



# DESCRIPTION • INSTALLATION • MAINTENANCE INSTRUCTIONS

## ELECTRICAL INTERLOCKS Type L-61

### DESCRIPTION

The construction of the interlock is shown in Fig. 1. All of the contacts, both moving and stationary, are provided with silver buttons to insure low electrical resistance. Isolation of the two circuits controlled by the interlock is afforded by a pushrod construction which comprises two formed steel members firmly molded into a central insulation piece.

Two contact springs insure adequate contact force as the contacts wear. One return spring provides the force necessary to return the pushrod to its normal position.

The pushrod, its two bearing plates, and the moving contacts are of hardened steel assuring long wearing life.

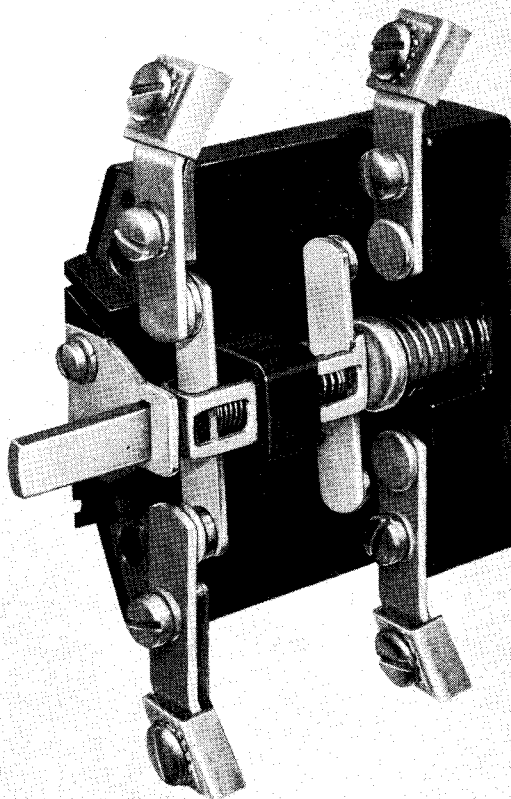


FIG. 1. Type L-61 Interlock—One Contact Normally Open and One Contact Normally Closed

**TYPE L-61 ELECTRICAL INTERLOCK** is an auxiliary switching device designed primarily for mounting on Type M, d-c magnetic contactors rated at 100 to 2500 amperes. It is available in the following combinations:

One contact normally open; one contact normally closed; one contact normally open and one contact normally closed; two contacts normally open or two contacts normally closed.

**Rating.** The interlocks are capable of closing and carrying 10 amperes continuously. Their d-c interrupting capacity is 200 volt-amperes at a maximum of 600 volts.

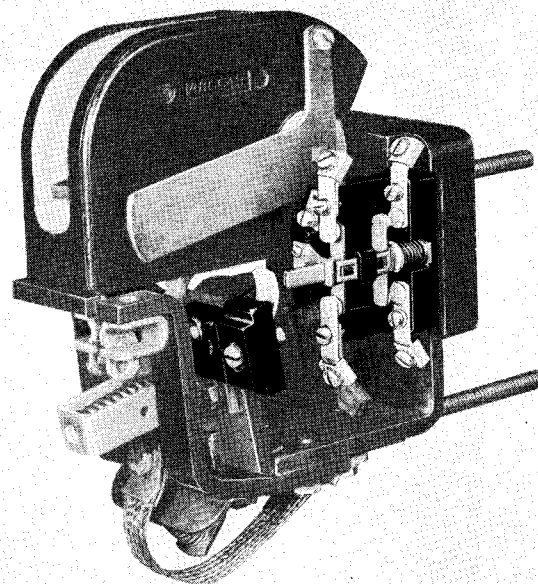


FIG. 2. Type L-61 Electrical Interlock with One Normally Open and One Normally Closed Contact, Mounted on Type M-310 Magnet-Closed Contactor

