

## Type L-46 Electrical Interlock

### INSTRUCTIONS

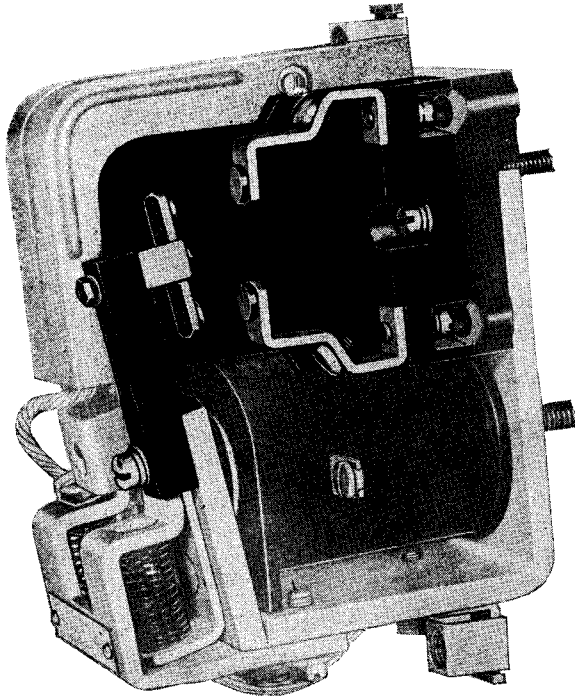


Fig. 1—Normally-open Electrical Interlock Mounted on a Type M-210 Magnetic Contactor

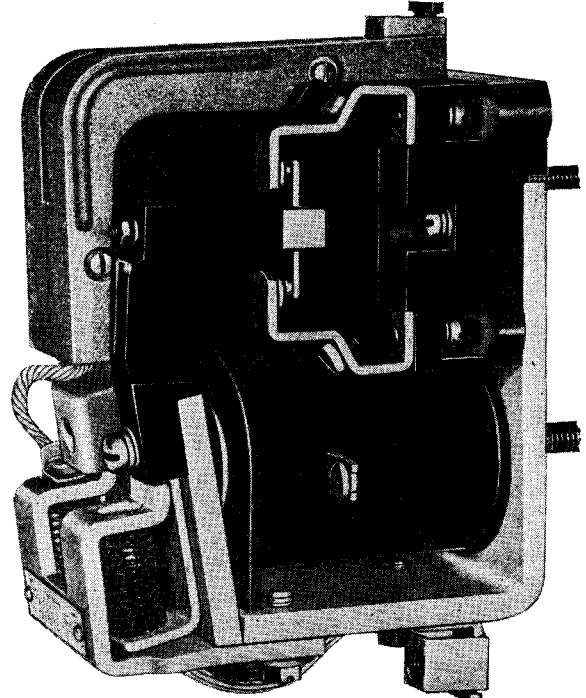


Fig. 2—Type L-46 Normally-closed Electrical Interlock Mounted on a Type M-210 Magnetic Contactor

#### APPLICATION

The Type L-46 electrical interlock is an auxiliary switching device designed primarily for operation on Type M 25 and 50-ampere and Type MM 100 and 150 ampere d-c magnetic contactors. It is available in both normally-open and normally-closed contact arrangements, and should be applied subject to the limitations listed in the Application Table, Fig. 3.

#### RATING

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

#### CONSTRUCTION

The stationary contact assembly consists of a pair of silver contact buttons welded to supports which are secured to an insulating base.

The moving contact, comprising a pair of silver buttons welded to a cross-member, is carried on an insulating arm which is attached to the magnet armature. It is provided with a contact spring which insures that adequate pressure is maintained as the contacts wear.

Rear-connected interlocks are provided with studs long enough to extend through a two-inch

thick panel. Front-connected interlocks are equipped with screw-type terminals.

It is to be noted that interlocks performing as normally-closed interlocks when mounted on single-pole normally-open and two-pole contactors function instead as normally-open interlocks when mounted on single-pole normally-closed contactors or on the lower side of multiple contactors.

#### INSTALLATION AND MAINTENANCE

The stationary part of the interlock is secured by a screw to the insulating base of the contactor, occupying a position between the arc shields if the base carries two main poles, and a position beside the arc shield if the base carries a single main pole.

The contact alignment when the contacts are new should provide that the two pairs of contacts meet simultaneously as the interlock closes, and that the moving contact collar then advance an additional  $\frac{3}{32}$  inch before coming to rest. The over-travel is adjusted by bending the stationary contacts. The final force exerted against the stationary contacts by each of the moving contact buttons should be 3 ounces.

## Type L-46 Electrical Interlock

### INSTRUCTIONS—Continued

The contacts should be replaced when they have worn to the extent that the overtravel has been reduced from the aforementioned  $\frac{3}{32}$  inch 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.

