Supersedes Issue Dated June, 1941

INSTRUCTION LEAFLET 3283-B
Filing No. 15-800

SEPTEMBER, 1948

TYPE DN MULTI-POLE CONTACTOR

Size 00, 2 to 8 Poles

INSTRUCTIONS

General

This is an A-C. multi-pole contactor, actuated by vertical operating solenoid magnet.

Rating

Ten amperes A-C., maximum interrupting capacity—7500 voltamperes A-C., 50 voltamperes D-C. inductive, with a maximum of 1 ampere. The maximum voltage is 600 volts.

Circuit	110–115 Volts	208–230 Volts	440–460 Volts
3 Phase	¾	1	1
1 Phase	½	¾	..
D-C.	½	¼	..

Application

These multi-pole contactors are designed for use on machine tool and similar controllers as relays in control circuits, and to control small motors. They are assembled as complete units on rigid steel bases suitable for mounting on insulating or steel panels as parts of a controller. The contactors are available in two to eight pole forms in any combination of normally open and normally closed contacts required for the most complicated control systems.

Construction

Contactors are made up of two and four pole contact assemblies, and a solenoid magnet mounted on the steel base. Two and four pole units have the contact assembly below the magnet. Six and eight pole units have an additional contact assembly mounted above the magnet. This contactor has high contact pressure and kickout springs, and is operated by an efficient solenoid magnet.

Mechanically interlocked units are assembled on a single rigid base made by welding two standard bases together. The units are interlocked side by side. Latched-in contactors consist of one standard contactor mounted on a base with a latch mechanism and releasing solenoid. After the contactor is operated by its own coil, the coil must be de-energized while the contactor remains latched in position. To return the contactor to its initial position, the releasing solenoid must be energized momentarily.

Coils

The coils are marked with identifying style number, and the voltage and frequency for which they are designed. All coils are for continuous duty with the exception of the coils for the latched-in contactors. The latched-in coils are intermittently rated, and are marked on the label, "Latched-in", and should not be used on other than latched-in contactors.

Table of Operating Coils

Volts	Cycles	1 to 4 Poles Style No.	5 to 8 Poles Style No.
24	60	.....	1109460
32	60	.....	1128896
110	60	1186537	1089553
208/220	60	1186538	1089508
440/480	60	1186539	1091345
550	60	1186540	1091360
600	60	1186541	1091361
110	25	1186538	1089508
220	25	1186539	1091345
440/480	25	1186546	1091349
550	25	1186547	1091362

Contacts

The contacts are silver buttons, and are of the double break bridging type. The contact terminals have special wiring clamps under the screws and are such that a good connection may be made by merely inserting the straight end of one or two wires under the clamp. This makes for ease of wiring and does away with the necessity of looping the wire.

Maintenance

Two screws hold the magnet assembly to the base. The entire magnet and coil assembly may be removed by taking out the holding screws at the top of the magnet and removal of the two screws which attach the moving armature to the cross bar. The entire magnet assembly may then be lifted out.

The stationary contacts are held on with mounting screws. The stationary contacts may be removed by taking out the mounting screws. The contacts may thus be renewed, or any pole changed from make to break, or vice versa, by changing the stationary contacts and turning over the moving contacts. A different contact spring is required when changing from make to break, or vice versa, and a spring retainer is required when the moving contact is assembled with the contact button facing up, on an assembly below the magnet and vice versa on an assembly above the magnet.

The moving contact may be removed from the contact support **saddle** by tilting to approximately a 60° angle, depressing it fully against the spring, and tilting sidewise until the projecting ear clears the saddle on the inside. This may be done without removal of the cross bar. In case it is desired to remove the cross bar, it may be done by removal of the two screws which attach the moving armature to the cross bar, removal of the two arc box mounting screws, and removal of such long stationary contacts as are on the front side only.

The moving armature should run free and loose in the magnet guides. In case there is any binding or friction from dirt collection or otherwise, the armature should be cleaned and freed. The contacts should not require any filing or dressing, as they are made of silver, and even though they become blackened, they still give good contact. The only attention that should be necessary is replacement of the contacts after they have worn down to somewhat less than one-third of their original thickness.

Westinghouse Electric Corporation
Beaver, Pa.

Printed in U.S.A. (Rep. 2-49)