

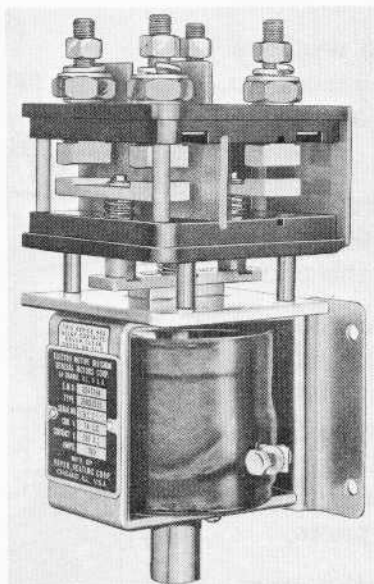


M AINTENANCE I NSTRUCTION

TWO POLE AC COOLING FAN CONTACTOR 8247364

DESCRIPTION

Heavy duty two pole contactors of the type shown in Fig. 1 are used for controlling the operation of AC cooling fans. When the contactor coil is energized by the low voltage DC temperature control circuit, the plunger moves up closing the pair of movable contacts against the stationary contacts. This completes the circuit to connect AC power to the cooling fans.



be filed or dressed as their operation is not impaired by such conditions. No contact adjustments are necessary since there is sufficient overtravel of the plunger shaft to compensate for any contact wear.

5. Check springs for signs of overheating which would weaken them and cause improper contact pressures which could lead to faulty fan operation or damage.

CONTACT REPLACEMENT

MAINTENANCE

This contactor is designed and manufactured for heavy duty operation to provide a long trouble free service life. It should, however, be inspected at intervals prescribed for such equipment in the Scheduled Maintenance Program, Maintenance Instruction 1704.

The inspection should include the following points:

1. Remove any accumulations of dust or dirt with a cloth or soft brush.
2. Check tightness of electrical terminal connections.
3. Observe that no binding or wear exists in moving parts.
4. Inspect main contacts to see if they are making properly and have not reached the wear limit specified in the Maintenance Data section of this bulletin.

Although contacts may appear blackened and eroded, they should NEVER

Fig. 1 - 2-Pole Contactor

Referring to Fig. 2, contacts may be easily removed and replaced as follows:

1. With the contactor removed and placed on a suitable workbench, remove the four screws holding the rear cover plate in place.
2. Remove the upper base assembly and barrier plate by removing the three screws which hold this assembly in place. The stationary contacts can now be removed from the upper base by removing the nuts and washers holding them in position.
3. The movable contact plate assembly is removed by depressing slightly to remove the retainer ring and washer which hold them to the contact post assembly.
4. After careful inspection and replacement of worn parts, the contacts may be installed in reverse order to disassembly.

COIL REPLACEMENT

When it becomes necessary to replace the coil, the contactor will have to be completely disassembled. Continuing from the partial disassembly for contact replacement, the procedure is as follows:

1. Remove the lower base by removing the four screws which hold it in place.
2. Remove the two screws and washers holding the contact post support to the movable contact plate assembly and remove the support.
3. Remove the screw and washer holding the movable contact plate assembly to the plunger shaft and remove the plate.
4. Remove the three screws and washers holding the cap to the bottom of the frame which will free the bottom bearing and retainer spring. Since this spring is under slight tension, hold cap in place until screws are removed to prevent losing parts.
5. Remove the plunger from the core stop assembly.
6. Remove the two screws holding the anchor plate to the frame and remove the plate.
7. Remove the four screws holding the base plate to the top of the frame and remove the plate.
8. Push the tube and core stop assembly up through the coil and frame to remove. Coil and pressure plate can now be removed from the frame.
9. Contactor may be assembled in reverse order to disassembly.

MAINTENANCE DATA

Main Contact

2 N.O. 100 ampere, 230 volts AC

Wear Limits (per mating pair compared to new contacts) 1/16"

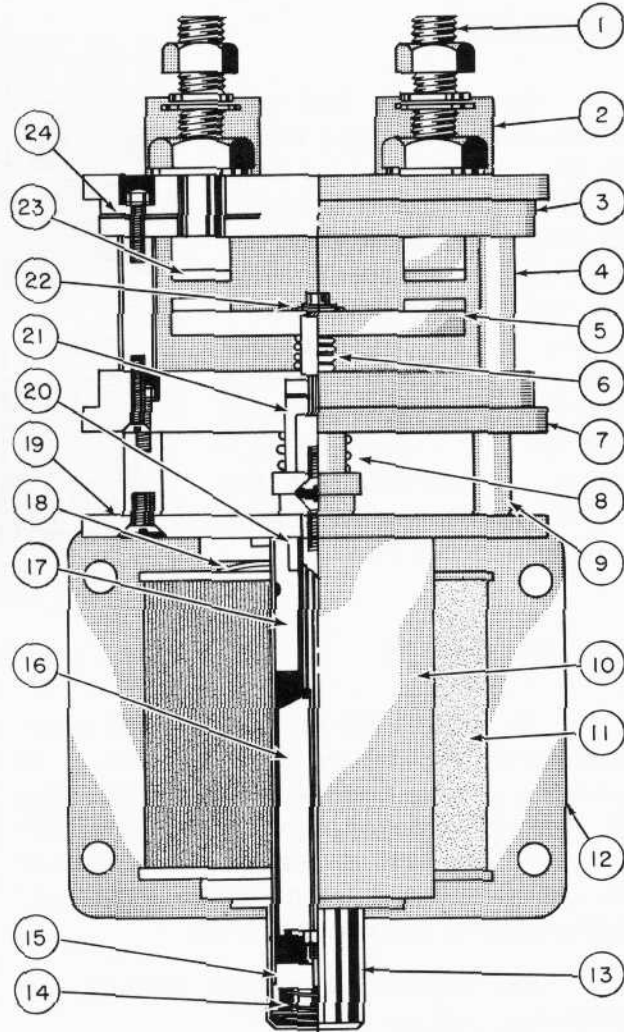
Magnet Coil 358 ohms \pm 10% @ 20° C.

Operation

Working 74 volts DC
 Maximum pickup @ 20° C. 48 volts DC
 Dropout @ 20° C. 5-28 volts DC

Hi-Pot

600 volts RMS 60 cycle - 1 min.:
 Magnet coil to mounting
 Coil to contacts
 Contacts to mounting
 Between contacts



- | | |
|---------------------------|---------------------------------|
| 1. Contact Post Assembly | 13. Cup |
| 2. Barrier Plate | 14. Retainer Spring |
| 3. Upper Base | 15. Bottom Bearing |
| 4. Insulator Spacer | 16. Plunger And Shaft |
| 5. Movable Plate Assembly | 17. Tube And Core Stop Assembly |
| 6. Contact Spring | 18. Pressure Plate |
| 7. Lower Base | 19. Base Plate |
| 8. Return Spring | 20. Top Bearing |
| 9. Bottom Guide Spacer | 21. Contact Post Support |
| 10. Frame | 22. Retainer Ring And Washer |
| 11. Coil | 23. Stationary Contact |
| 12. Anchor Plate | 24. Heat Dissipator |

Fig. 2 - Cutaway View Of Contactor