SQUARE D
Instruction Bulletin

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Definite Purpose Contactor
Class 8910 Type DPA – 120 Amp

INTRODUCTION

This instruction bulletin illustrates and describes the Class 8910 definite purpose contactor. It also contains assembly, operation, inspection, replacement and protection instructions. To identify parts, refer to Figure 1.

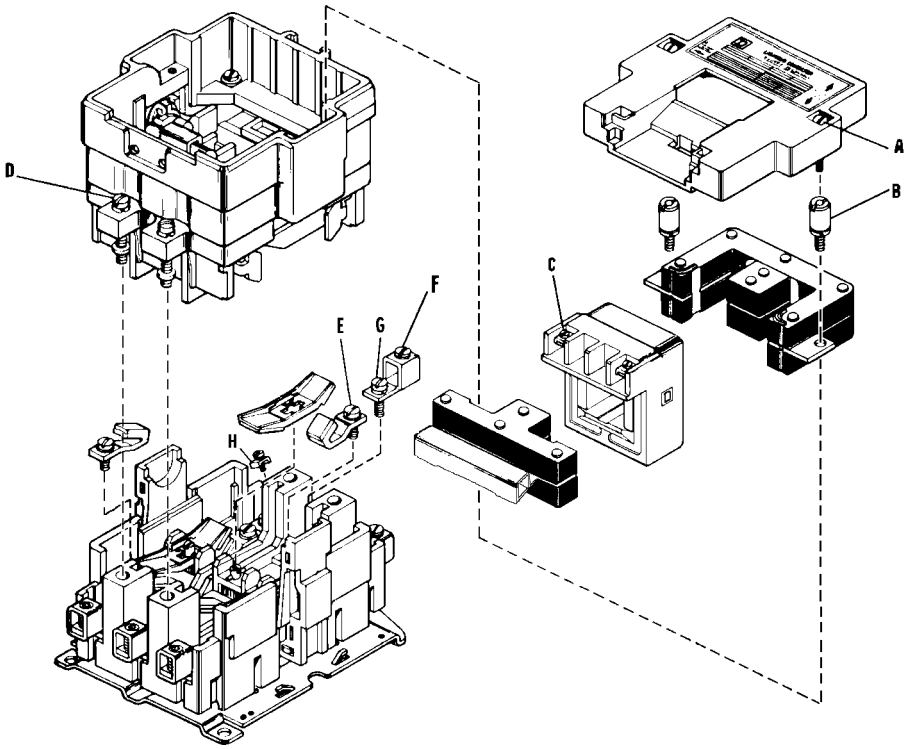

Figure 1 Contactor Assembly Drawing

⚠ DANGER

HAZARDOUS VOLTAGE.

Disconnect all power before working on equipment.

Electrical shock will cause severe injury or death.

INSPECTING AND REPLACING CONTACTS

When contacts require replacement, it is recommended that all of the contacts be replaced. It is unnecessary to remove any wiring to inspect contacts. Loosen the four screws (item D) holding the contact actuator to the contact block. Lift the contact actuator to expose the contacts.

Table 1 Contact Replacement Kit

120 Amp Class 9998 Type DRC 12

Each kit contains 2 stationary contacts, 2 mounting screws and 1 movable contact (sufficient for one pole).

MANUAL OPERATION

⚠ WARNING

HAZARDOUS VOLTAGE.

Disconnect all power before manually operating equipment.

Manual operation with power on can cause contact arcing and unexpected energization of load, resulting in personal injury or equipment damage.

Manual operation of contactors may be accomplished by pushing the contact carrier down with a screwdriver. There is a step on the outside of the contact carrier that is suitable for this use.

COIL REPLACEMENT

To remove the coil, loosen the two captive cover screws (item A). Disconnect wires from the coil terminals and remove the cover. Loosen the two screws (item B) holding the magnet in place. Remove the coil and magnet assembly. Separate the coil from the magnet assembly.

To replace the coil, first assemble the magnet, coil and armature and insert as a unit. Approximately 3/8" of space should exist between the top outside surface of the coil and the inside surface of the magnet. If this space does not exist and the magnet is loose and not quite in place, grasp the coil firmly and slide it down toward the armature. The magnet will then fall in place.

Before installing the cover, manually operate the device as described in "Manual Operation" to insure that all parts are functioning properly. Follow the recommended tightening torques listed in Table 2 when reassembling the device.

Table 2 Factory Recommended Tightening Torques

Item	Description	Tightening Torque (in-lb)
A	Cover screws	24-28
B	Screw post	65-75
C	Coil terminal pressure wire connector	9-12
D	Power plant screw	40-45
E	Stationary contact fasteners	44-50
F	Wire retaining screw	100
G	Lug retaining screw	44-50
H	Control circuit pressure wire connector	9-12

SHORT CIRCUIT PROTECTION

Suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes, 600 volts maximum. Rating of branch-circuit protective device must comply with applicable electrical codes and the maximum protective device ratings listed in Table 3.

Table 3 Maximum Ampere Rating

Type of Device	Maximum Rating
Class K5 or RK5 fuse (time delay may be required)	175 A
Class J, RK1 or T fuse[1]	350 A
Inverse-time circuit breaker	175 A

[1]Class T fuse is 250 volts maximum.

PLEASE NOTE:

Electrical equipment should be serviced only by qualified electrical maintenance personnel, and this document should not be viewed as sufficient instruction for those who are not otherwise qualified to operate, service or maintain the equipment discussed. Although reasonable care has been taken to provide accurate and authoritative information in this document, no responsibility is assumed by Square D for any consequences arising out of the use of this material.