



DESCRIPTION • OPERATION • MAINTENANCE

INSTRUCTIONS

DESIGN N	
CAT. NO.	REVERSING <i>Life-Line</i> CONTACTOR
STYLE	SIZE 1 3 OR 4 POLE
	COIL STYLE V CY

DESIGN N, REVERSING LIFE-LINE® CONTACTOR, SIZE 1, has been designed primarily to provide reversing operation for a-c motors and consists of two non-reversing contactors mechanically interlocked to prevent both contactors from being closed at the same time. NEMA standard mounting dimensions have been met in the design of this device. Up to three electrical interlocks per contactor (total of 6 on complete unit) may be mounted on this device depending upon circuit requirements (see "Electrical Interlocks"). This reversing contactor is complete with line, load and control terminals, main cross wiring, one normally open electrical interlock and one normally closed electrical interlock per contactor (total of 4 on complete unit.)

For a typical application of a reversing contactor showing line, load and control connections, refer to Fig. 1 for 3-pole device or Fig. 2 for 4-pole device. Customer connections are shown in dashed lines. The reversing pushbutton station shown is furnished separately.

This reversing contactor unit is intended to be applicable to numerous simple control schemes (see wiring diagram) and also as a part of large control panels. Thus, to obtain maximum application flexibility for the unit, terminal marking and control wiring have been omitted but main cross wiring has been included.

CONSTRUCTION

The Design N 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.

ELECTRICAL INTERLOCKS

Standard reversing contactors are furnished with one normally open interlock and one normally closed interlock on each

contactor. A third interlock per contactor may be obtained by ordering either S#453D976G07 normally open or, S#453D-976G08 normally closed. The normally open interlocks may be readily installed as normally closed interlocks per Instruction Leaflet IL-11956.

A universal electrical interlock (L54) is available as an accessory. This interlock provides either NO or NC operation, or may be employed as a SPDT device by jumpering the terminals on one end for a common line connection. The style number of the Type L54 interlock kit when used as a first or second interlock is S#453D502G03, when added as the third interlock specify S#453D502G04.

CONTACTOR IDENTIFICATION

The LIFE-LINE REVERSING CONTACTOR complete is identified by the CAT. NO. (shown on leaflet, carton and in catalog) or by style (shown on leaflet and carton) and consists of two basic parts: (1) the reversing contactor unit without coils, and (2) the coils.

The CAT. NO. and style of the reversing contactor unit (without coils) appear on the metal nameplate attached to the magnet.

The coil style is marked on the coil itself along with its voltage and frequency rating.

