

# DESCRIPTION • INSTALLATION • OPERATION INSTALLATION • OPERATION

# fife-finecontactor \* TYPE N 250

Class 15-825 N.2

5 Pole, Size 2

# TYPE N-250, LIFE-LINECONTACTOR\*,

5 pole, Size 2 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 2, 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.

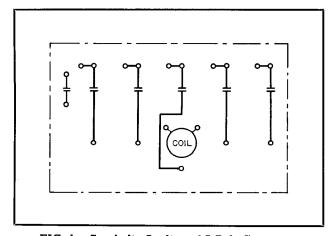


FIG. 1. Symbolic Outline of 5-Pole Contactor

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 auto-transformer starting, and similar circuit requirements. This unit will be furnished as a standard device consisting of the 5-pole and 3-pole contactor mechanically interlocked as in integral assembly.

#### MAXIMUM A-C RATINGS

Open—50 Amperes	Enclosed—45 Amperes	
Volts	HORSEPOWER	
	Polyphase	
110 208-220 440-600	7½ 15 25	

## CONSTRUCTION

The Type N-250, 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:

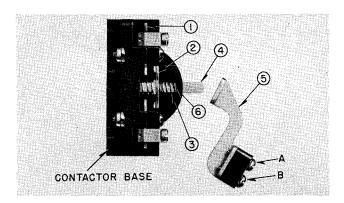


FIG. 2. Normally Open Interlock

- 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 against contact bar (2) and rotate spring until it disengages hole (6).
- **3.** 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 888, normally open, or S \* 1314 889, normally closed. A third or fourth interlock may be obtained by ordering either S \* 1314 890, normally open, or S \* 1314 891, 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	773
Stationary ContactS * 1224	774
Contact Spring	426
For other parts refer to Renewal Parts Cata	alog.

# **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 Hex. head magnet mounting bolts and withdraw the coil and magnet.

When Installing Contactor Coil, make sure that Hex. head magnet mounting bolts are securely tightened.

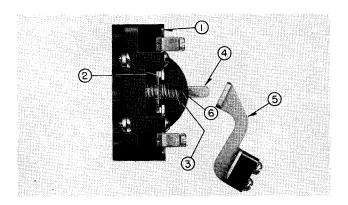


FIG. 3. Normally Closed Interlock

# 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  $S \times 1314$  903 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 221	1587 625
110 208 220	25 60 60	1470 222	1587 626
220 380 440 480	25 50 60 60	1470 223	1587 627
550 600 110 220	60 60 50 50	1470 224 1470 225 1470 226 1470 227	1587 628 1587 629 1587 630 1587 631
440 550 440 550	50 50 25 25	1470 228 1470 229 1470 230 1470 231	1587 632 1587 633 1587 634 1587 635