

Type FDHB Magnetic Contactors Frames 92FDHB, 102FDHB

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. Separate main and arcing contacts are provided. The main contact circuits are arranged as close together as possible to minimize inductance. They are located back to back, one on each side of an insulating panel. Main contacts are double break, silver to silver, while arcing contacts are single break, copper to copper, and provided with arc boxes and magnetic blowouts. Both arcing contacts are on the front side of the panel.

RATING

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

Cycles	AMPERES	
	92FDHB	102FDHB
3000	1500	2500
9600	1000	1750

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 the contactor will be used. Remove all paper and cord tying parts together for shipment. Remove any material that could interfere with mechanical operation or prevent closing of the contacts. Check for unnecessary fric-

tion 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 $\frac{1}{4}$ " gap on each side of the main contacts. This can be controlled by removing the connecting link hinge pins and turning the threaded clevis studs. After the main contacts touch, there should be $\frac{3}{16}$ " additional movement toward the panel to compress the main contact springs. This can best be checked by measuring the distance the main contact pieces are lifted away from the micarta stop plate when the contactor is fully closed.

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 behind the barrier at the top of 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 $\frac{1}{8}$ ". Clean accumulated dust and dirt from all insulating surfaces. Lubricate the main shaft bearings, all hinge pins and the guide pins for main contact support castings. Do not lubricate the contacts.

Swing the arc boxes upward to inspect the arcing contacts. Before doing this, disconnect the front 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.

Westinghouse Electric Corporation

East Pittsburgh, Pa.