



DESCRIPTION • INSTALLATION • OPERATION INSTRUCTIONS

*Life-Line*contactor* TYPE N 220

Class 15-825 N.2

2 Pole, Size 2

TYPE N-220, LIFE-LINECONTACTOR*, 2 Pole, Size 2 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 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.

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.

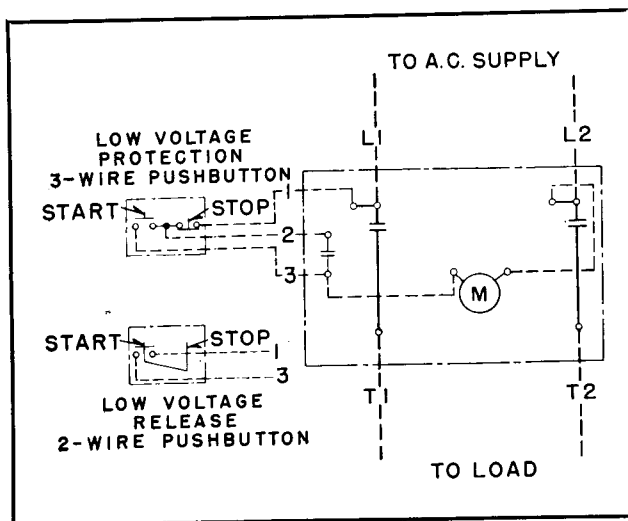


FIG. 1. Wiring Diagram—Customer's Wiring Is Shown in Dashed Lines

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—50 Amperes		Enclosed—45 Amperes	
Volts		HORSEPOWER	
		Single Phase	
115		3	
208-230		7½	
440-600		10	

CONSTRUCTION

The Type N-220, 2-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:

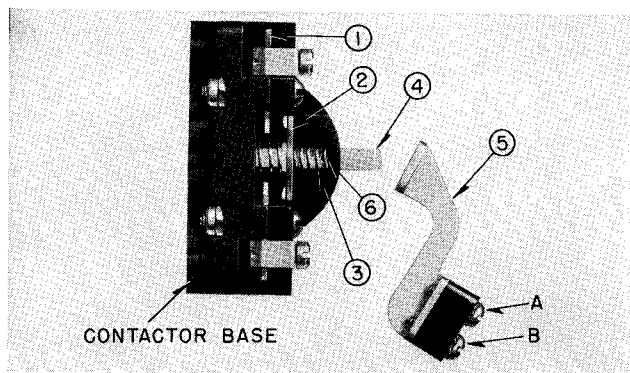


FIG. 2. Normally Open Interlock

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.....S# 1224 773
Stationary Contact.....S# 1224 774
Contact Spring.....S# 1221 426
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 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.

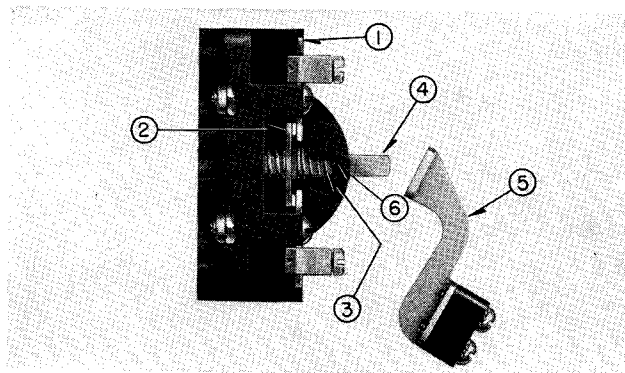


FIG. 3. Normally Closed Interlock

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# 1314 901 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 201	1587 602
110	25		
208	60	1470 202	1587 603
220	60		
220	25		
380	50	1470 203	1587 604
440	60		
480	60		
550	60	1470 204	1587 605
600	60	1470 205	1587 606
110	50	1470 206	1587 607
220	50	1470 207	1587 608
440	50	1470 208	1587 609
550	50	1470 209	1587 610
440	25	1470 210	1587 611
550	25	1470 211	1587 612



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