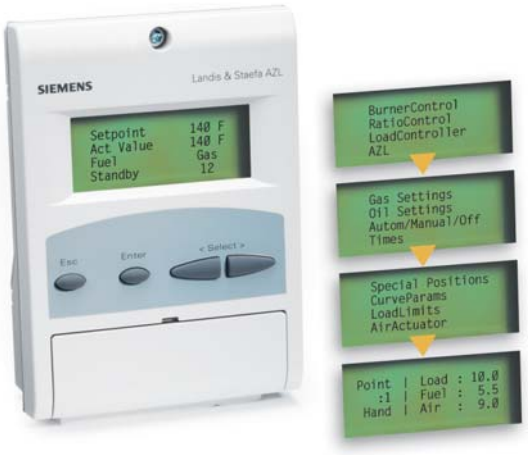
SIEMENS

Building Technologies

LMV... Linkageless Burner Management System

World-class system, support and performance

The LMV... Linkageless Burner Management System sets the standard high – from easy installation, programming and commissioning to reliable, proven control. Quite frankly, it is all about the control. With the LMV, Siemens forges new ground delivering a fully integrated system that is not only easy to install and use, but also provides improved burner performance and efficiency, and ensures accurate control and safe operation.



The AZL Display interfaces with the system for fast, easy programming, at-a-glance monitoring, and alert and troublshooting for alarm conditions.

Fully integrated user interface is easy to use and program

Programming and commissioning of the LMV takes minutes, not days – so you get up and running fast. Use the AZL Programming/ Annunciator Display, an easy-to-use touch pad, for monitoring or programming your system. Simply log in, select the programming option from the menu, and define the specific parameters. It is that easy.

For fast, at-a-glance monitoring, the AZL displays and annunciates the current burner status at all times, including flame signal strength, firing rate and set point. For alarm conditions, view the lockout and fault history in plain text for fast response to critical situations. Because the AZL Display is fully integrated with the system for monitoring or troubleshooting – there is no need to interface with a PC.

- User-friendly, menu system for fast programming and startup
- Quickly access and monitor the system at all times
- Annunciation of fault conditions for fast troubleshooting
- Multi-level password protection for added security
- Communicates in real-time with building management or other supervisory system(s)

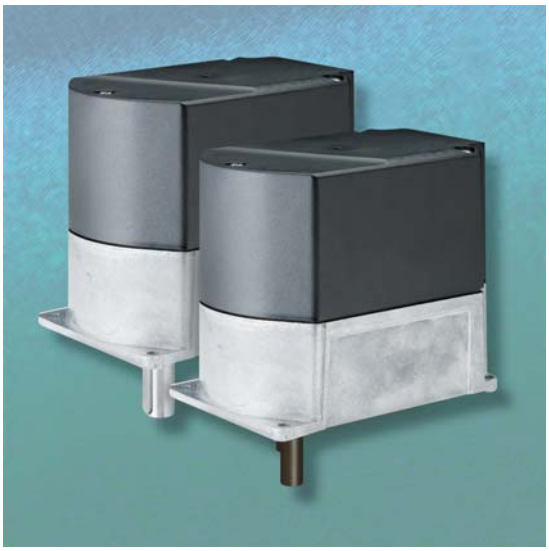
Key features and benefits include:

- Completely integrated burner control with fully modulating flame safeguard from a single source
- Integrated fuel-air ratio control system with single or dual-fuel applications for greater flexibility
- Controls up to six independent actuators for optimal efficiency in low NOx burner applications
- Integrated gas valve proving system that checks for leaks on every burner cycle for maximum safety
- High accuracy and resolution with 900 highly repeatable actuator positions for efficient operation
- Digital positioning feedback from actuators ensure precise control, unmatched repeatability and proven reliability
- Up to 15 programmable points per fuel-air ratio curve for greater flexibility and tighter control
- Independent ignition position for greater flexibility
- Annunciation of over 500 standard faults allowing fast response to trouble conditions
- Integrated PID Temperature/Pressure Controller with autotune for extremely accurate control
- VFD control with actual motor RPM speed sensor provides reliable, efficient and safe control of the combustion air blower
- World-wide approvals and technical support

Accuracy is the key to control

SQM4 Linkageless Actuators provide extreme accuracy for your burner. Driven by a digital can-bus signal, the actuator's movement is highly accurate to 1/10th of one degree. A digital feedback signal ensures the correct position is maintained throughout the actuator's modulating range.

If an actuator should fall out of position, the LMV Burner Management System automatically locks out. This tight control ensures that the burner will always perform with repeatability and accuracy as well as within the recommended safety parameters. Available in three torque ranges, 27, 180 and 360 in.-lbs., the SQM4 actuators can handle your toughest control needs.



The SQM actuators are available in torque ranges of 27, 180 or 360 in.-lbs. for highly accurate and reliable control.

Reliable flame monitoring for safe operation

The solid-state flame detector continuously monitors the flame and filters line voltage frequencies to prevent detection of the spark or its reflection. The detector is self-checking and approved for use on burners that operate on a continuous basis. The self-checking function has no moving parts to ensure reliable operation and long-life. UV self-checking flame detector is also available.

More options for saving energy and expense

High impact options deliver even tighter control to meet your specific control needs, improve process control and reduce energy costs.

O_2 Trim System

Featuring a proven Zirconium Dioxide analyzer, the O_2 Trim System provides continuous adjustment of the fuel-air ratio by constantly monitoring the levels of O_2 in the exhaust gases. To meet your specific control needs, the system has an adjustable O_2 alarm curve and combustion efficiency calculator. The Siemens O_2 Sensor is extremely reliable with no moving parts for longer operating life.

Variable Frequency Drive and VFD Sensor

The VFD control with actual motor RPM speed sensor reduces electrical costs through more efficient control of the combustion blower as well as ensuring safe operation.

Commissioning Tool

The Windows-based ACS450 Commissioning Tool allows you to:

- view real-time data
- set up control parameters
- adjust fuel-to-air ratio curves
- trend, log and print data.

While this tool offers additional capability to store and print data for analysis, it is not required for commissioning or operation.

The 0_2 Trim System optimizes control of the burner and reduces energy costs.

www.siemens.com/hvp/combustion

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