



DESCRIPTION • OPERATION • MAINTENANCE INSTRUCTIONS

REVERSING *life-line*starter*

TYPE N
CLASS 11-211N.0
SIZE 0

THIS TYPE N REVERSING LIFE-LINE-STARTER has been designed primarily to provide reversing operation for A-C motors and consists of two 3-pole non-reversing contactors mechanically interlocked to prevent both contactors from being closed at the same time. Up to three electrical interlocks per contactor (total of 6 on starter) may be mounted on this device depending upon circuit requirements (see Electrical Interlocks). The LINESTARTER is complete with Line, Load, and Control Terminals, both Control and Main Cross Wiring, and one normally open electrical interlock on each contactor (total of 2 on complete unit).

For use with A-C motors, the following table of ratings applies.

MAXIMUM A-C RATINGS

| Open—15 Amperes | | Enclosed—13½ Amperes | |
|-----------------|------------|----------------------|--|
| Volts | HORSEPOWER | | |
| | Polyphase | Single Phase | |
| 110 | 1½ | 1 | |
| 208-220 | 2 | 1½ | |
| 440-600 | 2 | 1½ | |

CONSTRUCTION

This starter employs two 3-pole non-reversing contactors of the 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.

CONNECTIONS

This LINESTARTER provides connections for several control schemes, three of which are shown in the following diagram.

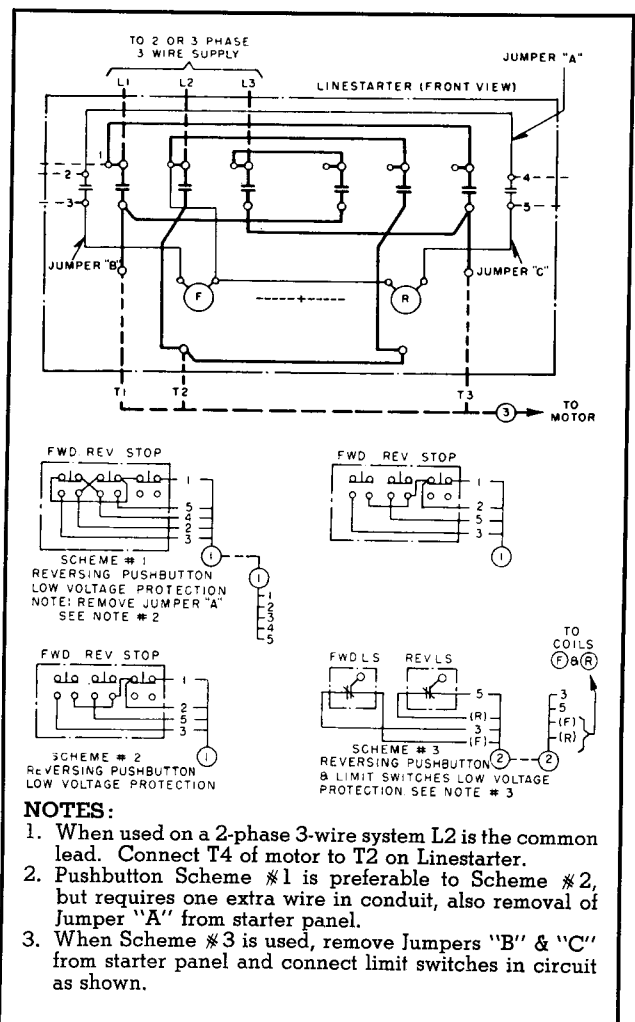


FIG. 1. Wiring Diagram of Linestarter and Connections to Master Switches

INSTALLATION

1. Clean the magnet surfaces.
2. Operate the armature by hand to be sure that all moving parts move freely.

REVERSING LIFE-LINESTARTER

STARTER IDENTIFICATION

This LINESTARTER complete is identified by style (shown on carton and as listed in Price List) and consists of two basic parts: (1) the starter unit and (2) the coils.

The style number of the starter unit (but without coils) is S# 1587 638 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.

Style identification for use in ordering either a complete LINESTARTER or individual coils is given in the table below:

STYLE IDENTIFICATION

| VOLTS | CYCLES | COIL STYLE | COMPLETE STYLE |
|-------|--------|------------|----------------|
| 110 | 60 | 1470 241 | 1587 650 |
| 110 | 25 | 1470 242 | 1587 651 |
| 208 | 60 | | |
| 220 | 60 | | |
| 220 | 25 | 1470 243 | 1587 652 |
| 380 | 50 | | |
| 440 | 60 | | |
| 480 | 60 | | |
| 550 | 60 | 1470 244 | 1587 653 |
| 600 | 60 | 1470 245 | 1587 654 |
| 110 | 50 | 1470 246 | 1587 655 |
| 220 | 50 | 1470 247 | 1587 656 |
| 440 | 50 | 1470 248 | 1587 657 |
| 550 | 50 | 1470 249 | 1587 658 |
| 440 | 25 | 1470 250 | 1587 659 |
| 550 | 25 | 1470 251 | 1587 660 |

ELECTRICAL INTERLOCKS

This starter comes equipped with **one** normally open interlock on each contactor. A **second** interlock for each contactor may be obtained by ordering either S#1314 880, normally open, or S#1314 881, normally closed. A **third** interlock per contactor may be had by ordering either S#1315 882, normally open, or S#1314 883, normally closed. The above normally open interlocks may readily be installed as normally closed interlocks per instructions enclosed with each interlock.

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.

PRINCIPAL RENEWAL PARTS

Contactor Moving Contact.....S# 1314 978

Contactor Stationary Contact.....S# 1314 979

Contactor Contact Spring.....S# 1314 960

For other parts refer to Renewal Parts Catalog.



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