DESCRIPTION • INSTALLATION

INSTRUCTIONS

Life-Linecontactor* TYPE N 140

Class 15-825 N.1 **4 Pole, Size 1**

TYPE N-140, LIFE-LINECONTACTOR*, 4-pole, Size 1 has been designed to be applicable to motor circuit loads, resistance loads, interconnections of multi-speed motor windings, etc. NEMA standard mounting dimensions have been met in the design of this contactor; Size 1. Type N, 2, 3, 4 and 5-pole contactors have identical mounting dimensions. Up to four electrical interlocks (See ELECTRICAL INTERLOCKS) may be mounted on each contactor depending upon circuit requirements. The contactor is complete with Line, Load and Control Terminals, STRAIGHT-THRU main wiring, and one normally open electrical interlock.

For a typical application of a single contactor showing Line, Load, and Control Connections refer to Fig. 1. Customer connections are shown in dashed line. The Start and Stop pushbutton units designated are furnished separately.

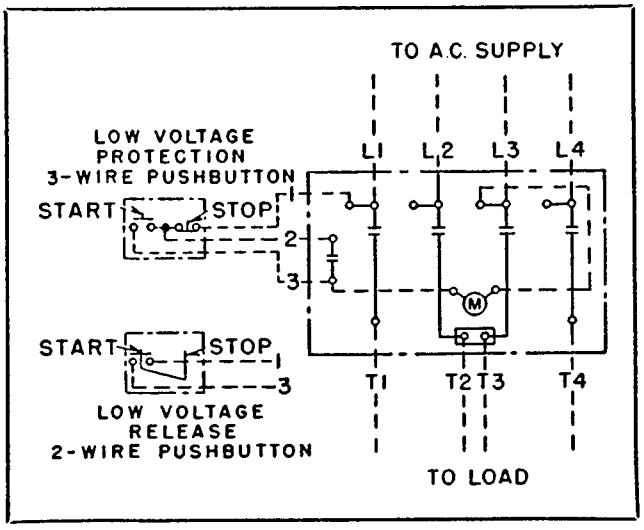

FIG. 1. Wiring Diagram

For more involved controls, the user may frequently apply several contactors with interconnections to meet his particular requirements. Thus, to obtain maximum application flexibility for the user, terminal marking and control wiring have been omitted from this contactor. Ratings are as shown in following table:

MAXIMUM A-C RATINGS

Open—25 Amperes	Enclosed—22½ Amperes
Volts	HORSEPOWER
	Polyphase
110	3
208-220	5
440-600	7½

CONSTRUCTION

The Type N-140, 4-pole contactor is an inverted clapper type with knife-edge bearing and having positive action through the use of a compression kick-out spring. This construction provides maximum accessibility for servicing and maintenance and allows coil change to be a simple operation. All current carrying parts are of high conductivity copper or copper alloy of large cross section resulting in high electrical efficiency. Long life and low contact drop are assured by fine silver contacts with large area of bond for current conduction and heat transfer.

Pressure-type connectors on main and control terminals permit the use of either solid or stranded wire without soldered joints.

INSTALLATION

1. Clean the magnet surfaces.

2. Operate the armature by hand to be sure that all parts move freely.

3. Installation of the starter on a properly drilled and tapped mounting panel has been facilitated by providing two open mounting slots at the bottom of the starter base and a captivated screw at the top of the base. The two open slots should be made to engage screws started in the mounting surface; this will support the starter weight and also help position the captive screw so that it may be driven into the mounting surface. If a screw of different length is required, the captive screw may easily be removed from its spring retainer.

