control, with communication					
Ionization probe (ION) or flame detector QRA... ¹⁾ with AGQ3...A27	LME39.400C2	AC 230 V	Times can be parameterized		
			0...75	1...5	1...38

1)only for AC 230 V

Overview of burner systems with LME burner controls



Diagnostic possibilities of the LME burner controls

Color code table for multicolor signal lamp (LED)

Status	Color code	Color
Waiting time «tw», other waiting states	○ (Off).....	Off
Ignition phase, ignition controlled	● ○ ● ○ ● ○ ● ○	Flashing yellow
Operation, flame o.k.	□.....	Green
Operation, flame not o.k.	□ ○ □ ○ □ ○ □ ○	Flashing green
Extraneous light on burner startup	□ ▲ □ ▲ □ ▲ □ ▲	Green-red
Undervoltage	● ▲ ● ▲ ● ▲ ● ▲	Yellow-red
Fault, alarm	▲.....	Red
Error code output (press 3 s reset button)*	▲ ○ ▲ ○ ▲ ○	Flashing red
Interface diagnostics (press 2 x 3 s reset button)	▲ ▲ ▲ ▲ ▲ ▲	Red flicker light

* Error code table

Red blink code	Possible cause
2 x blinks	No establishment of flame at the end of «TSA»
3 x blinks	«LP» (air pressure switch) faulty
4 x blinks	Extraneous light when burner startup
5 x blinks	Time out «LP» (air pressure switch)
7 x blinks	Too many losses of flame during operation
10 x blinks	Wiring error or internal error, miscellaneous errors
14 x blinks	CPI contact not closed

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