## **SIEMENS**

## LMV... Linkageless Burner Management Systems



#### LMV...

#### **Burner Control**

#### LMV51 or LMV52 standard features:

Advanced flame safeguard functionality
Linkageless actuators for air, gas, oil, FGR ...
High accuracy and resolution - 900 repeatable motor positions
Integrated valve proving system
Single or dual fuel applications
15 Programmable points per curve
Ignition position independent of the curves
Annunciation of all standard points – over 100 terminals on base!
4 Password levels: End-user, Installer, Burner manufacturer, Siemens
Autotune PID temperature or pressure controller

Upload and download parameters, between the LMV51, AZL and PC Components match the system, all parts manufactured by Siemens Remote diagnostics

Adjustable programming times for purge, trial-for-ignition, pilot, etc. Worldwide Approvals

NO PC REQUIRED to program

#### LMV52 features:

Control from 1 to 6 actuators Optional oxygen trim system Optional variable speed drive Input for fuel meters (oil and gas)



## SQM

#### **Actuator**

#### Main features:

Maximum angular rotation of 90°
Programmable clockwise or counter clockwise
24 volt AC (Powered from LMV transformer)
No user pot adjustments required!
Stepper motor controlled by digital signals
Positioning and speed controlled by the LMV51 System Bus
Position indication is via the AZL display-unit
900 motor positions in 90° of rotation

Model	<b>Drive torque</b>	Programmable running time
SQM45	25 in-lbs	10 to 120 sec
SQM48.4	175 in-lbs	30 to 120 sec
SQM48.6	350 in-lbs	60 to 120 sec



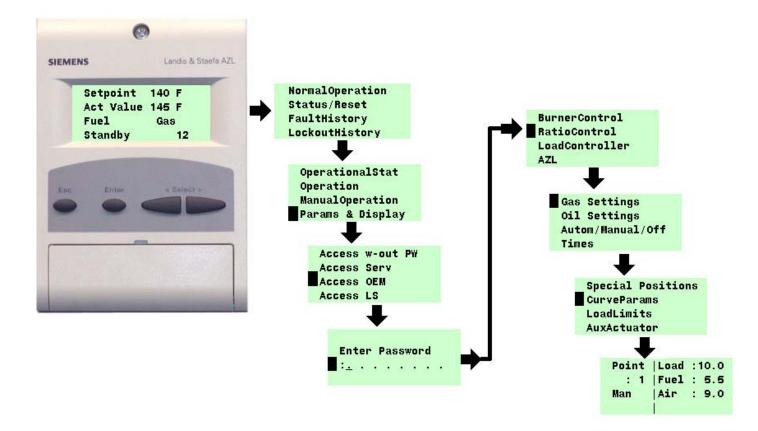
#### **AZL**

## Display / Operating Unit

#### Main features:

Access and configure all parameters
NO PC REQUIRED to program
Clear text display (4 lines x 16 characters)
User friendly, intuitive menu system
Multiple languages - including, English, German, and French
ACS 450 port on front for programming
MODBUS® port on back for communication to BMS or PLC systems
Quick removal mounting screws

#### Menu, curve programming example:



### **QRI**

#### Flame scanner

#### Main features:

High sensitivity Infrared flame detector for gas and oil Filters out glowing refractory and 50/60 Hz lighting Front or side viewing Built-in self checking amplifier for continuous use 3/4" NPT adapter with heat shield



## O<sub>2</sub> Trim System

LMV52 option

#### Main features:

Proven zirconium dioxide analyzer
Continuous adjustment of fuel air ratio
Flue gas oxygen monitoring
Self calibrating sensor and self test diagnostics
Adjustable O<sub>2</sub> alarm level
Optional ambient and flue gas temperature measurement
Optional combustion efficiency calculation



### **VSD** module

Variable speed drive module - LMV52 option

#### Main features:

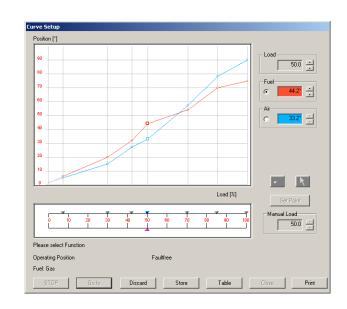
Enables the use of variable frequency drives Actual motor speed detected by sensor Sensor confirms fan direction of rotation



# ACS 450 Commissioning Tool LMV51 or LMV52 option

#### Main features:

Runs under Windows
Normal Operation screen
Curve adjustment with mouse
Allows setting of all parameters
Password protected
Trending and data logging



#### Siemens Building Technologies, Inc.

Tel: (847) 941 5120

Fax: (847) 215 9026

Combustion Burner Boiler 1000 Deerfield Parkway Buffalo Grove, IL 60089-4513