



INSTALLATION DATA

5225 SERIES

REMOTE BULB LIMIT CONTROLLER

The Robertshaw® 5225 Remote Bulb Limit Controllers are fixed temperature limit controls with special hydraulic sensing elements. This sensing element is designed to activate the controller if a fluid loss should occur in the hydraulic element. The controller will then react the same as if a high limit condition existed. Individual models are available for either automatic (cycling) or manual reset applications.

ELECTRIC OR GAS FRYER APPLICATIONS REQUIRING MANUAL RESET

Manual reset models have SPST switch action. If temperature exceeds fixed setting, the contacts will open. Reset button is a trip-free design, and contacts cannot be latched closed by depressing reset button as long as over-temperature condition exists.

Temperature must drop approximately 50°F below fixed setting before contacts will reset. Contacts on cycling models will reset automatically. Manual reset models require the reset button to be depressed before contacts will close.

GAS FRYER APPLICATIONS REQUIRING AUTOMATIC RESET

Automatic reset or cycling models have SPDT switch action. If temperature exceeds fixed setting, N.C. contacts will open to provide a shut down circuit. N.O. contacts will close and permit use of an alarm system to signal the condition.

ELECTRICAL RATINGS

Model LCH - Manual Reset

Switch action - SPST

30 Amps (resistive load) at 125, 250 or 480V AC

Model LCC - Automatic Reset

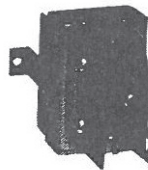
Switch Action - SPDT

25 Amps (resistive load) at 125, 250 or 480V AC

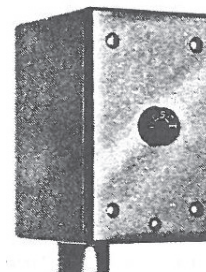
125 VA Pilot Duty at 125, 250V AC

MODEL LCH - MANUAL RESET

Without Case

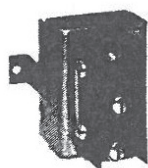


With Case

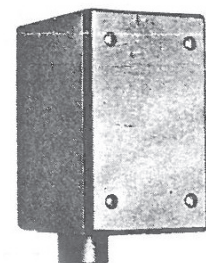


MODEL LCC - AUTOMATIC RESET

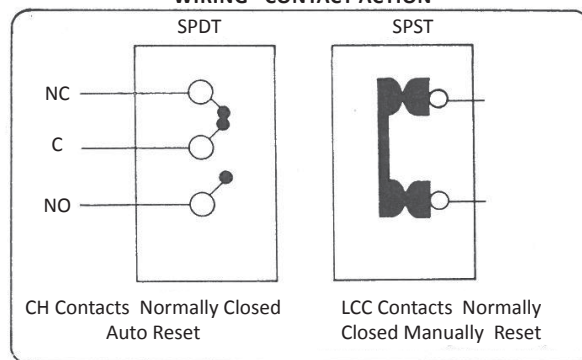
Without Case



With Case



WIRING - CONTACT ACTION



5225 MANUAL RESET MODELS (LCH)

UNI-LINE® NUMBER	TEMPERATURE RANGE (FIXED)	BULB O.D. & LENGTH	CAPILLARY LENGTH	COMMENTS
5225-201	360°F	5/16" x 3-5/8"	36"	Has 3/8" Stuffing Box
5225-006* UNI-KIT	425°F	5/16" x 4" Nickel	60"	Includes Case
5225-106* UNI-KIT				
5225-105				
5225-105	440°F	1/4" x 4-7/8" Nickel	24"	
5225-002	450°F	5/16" x 4" Nickel	60"	Includes Case
5225-102				
5225-202		1/4" x 6-1/2" Nickel	30"	
5225-001* UNI-KIT		5/16" x 4" Nickel	60"	Includes Case
5225-101* UNI-KIT				
5225-005	490°F	1/4" x 6-1/2" Nickel	30"	

5225 AUTOMATIC RESET MODELS (LCC)

5225-007* UNI-KIT	425°F	5/16" x 4" Nickel	60"	Includes Case
5225-107* UNI-KIT				
5225-004	450°F	5/16" x 4" Nickel	60"	Includes Case
5225-104				
5225-003* UNI-KIT				Includes Case
5225-103* UNI-KIT				

*Uni-Kit includes 30" wire leads and a 1922 adaptor for gas applications.



CAUTION

THIS DEVICE SHOULD BE INSTALLED BY A QUALIFIED SERVICE TECHNICIAN WITH DUE REGARD FOR SAFETY AS IMPROPER INSTALLATION COULD RESULT IN A HAZARDOUS CONDITION.

EACH APPLICATION SHOULD BE EVALUATED BY A COMMERCIAL SERVICEMAN BEFORE ATTEMPTING AN INSTALLATION. SELECT THE CORRECT MODEL TO SUIT THE APPLICATION. MOUNT CONTROL IN AN AREA THAT WILL NOT EXCEED 150°F.

ELECTRIC OR GAS FRYER APPLICATIONS REQUIRING MANUAL RESET

Model LCH is ideal for gas or electric fryers. Control has manual reset and SPST switch action. Reset Button is a trip-free design and contacts will reset only when the button is released after being depressed. Should the temperature exceed the fixed setting, contacts will open. Temperature must drop approximately 50° before depressing reset button to return the contacts to the latched closed position.

NOTE: The LCH manual reset type is the recommended model to use for electrical applications as it requires the reset button to be depressed after an over temperature condition, letting the operator know there is an overheat problem.

With electric elements, the Limit Control is wired in series with the operating temperature thermostat. The Limit Control usually cannot carry the load circuit (see electrical rating); therefore, it must be wired in the solenoid coil side of the contactor circuit.

BULB LOCATION AND MOUNTING

CAUTION: Exposing the bulb to temperatures above 575°F will destroy the diastat and voids the warranty.

Bulb location - next to the fryer thermostat bulb. A few short pieces of stainless or nickel wire could be used to strap bulbs together.

Bulb and capillary may be installed by having capillary over top edge of the tank or install a new opening through the side of the tank.

Should a new opening in the side of the tank be desired, care must be used to have a good fit. The 4650-003 Stuffing Box and Tank Adaptor Kit is available to ease the problem of sealing a new opening.

GAS FRYER APPLICATIONS REQUIRING AUTOMATIC RESET

Model LCC is automatic reset or cycling type (no reset button) with SPDT switch action. If temperature exceeds fixed setting, N.C. contacts will open. The N.O. contacts would, in turn, close and could be used to signal the over temperature condition if desired. Temperature must drop approximately 25° before contacts will reset.

NOTE: The LCC automatic reset type is the recommended model to use for gas applications as the electromagnet in the system will have a reset button.

Install the 1922 Adaptor between the electromagnet and the thermocouple.

Using a low-resistance wire, connect the spade ends to the 1922 Adaptor and the other ends to the N.C. terminals on the Limit Control.

BULB LOCATION AND MOUNTING

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Bulb location - next to the fryer thermostat bulb. A few short pieces of stainless or nickel wire could be used to strap bulbs together.

Bulb and capillary may be installed by having capillary over top edge of the tank or install a new opening through the side of the tank.

Should the new opening in the side of the tank be desired, care must be used to have a good fit. The 4650-003 Stuffing Box and Tank Adaptor Kit is available to ease the problem of sealing a new opening.



Customer Service Telephone 1.800.304.6563
Customer Service Facsimile 1.800.426.0804
HVACCustomerService@robertshaw.com

For Technical Service
Telephone 1.800.445.8299
Facsimile 1.630.260.7294
TechnicalService@robertshaw.com

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