



L61, L62 Series BASO® Safety Shutoff Device

The L61 and L62 Series BASO® Safety Shutoff Devices are for use on all gas-fired, standing pilot equipment that requires main burner shutoff when the pilot is extinguished. Typical applications include domestic central heating and commercial space heating appliances, as well as industrial processing equipment (for example, die-casting machines and degreasers).

The L61 and L62 monitor the pilot flame through the use of a thermocouple

In 100% shutoff model L62GB applications, if the pilot flame is extinguished, the switch will interrupt gas flow to the main burner and pilot burner, shutting down the appliance.

In Non-100% shutoff models L61LL and L62AA applications, if the pilot flame is extinguished, the switch will interrupt gas flow to the **main burner only**, shutting down the appliance. **Pilot gas will continue to flow until the pilot gas is manually shut off.**



Figure 1: L61 and L62 Safety Shutoff Devices

Features and Benefits	
Automatic Resetting (L61LL-1 Only)	Eliminates the need to manually operate a reset button
Single-Pole, Double-Throw (SPDT) Switching Action (L61LL-1 Only)	Allows use of a signal light or alarm
Electric Interruption (L62AA-5 and L62GB-3 Only)	Allows only pilot gas flow during lighting cycle
Universal Replacement (L62GB-3 Only)	Allows for the replacement of many existing models (BASO Gas Products, Inc. and other manufacturers)

Product Overview

L61

The L61 is an automatic resetting device that opens the main gas valve electrical circuit if the pilot flame is extinguished. Lighting or relighting the pilot burner causes the device to close the main gas valve electrical circuit, allowing the appliance main burner to operate.

The L61 receives its energy from a heated thermocouple. Because the L61 has automatic resetting, minor pilot flame fluctuations, which may cause the device to drop out, will not shut down the appliance permanently. The L61 device will automatically close and restore service upon resumption of a normal pilot flame.

L61 models are available with Single-Pole Double-Throw (SPDT) switching action when an additional switching function, such as a signal light, is desired.

L62

The L62 has a manual reset feature, and is available in models with or without 100% shutoff. The L62 has a thermo-electric power unit assembly that receives its energy from a heated thermocouple. If the pilot flame is extinguished, the main valve circuit is interrupted and gas flow to the main burner (and pilot burner in 100% shutoff model L62GB) is stopped. Both L62 models contain an electric interruption feature that only allows pilot gas flow during the lighting or resetting cycle. When lighting the pilot, the main valve electrical circuit is interrupted until the pilot flame is established and the reset button is released.

Dimensions

Table 1: Dimensions

Part Number	Dimensions					
	Width		Depth		Height	
	in.	mm	in.	mm	in.	mm
L61LL-1	3.4	86	2.2	56	3.9	99
L62AA-5	2.6	66	1.3	33	4.2	107
L62GB-1, 3	2.8	71	2.0	51	3.4	86

Mounting

L62 safety shutoff devices can be mounted in any position; however, the L61 must be mounted in the vertical position only, with the thermocouple connection down.

Both the L61 and L62 can be mounted in any convenient location by fastening the unit to a control panel or to the appliance using the mounting holes on the back of the case.

Table 2: Thermocouple Output

Thermocouple		mV Range	
Lead Type	Turn Down	Normal	Not Less Than
K15	4 mV	20-28	15
K16	4 mV	25-35	17
K17	4 mV	30-40	25
K19	4 mV	25-35	17

Table 3: Power Unit Dropout Range

Series Number	mA Range	
	Low	High
L62AA, L62GB	100	300
L61	75	200

Table 4: L61LL-1 Pull-In Range

mA Range of Power Unit Assembly	
Low	High
220	400

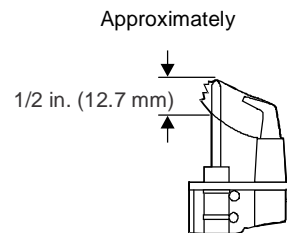


Figure 2: Flame Position

Electrical Ratings

Table 5: L61 Electrical Ratings

Part Number	24/25 VAC	120VAC	240 VAC	Motor Rating 120/240 VAC	Pilot Duty at 120/240 VAC
L61LL-1 Circuit 1-2, NO Contact	*	8 A	4 A	1/4 hp	125 VA
L61LL-1 Circuit 1-3, NC Contact	*	—	—	—	125 VA

* Switches can be used on 24/25 VAC Installations.

Table 6: L62 Electrical Ratings

Part Number	24/25 VAC	125 VAC	250 VAC	230 VDC	Motor Rating 125/250 VAC
L62AA-5	*	8 A	3 A	0.06A	1/4 hp
	24/25 VAC	125 VAC	250 VAC	230 VDC	Pilot Duty at 120/240 VAC
L62GB-1, 3	*	8 A	4 A	—	125 VA

* Switches can be used on 24/25 VAC Installations.

Ordering Information

Table 7: Ordering Information

Part Number	Description
L61LL-1	SPDT Automatic Reset Pilot Switch
L62AA-5	Single-Pole, Single-Throw (SPST) Manual Reset Pilot Switch
L62GB-1	SPST Manual Reset Pilot Switch with 100% Shutoff
L62GB-3	SPST Manual Reset Pilot Switch with 100% Shutoff with Universal Mounting Plate

Technical Specifications

Product	L61LL-1	L62AA-5	L62GB-1, 3
100% Shutoff	No	No	Yes
Conduit Opening	1	1	2, 1 plugged
Maximum Ambient Temperature	150°F (66°C)	150°F (66°C)	175°F (79°C)
Reset	Automatic	Manual	Manual
Switch Action	SPDT	SPST	SPST
Rated Inlet Pressure			0.5 psi (35 mbar)
Type of Gas	Natural	Natural	Natural, Liquefied Petroleum (LP), Manufactured, Mixed, or LP Gas-Air Mixtures
Packaging	Bulk pack supplied to original equipment manufacturer (individual pack optional).		
Bulk Pack Quantity	48	30	30
Weight	65 lb (29.5 kg)	24 lb (10.9 kg)	32 lb (14.5 kg)
Agency Listings			
CSA Certificate Number	229521-1656085	229521-1656085	229521-1656085
UL File Number	MH2926	MH2926	—
Specification Standards			
ANSI Standard	ANSI Standard Z21.20 CAN1-6.4	ANSI Standard Z21.20 CAN1-6.4	ANSI Standard Z21.20 CAN1-6.4
UL Standard	372	372	—

Performance specifications are nominal and conform to acceptable industry standards. All agency certification of BASO products is performed under dry and controlled indoor environmental conditions. Use of BASO products beyond these conditions is not recommended and may void the warranty. Product must be protected if exposed to water (dripping, spraying, rain, etc.) or other harsh environments. The original equipment manufacturer or end user is responsible for the correct application of BASO products. Consult BASO Gas Products LLC for questionable applications. BASO Gas Products LLC shall not be liable for damages or product malfunctions resulting from misapplication or misuse of its products.

Refer to the L61LL-1 BASO Safety Shutoff Device Installation Instructions (Part No. BASO-INS-L61), L62AA BASO Safety Shutoff Device Installation Instructions (Part No. BASO-INS-L62AA), L62GB BASO Safety Shutoff Device Installation Instructions (Part No. BASO-INS-L62GB) for necessary information on the installation, use, and servicing of this product.



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