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

3 Pole Contact Kit.....	S# 1605 212
4 Pole Contact Kit.....	.2 of S# 1605 211

REVERSING LIFE-LINE CONTACTOR DESIGN N

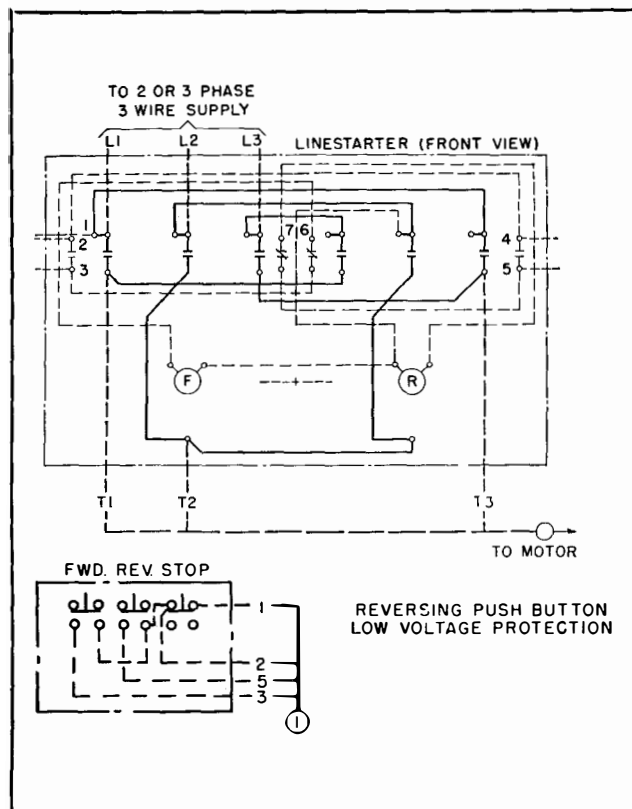


FIG. 1. 3-Pole Wiring Diagram

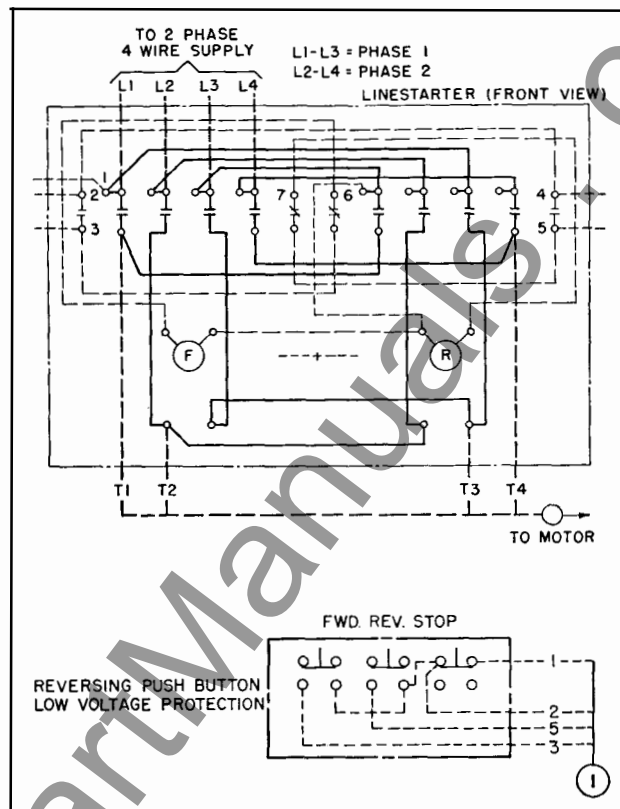


FIG. 2. 4-Pole Wiring Diagram

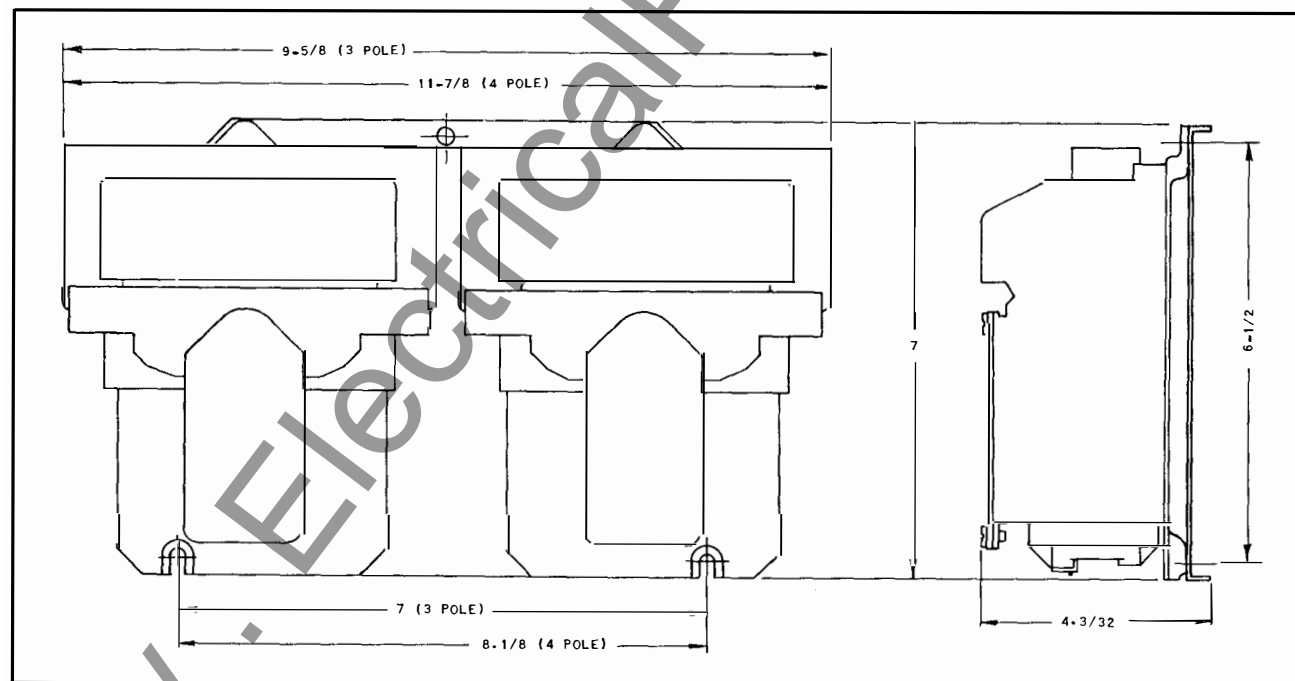


FIG. 3. Outline Dimensions

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