

## INSTALLATION

### MAINTENANCE

# TRUCT

## Type L-60 ELECTRICAL INTERLOCK

for use with

Sizes 3 and 4 Life-Linestarters and Types NR, NRD and NRL Contactors

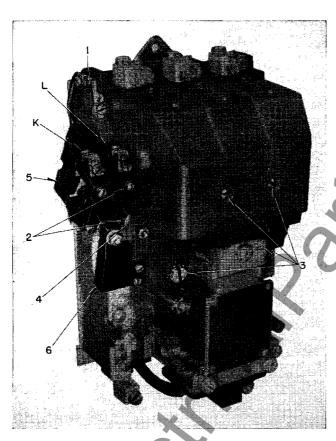


FIG. 1. Type L-60 Electrical Interlocks Mounted on a Type NR Contactor in Class 11-200 N.3 Life-Linestarter L—An inboard "first" or "second" electrical interlock K-An outboard "third" or "fourth" electrical interlock

TYPE L-60 ELECTRICAL INTERLOCK is an auxiliary contacting device applicable to the Sizes 3 and 4 Life-Linestarters and Types NR, NRD and NRL Contactors. It is readily convertible from a normally-open to a normally-closed device or vice versa without adding or removing any parts.

The interlock will carry and rupture non-inductive alternating currents of 5 amperes at 600 volts, or direct currents up to 1 ampere at a maximum of 50 volt-amperes.

## APPLICATION

The Type L-60 Electrical Interlock is supplied in the following assemblies:

Style #1490 460. Interlock complete with hardware for mounting in the "inboard" location shown at "L" (or a corresponding location on the right of the contactor). This style should be ordered for the first or second interlock to be mounted on a contactor.

Style #1490 456. Interlock complete with operating arm and mounting details for installing in the "outboard" location indicated at "K" (or the corresponding location on the right of the contactor) in Fig. 1. This style should be ordered for the third or fourth interlock to be mounted on the contactor.

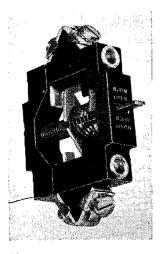
#### INSTALLATION

Before installing the interlock, be sure that the parts are set to produce the desired contacting action. If they are set for normally-open operation, and normally-closed operation is desired instead. convert the interlock as instructed in Fig. 2. Follow a reverse procedure to convert a normallyclosed to a normally-open interlock.

To install an inboard interlock, mount the assembled contact unit on the contactor base and secure it with the long screws (shown at "2" in Fig. 1) and nuts accompanying it. Greater access for the screwdriver will be afforded, if needed, by temporarily removing the arc box and the moving crossbar of the contactor by taking out the four screws "3".

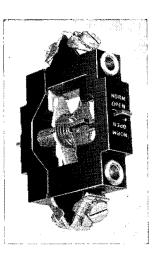
Mount the conical adjusting screw "4" on the projecting arm of the contactor crossbar. Adjust it to produce 1/8-inch overtravel of the slide-bar after the contacts meet, if the interlock is a normallyopen device; or to produce 3/6-inch separation of the contacts if the interlock is a normally-closed one. Lock it securely by tightening the nut.

SUPERSEDES I.L. 10708-A

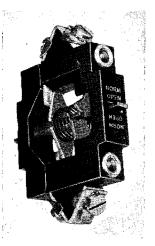


(a) Before conversion. Contacts are normally open.

Note "NORM. OPEN" marking.



(b) Transition step. The spring stop has been pushed forward and rotated clockwise slightly.



(c) Conversion completed. Clockwise rotation of the spring stop has been carried through.



(1) The interlock is righted by turning it over, ready for mounting as a normally-closed unit. Note "NORM.CLOSED" marking.

FIG. 2. Conversion of an Interlock From Normally-Open to Normally-Closed Operation

**Important:** The conical adjusting screw "4" must not be extended for extra travel or it will cause mechanical interference with the contact unit. If the contactor becomes noisy after an interlock is installed, check at once to see if such interference has occurred and is preventing the contactor magnet from seating.

To install an outboard interlock, first omit the nuts from the inboard interlock mounting screws "2". In their place locate the molded support "5" and secure it and the inboard interlock at the same time by tightening screws "2". Then mount the outboard interlock contact assembly on the support "5" and secure it by its own screws and nuts.

