# Type FDH Magnetic Contactors Frames 72FDH, 92FDH and 102FDH

### INSTRUCTIONS

#### DESCRIPTION

These are two pole, D-C. magnet operated, A-C. contactors, designed to handle the current output of single phase, high frequency A-C. generators. They are arranged for mounting on insulating panels up to two inches thick. Separate main and arcing contacts are provided.

#### RATING

The ampere rating at a maximum of 800 volts is as follows:

Cycles	AMPERES		
	72FDH	92FDH	102FDH
1000	375	750	1800
3000	375	750	1500

## **OPERATING COILS**

The D-C. operating coils are intended to be connected in series, with the line leads going to the upper coil terminals. Coils are designed for continuous service after their closing current has been reduced by a resistor cut in by an auxiliary switch during closing of the contactor. Coils will successfully operate the contactors at from 80% to 110% of rated control circuit voltage.

#### INSTALLATION

When installing, connect as per diagram applying to the particular job for which contactor will be used. Remove all paper and cord tieing parts together for shipment. Remove any material that could interfere with mechanical operation or prevent closing of the contacts. Check for unnecessary

friction by partially closing the contactor by hand. It should fall out freely from the position where the arcing contacts just touch. Lubricate all bearings and hinge pins.

The main contacts should close last and open first. When the arcing contacts just touch, there should be ½6" gap on the main contacts. This can be controlled by adjusting the screws which limit the travel of the main contacts. The heads of these screws should lift away from their stops approximately ½6" when the contactor is completely closed. If adjustment is necessary, be sure to lock the adjusting screws by tightening the jam nuts. Arc boxes should be pulled down as far as they will go until stopped by resting against the stationary contact support. The top end of the stationary arc horn should pass under the barrier in the arc box and should not prevent pulling the arc box down against the contact support casting.

# PERIODIC INSPECTION AND MAINTENANCE

Inspect the contactor weekly, or more often if service is severe, to observe any parts which may need replacement or repair. Arcing contacts should be replaced if worn so much that the gap on the main contacts when the arcing contacts touch is less than 32". Clean accumulated dust and dirt from all insulating surfaces. Lubricate the main shaft bearings and all hinge pins. Do not lubricate the contacts.

Swing the arc boxes upward to inspect the arcing contacts. Before doing this, disconnect the arc horn shunt and remove the bolts which hold the laminated blowout core to the small brackets on the sides of the arc box. This will free the arc box so that it can be lifted upward, revolving about the hinge pin near the panel.