

DESCRIPTION

OPERATION

MAINTENANCE

INSTRUCTIONS

REVERSING <u>life-linestarter</u>*

TYPE N, SIZE 2 CLASS 11-211N.2 2 PHASE, 4 POLE

THIS TYPE N REVERSING LIFE-LINE-STARTER has been designed primarily to provide reversing operation for A-C motors and consists of two 4-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—50 Amperes	Enclosed—45 Amperes	
	HORSEPOWER	
Volts	Polyphase	
110 208-220 440-600	7½ 15 25	
440-600	25	

CONSTRUCTION

This starter employs two 4-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:

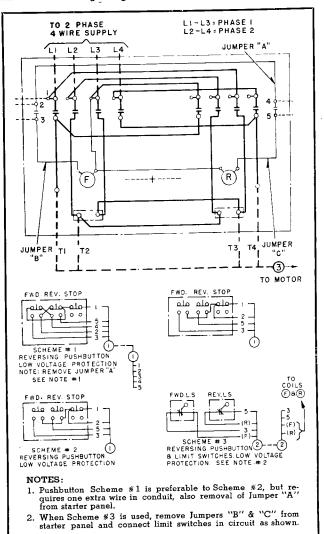


FIG. 1. Wiring Diagram of Linestarter and Connections to Master Switches

INSTALLATION

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

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 (without coils) is S * 1578 715 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 221	1578 850		
110 208 220	25 60 60	1470 222	1578 851		
220 380 440 480	25 50 60 60	1470 223	1578 852		
550 600 110 220	60 60 50 50	1470 224 1470 225 1470 226 1470 227	1578 853 1578 854 1578 855 1578 856		
440 550 440 550	50 50 25 25	1470 228 1470 229 1470 230 1470 231	1578 857 1578 858 1578 859 1578 860		

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 888, normally open, or S#1314 889, normally closed. A **third** interlock per contactor may be had by ordering either S#1315 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.

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.

PRINCIPAL RENEWAL PARTS

Contactor Moving ContactS*	1224	773
Contactor Stationary ContactS*	1224	774
Contactor Contact SpringS*	1221	426

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