Finally mount the operating arm "6" on the moving crossbar of the contactor and adjust the conical screw as directed above.

#### **MAINTENANCE**

See that the moving parts of the interlock are kept free from dirt or other hindrance to their movement.

The silver contacts will not need dressing throughout their normal life.

Should the parts become severely worn the entire interlock should be replaced as a unit.



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BUFFALO PLANT • MOTOR AND CONTROL DIVISION • BUFFALO 5, N.Y.

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## INSTALLATION

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# INSTRUCTIONS

## Type L-60 ELECTRICAL INTERLOCK

for use with

Sizes 3 and 4 Life-Linestarters and Types NR, NRD and NRL Contactors

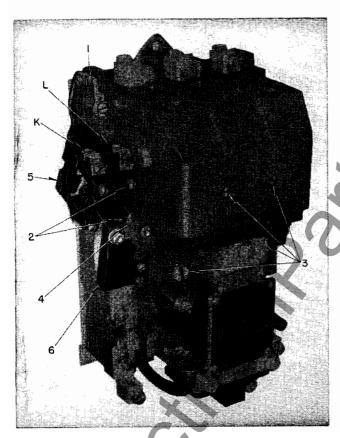


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The interlock will carry and rupture non-inductive alternating currents of 5 amperes at 600 volts, or direct currents up to 1 ampere at a maximum of 50 volt-amperes.

### APPLICATION

The Type L-60 Electrical Interlock is supplied in the following assemblies:

**Style \*1490 460.** Interlock complete with hardware for mounting in the "inboard" location shown at "L" (or a corresponding location on the right of the contactor). This style should be ordered for the first or second interlock to be mounted on a contactor.

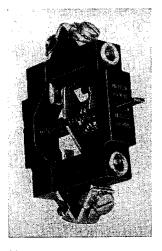
Style \* 1490 456. Interlock complete with operating arm and mounting details for installing in the "outboard" location indicated at "K" (or the corresponding location on the right of the contactor) in Fig. 1. This style should be ordered for the third or fourth interlock to be mounted on the contactor.

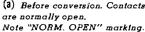
#### **INSTALLATION**

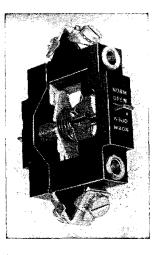
Before installing the interlock, be sure that the parts are set to produce the desired contacting action. If they are set for normally-open operation, and normally-closed operation is desired instead, convert the interlock as instructed in Fig. 2. Follow a reverse procedure to convert a normally-closed to a normally-open interlock.

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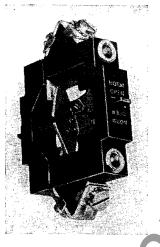
Mount the conical adjusting screw "4" on the projecting arm of the contactor crossbar. Adjust it to produce ½-inch overtravel of the slide-bar after the contacts meet, if the interlock is a normally-open device; or to produce ¾-inch separation of the contacts if the interlock is a normally-closed one. Lock it securely by tightening the nut.







(b) Transition step. The spring stop has been pushed forward and rotated clockwise slightly.



stop has been carried through.



(6) Conversion compression.

Clockwise rotation of the spring turning it over, ready for mounting as a normally-closed unit. (d) The interlock is righted by turning it over, ready for mount-Note"NORM.CLOSED"marking.

FIG. 2. Conversion of an Interlock From Normally-Open to Normally-Closed Operation

Important: The conical adjusting screw "4" must not be extended for extra travel or it will cause mechanical interference with the contact unit. If the contactor becomes noisy after an interlock is installed, check at once to see if such interference has occurred and is preventing the contactor magnet from seating.

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Finally mount the operating arm "6" on the moving crossbar of the contactor and adjust the conical screw as directed above.

#### **MAINTENANCE**

See that the moving parts of the interlock are kept free from dirt or other hindrance to their movement.

The silver contacts will not need dressing throughout their normal life.

Should the parts become severely worn the entire interlock should be replaced as a unit.



#### WESTINGHOUSE ELECTRIC CORPORATION BEAVER, PA.

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