ELECTRICAL INTERLOCKS

The contactor comes equipped with one normally open interlock. By removing this interlock,

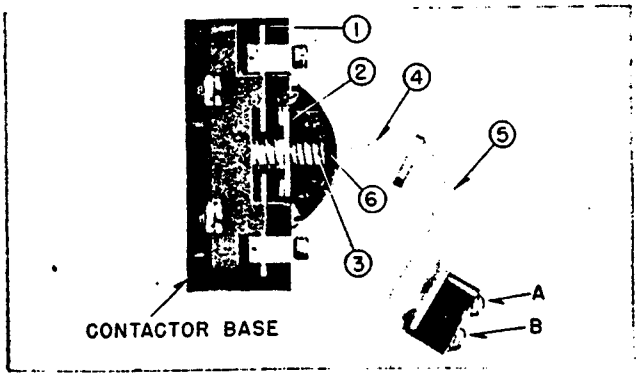

FIG. 2. Normally Open Interlock

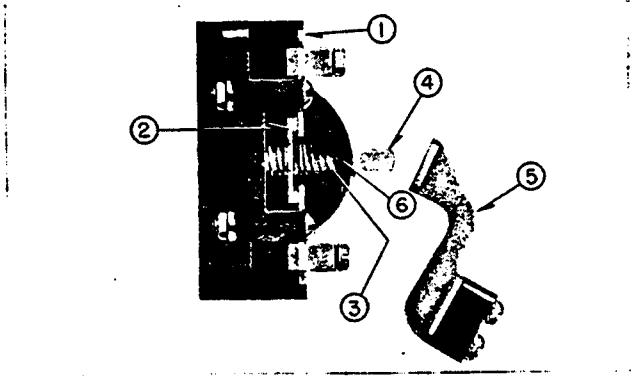

FIG. 3. Normally Closed Interlock

shown in Fig. 2, and reassembling parts 1, 2 and 3 per Fig. 3, the interlock is changed from normally open to normally closed contact. The change is simplified by first placing the contactor in the normal vertical operating position and by proceeding as follows:

1. Swing arm (5) out of way by removing screw A and loosening screw B. (See Fig. 2).

2. To detach upper spring (3) from plunger (4) compress inturned end of spring counterclockwise against contact bar (2) and rotate spring until it disengages hole (6).

3. Interlock mounting screws need not be tightened excessively as Elastic Stop Nuts provide positive locking.

4. Operate reassembled interlock by hand to check freedom of moving parts before reassembling arm (5) into original position.

A second interlock may be obtained by ordering either S# 1314 884, normally open, or S# 1314 885, normally closed. A third or fourth interlock may be obtained by ordering either S# 1314 886, normally open, or S# 1314 887, normally closed. The above normally open interlocks may readily be installed as normally closed interlocks per instructions enclosed with each interlock.

PRINCIPAL RENEWAL PARTS

Moving Contact.....S# 1314 985
Stationary Contact.....S# 1314 986
Contact Spring.....S# 1314 961
For other parts refer to Renewal Parts Catalog

MAINTENANCE

The sealing surfaces on the magnet frame and armature should be kept clean.

Do not lubricate the contact tips or bearings. Fine silver contacts need no dressing throughout their life.

To Remove Contactor Coil, remove the three round head magnet mounting screws and withdraw the coil and magnet.

When Installing Contactor Coil, make sure that round head magnet mounting screws are securely tightened.

CONTACTOR IDENTIFICATION

This contactor complete is identified by style number (shown on the carton and as listed in Price List) and consists of two basic parts: (1) the contactor unit without coil, and (2) the coil.

The style number of the contactor unit (without coil) is S# 1532 855 and appears on the metal nameplate attached to the unit.

The coil style is marked on the coil itself along with its voltage and frequency rating.

Complete style identification for use in ordering either a complete contactor or individual coils is given in the following Table:

STYLE IDENTIFICATION

VOLTS	CYCLES	COIL STYLE	COMPLETE STYLE
110	60	1470 261	1577 218
110	25		
208	60	1470 262	1577 219
220	60		
220	25		
380	50	1470 263	1577 220
440	60		
480	60		
550	60	1470 264	1577 221
600	60	1470 265	1577 222
110	50	1470 266	1577 223
220	50	1470 267	1577 224
440	50	1470 268	1577 225
550	50	1470 269	1577 226
440	25	1470 270	1577 227
550	25	1470 271	1577 228

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