# **ELECTRICAL INTERLOCKS, TYPE L-61**

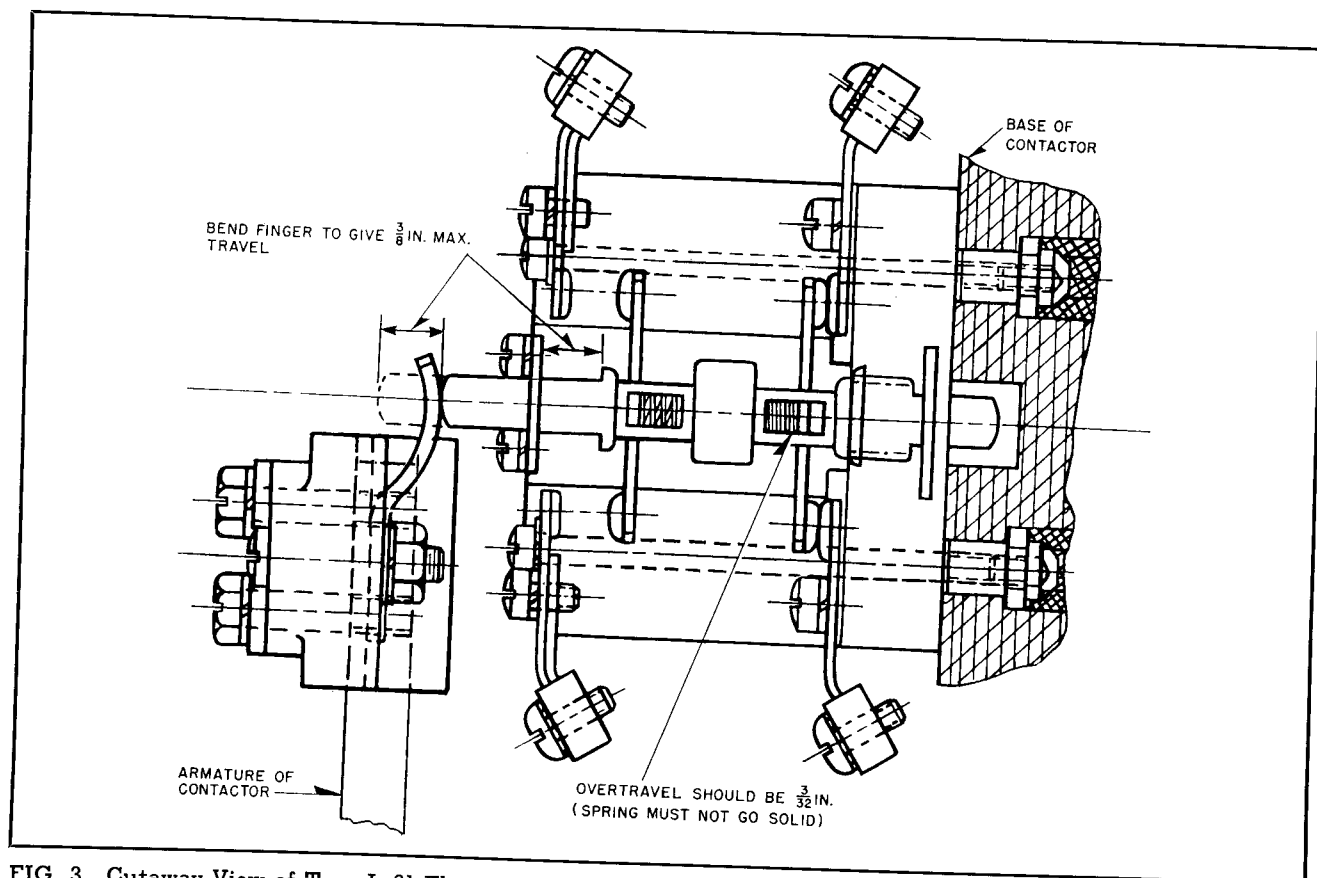


FIG. 3. Cutaway View of Type L-61 Electrical Interlock for Spring-Closed Contactors M-301, M-401, M-501, M-601, M-701 and Magnet-Closed Contactors M-310, M-410, M-510, M-610, M-710