Contactor Type No.	Position of Interlock	Total No. of Interlocks Allowable	NORMALLY OPEN L-46 ELEC. INTERLOCK			NORMALLY CLOSED L-46 ELEC. INTERLOCK			
			STYLE No.		Max. No.	STYLE No.		Max. No.	
			Front Conn.	Rear Conn.		Front Conn.	Rear Conn.		
M-110-S		2	1 399 072	1 399 074	2	1 399 073	1 399 075	1	
M-010-H M-020-H M-110-H M-120-H		2	1 399 072	1 399 074	2	1 399 073	1 399 075	1	
M-210-S		2	1 399 072	1 399 074	2	1 399 073	1 399 075	2	
M-010-2H M-110-2H M-210-L, H & 2H  M-020-2H M-120-2H M-220-L, H & 2H  MM-310 MM-320		2	1 399 072	1 399 074	2	1 399 073	1 399 075	2	
M-111-H M-211-L, H & 2H M-121-H M-221-L, H & 2H  MM-311 MM-321	Blowout on N.O. poles only	2	1 399 072	1 399 074	2	*	*	0	
M-022-H M-111-H M-121-H M-122-H  M-011-2H M-111-2H M-211-L, H & 2H  M-021-2H M-121-2H M-221-L, H & 2H  M-022-2H M-122-2H M-222-L, H & 2H  MM-311 MM-321 MM-322	Blowouts on all poles	Upper  +  Lower	2†   2†	1 399 072   1 399 073	1 399 074   1 399 075	2   2	*   .....	*   .....	0   0
M-001-H & 2H M-101-2H M-201-S, L, H & 2H  MM-301		2	1 399 073	1 399 075	2	1399 072	1 399 074	1	

\* Use Type L-47 Electrical interlock—See I. L. 15-829-L47-1  
† Total of 4 interlocks per contactor

S# 1399 072 supersedes S# 1257 450  
S# 1399 073 supersedes S# 1257 451  
S# 1399 074 supersedes S# 1257 452  
S# 1399 075 supersedes S# 1257 453

Fig. 3—Application Table.

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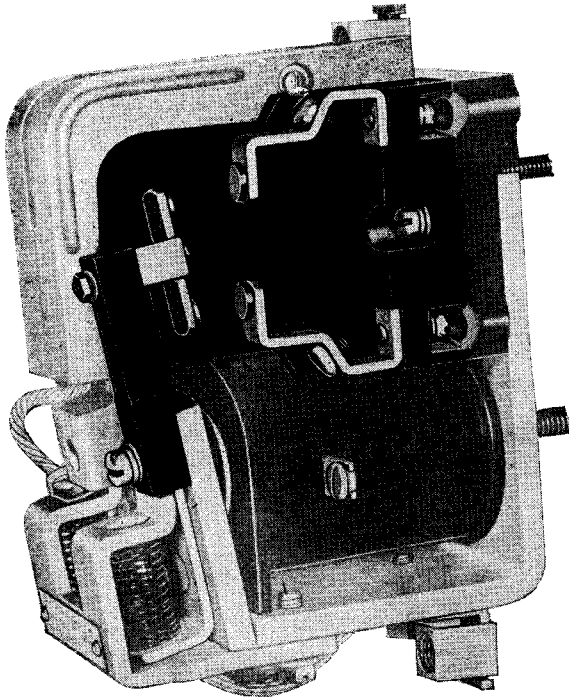


Fig. 1—Normally-open Electrical Interlock Mounted on a Type M-210 Magnetic Contactor

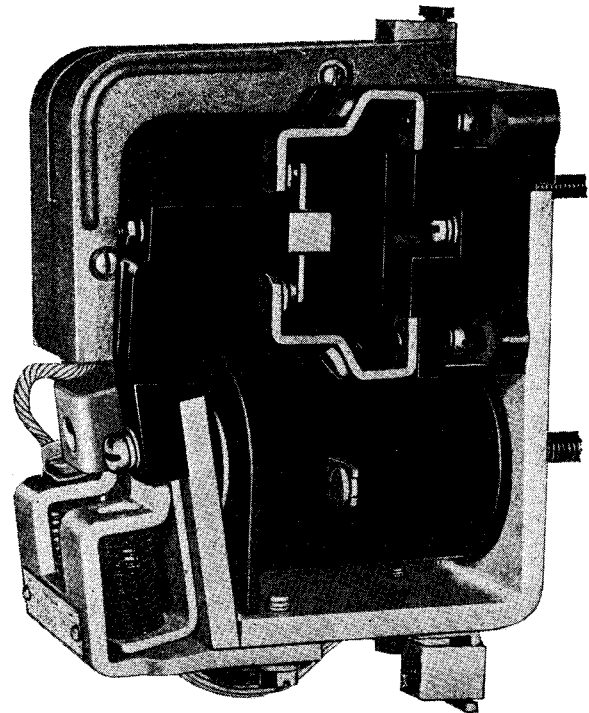


Fig. 2—Type L-46 Normally-closed Electrical Interlock Mounted on a Type M-210 Magnetic Contactor

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The contact alignment when the contacts are new should provide that the two pairs of contacts meet simultaneously as the interlock closes, and that the moving contact collar then advance an additional  $\frac{3}{8}$  inch before coming to rest. The over-travel is adjusted by bending the stationary contacts. The final force exerted against the stationary contacts by each of the moving contact buttons should be 3 ounces.

## Type L-46 Electrical Interlock

### INSTRUCTIONS—Continued

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	Upper	2†	1 399 072	1 399 074	2	*	*	0
	Lower	2†	1 399 073	1 399 075	2	.....	.....	0
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