

DESCRIPTION . INSTALLATION . MAINTENANCE

INSTRUCTIONS

*life-line*contactor

TYPE N-150

Class 15-825 N.1

5 Pole, Size 1

TYPE N-150, LIFE-LINECONTACTOR*, 5-pole, Size 1 has been designed to be applicable to motor circuit loads, interconnections of multispeed 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. (See Fig. 1.)

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.

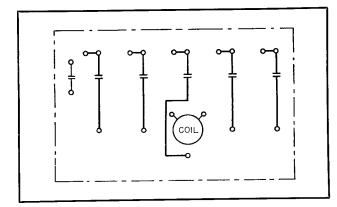


FIG. 1. Wiring Diagram

Note: A 5-pole contactor mechanically interlocked with a 3-pole contactor will provide a compact unit for use on two-speed, single-winding motors, reduced voltage autotransformer starting, and similar circuit requirements. This unit is furnished as a standard device consisting of the 5-pole and 3-pole contactor mechanically interlocked as an integral assembly.

MAXIMUM A-C. RATINGS

| Open—25 Amperes | Enclosed—22 1/2 Amperes | |
|---------------------------|-------------------------|--|
| | HORSEPOWER | |
| Volts | Polyphase | |
| 110 208-220 440-600 | 3 5 7½ | |

CONSTRUCTION

The Type N-150, 5-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.** Below the top mounting hole in the contactor backplate an opening is provided for the purpose of supporting the weight of the contactor during installation if the customer wishes to provide a peg or shoulder pin on the mounting surface for this purpose.

ELECTRICAL INTERLOCKS

This contactor comes equipped with one normally open interlock. By removing this 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:

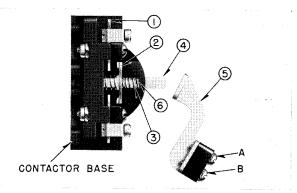
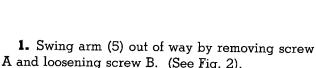


FIG. 2. Normally Open Interlock



2. To detach upper spring (3) from plunger (4) compress inturned end of spring 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 | 985 |
|--|------|
| Stationary ContactS*1314 9 | 986 |
| Contact Spring | |
| For other parts refer to Renewal Parts Catal | log. |

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.

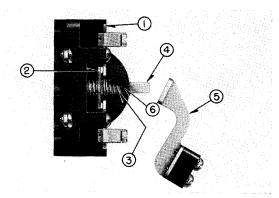


FIG. 3. Normally Closed Interlock

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 $S \times 1532$ 857 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 | 1587 716 |
| 110 208 220 | 25 60 60 | 1470 262 | 1587 717 |
| 220 380 440 480 | 25 50 60 60 | 1470 263 | 1587 718 |
| 550 600 110 220 | 60 60 50 50 | 1470 264 1470 265 1470 266 1470 267 | 1587 719 1587 720 1587 721 1587 722 |
| 440 550 440 550 | 50 50 25 25 | 1470 268 1470 269 1470 270 1470 271 | 1587 723 1587 724 1587 725 1587 726 |