

## L61, L62 Series BASO® Pilot Switches

The L61 and L62 Series BASO® Pilot Switches are for use on all gas-fired, standing pilot equipment that require 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 (e.g., die-casting machines, degreasers).

The L61 and L62 monitor pilot flame through the use of a thermocouple. If the pilot flame is extinguished, the switch will interrupt gas flow to the main burner (and pilot burner in 100% shutoff models), shutting down the appliance.



Figure 1: L61 and L62 Pilot Switches

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)	Replaces many competitor's models				

### **P**roduct Overview

#### L61

The L61 is an automatic resetting switch that opens the main gas valve electrical circuit if the pilot flame is extinguished. Lighting or relighting the pilot burner causes the switch 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 switch to drop out, will not shut down the appliance permanently. The L61 switch will automatically close and restore service upon resumption of a normal pilot flame.

L61 models are available with 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 in 100% shutoff models) 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.

### imensions

**Table 1: Dimensions** 

Part Number		Dimensions					
Number	Wie	Width Depth				leight	
	mm	in.	mm in.		mm	in.	
L61LL-1	86	3.4	56	2.2	99	3.9	
L62AA-5	67	2.6	33	1.3	107	4.2	
L62GB-3	71	2.8	51	2.0	86	3.4	

## **M**ounting

L62 pilot switches 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.

# **E**lectrical Ratings

**Table 2: Electrical Ratings** 

Part Number	24/25 VAC	125 VAC	250 VAC	230 VDC	Motor Rating 125/250 VAC	Pilot Duty at 120/240 VAC
L61LL-1 (Circuit 1-2 NO Contact)	*	8A	4A		1/4 hp	
L61LL-1 (Circuit 1-3 NC Contact)	*	1				125 VA
L62AA-5	*	8A	3A	0.06A	1/4 hp	
L62GB-3	*	8A	4A			125 VA

<sup>\*</sup> Switches can be used on 24/25 VAC installations.

# **O**rdering Information

**Table 3: Ordering Information** 

Part Number	Description			
L61LL-1	SPDT Automatic Reset Pilot Switch			
L62AA-5	SPST Manual Reset Pilot Switch			
L62GB-3	SPST Manual Reset Pilot Switch with 100% Shutoff			

# **S**pecifications

Product Number	L61LL-1	L62AA-5	L62GB-3		
100% Shutoff	No	No	Yes		
Conduit Opening	1	1 or 2 as Special	2, 1 plugged		
Maximum Ambient Temperature	66°C (150°F)	66°C (150°F)	79°C (175°F)		
Reset	Automatic	Manual	Manual		
Switch Action	SPDT	SPST	SPST		
Packaging	Bulk pack supplied to original equipment manufacturer (individual pack optional).				
Bulk Pack Quantity	48	30	30		
Weight	29.5 kg (65 lb)	10.9 kg (24 lb)	14.5 kg (32 lb)		
Agency Listings					
IAS (AGA/CGA) Certificate Number	C2154018	C2154019	C2154009		
Australian Gas Association Certificate Number	_	_	4167		
UL File Number	MH2926	MH2926	_		
Specification Standards					
ANSI Standard	Z21.20	Z21.20	Z21.20		
UL Standard	372	372	_		

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Refer to the L61, L62 Series Technical Bulletins (LIT-121330, LIT-121331, and LIT-121333) for necessary information on the installation, use, and servicing of this product.



Controls Group 507 E. Michigan Street P.O. Box 423 Milwaukee, WI 53201 www.johnsoncontrols.com FAN 435.0 Heating Line Product Guide Printed in U.S.A.