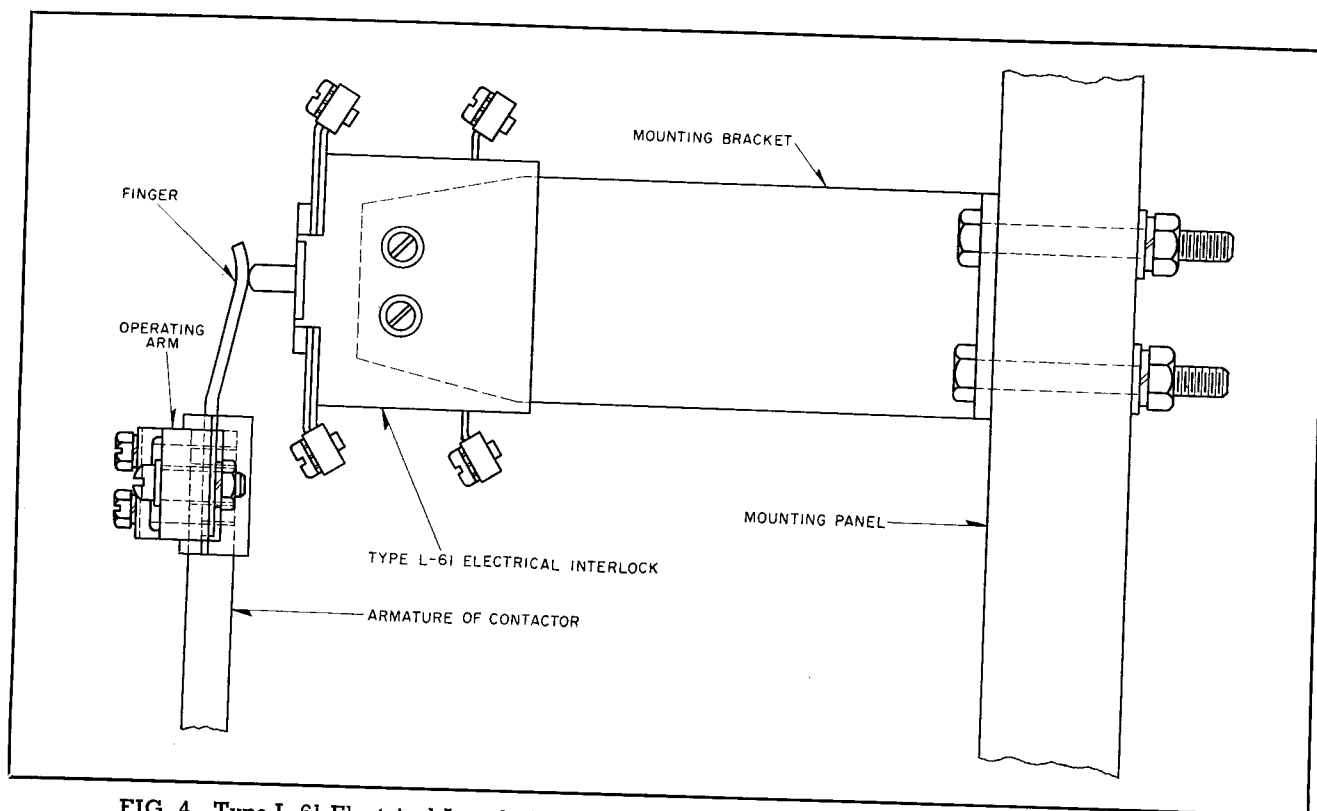


FIG. 4. Type L-61 Electrical Interlock for Magnet-Closed Contactors M-810, M-810-R and M-910

**INSTALLATION AND MAINTENANCE**

The interlock is a unit assembly which mounts on the base of the contactor by means of two screws. The operating finger is carried by an insulation block, which is bolted to the armature plate of the contactor, as shown in Fig. 3.

When used with Type M-810, M-810-R and M-910 contactors, the interlock is mounted on an angle bracket as shown in Fig. 4.

When an interlock and its operating finger are first mounted on the contactor, it may be necessary

to adjust the parts to produce normal travels. This is accomplished by bending the finger to produce  $\frac{3}{8}$  inch total movement of the pushrod. (See Fig. 3). This should represent  $\frac{3}{32}$  inch overtravel of the pushrod beyond the point at which the normally open contacts touch.

Contacts should be replaced when their overtravel is reduced to less than  $\frac{1}{32}$  inch.

A periodic inspection should be made to see that the interlock parts move freely without friction or binding. Oil should not be used on any part of the interlock as it hastens the accumulation of dust.

**TYPE L-61 INTERLOCK APPLICATION TABLE**

*Note: Read headings. Find magnetic contactor in left-hand column. Then select interlock, operating finger and mounting hardware style numbers in same horizontal line.*

TYPE M D-C MAGNETIC CONTACTORS		TYPE L-61 INTERLOCK CONTACT ARRANGEMENT AND STYLE NUMBERS					OPERATING FINGER STYLE NUMBERS		MOUNTING HARDWARE STYLE NUMBERS
		One Normally Open Contact	One Normally Closed Contact	One Normally Open and One Normally Closed Contact	Two Normally Open Contacts	Two Normally Closed Contacts	Left Hand	Right Hand	
Spring Closed	M-301	1486 683	1486 681	1486 685	1490 311	1490 309	1490 221	1490 316	1490 319
	M-401	1486 683	1486 681	1486 685	1490 311	1490 309	1490 221	1490 316	1490 319
	M-501	1486 683	1486 681	1486 685	1490 311	1490 309	1490 222	1490 317	1490 319
	M-601	1486 683	1486 681	1486 685	1490 311	1490 309	1490 221	1490 316	1490 320
	M-701	1486 683	1486 681	1486 685	1490 311	1490 309	1490 221	1490 316	1490 320
Magnet Closed	M-310	1486 681	1486 683	1486 685	.....	.....	1490 219	1490 314	1490 319
	M-410	1486 681	1486 683	1486 685	.....	.....	1490 219	1490 314	1490 319
	M-510	1486 681	1486 683	1486 685	1490 309	1490 311	1490 219	1490 314	1490 319
	M-610	1486 681	1486 683	1486 685	1490 309	1490 311	1490 220	1490 315	1490 320
	M-710	1486 681	1486 683	1486 685	1490 309	1490 311	1490 220	1490 315	1490 320
							OPERATING ARM COMPLETE*, MOUNTING BRACKET AND HARDWARE FOR ONE L-61 INTERLOCK		
	M-810	1486 682	1486 684	1486 686	1490 310	1490 311	.....	1490 247	
	M-810-R	1486 682	1486 684	1486 686	1490 310	1490 311	.....	1490 247	
	M-910	1486 682	1486 684	1486 686	1490 310	1490 311	.....	1625 825	
							*Includes Operating Finger		

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Printed in U.S.A.

