

June, 1925

INDUSTRIAL DEPARTMENT

Class RP 24103



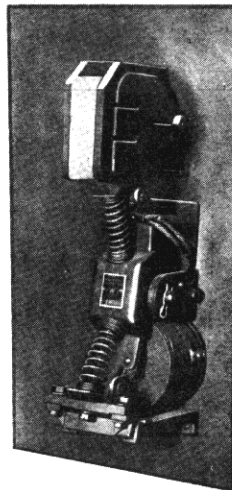
## RENEWAL PARTS DATA

# Westinghouse

## Type CS Magnetic Contactors

For Direct-Current, Elevator Service

Frame Nos. 31, 41 and 51



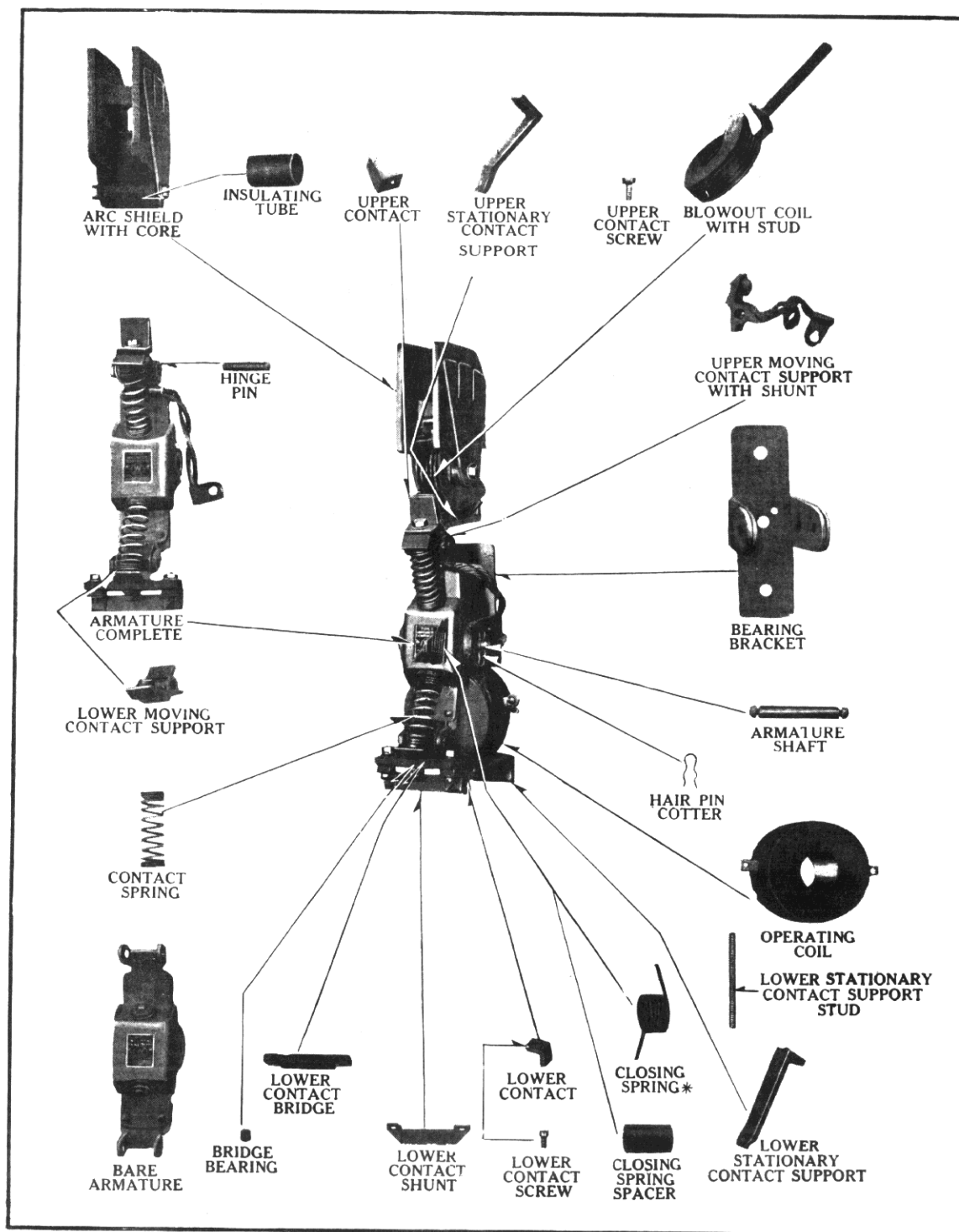
Type CS  
Magnetic Contactor  
Frame No. 51

WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY  
East Pittsburgh, Pa.

Printed in U.S.A.

## INDUSTRIAL DEPARTMENT

## TYPE CS MAGNETIC CONTACTOR RENEWAL PARTS



\*When ordering, specify whether right or left hand spring is desired.

## RENEWAL PARTS FOR TYPE CS MAGNETIC CONTACTORS, FRAME NOS. 31, 41 and 51

The renewal parts illustrated above are used for Type CS Magnetic Contactors, frame numbers 31, 41 and 51, (with or without blowout coil and arc shield). Simply NAMING THE PART AND GIVING THE CONTACTOR NAME PLATE READING, will insure correct shipment. For ORDERING INSTRUCTIONS, see page 3.

**RECOMMENDED MINIMUM RENEWAL PARTS STOCK**  
(Quantities based on the number of duplicate contactors in service)

Name of Part	No. per Contactor	Recommended Stock for		
		2	5 Duplicate Contactors	15
Operating Coil.....	1.....	0.....	1.....	1
Armature Complete.....	1.....	0.....	0.....	1
Upper Moving Contact Support with Shunt.....	1.....	1.....	1.....	2
Lower Moving Contact Support.....	1.....	0.....	1.....	2
Contact Spring.....	2.....	1.....	2.....	4
Upper Contact.....	2.....	4.....	8.....	16
Lower Contact.....	4.....	8.....	16.....	32
Upper Contact Screw.....	2.....	2.....	4.....	8
Lower Contact Screw.....	4.....	8.....	16.....	32
Lower Contact Shunt.....	1.....	1.....	1.....	2
Lower Contact Bridge.....	1.....	1.....	1.....	2
Bridge Bearing.....	1.....	0.....	0.....	1
Armature Shaft.....	1.....	0.....	1.....	1
Hinge Pins.....	2.....	0.....	1.....	2
Hair Pin Cotter.....	2.....	4.....	8.....	16
Right-Hand Closing Spring.....	1.....	1.....	1.....	2
Left-Hand Closing Spring.....	1.....	1.....	1.....	2
Upper Stationary Contact Support.....	1.....	0.....	1.....	1
Lower Stationary Contact Support.....	2.....	0.....	1.....	2
Lower Stationary Contact Support Stud.....	2.....	0.....	1.....	2
Blowout Coil with Stud.....	1.....	0.....	1.....	1
Arc Shield with Core.....	1.....	1.....	1.....	2
Insulating Tube.....	1.....	1.....	1.....	2

**ORDERING INSTRUCTIONS**

Quick shipments from district office stock and prompt replies to inquiries without the necessity of referring to the Works for information, are possible only when complete identifying information for the parts are given. Careful observance of the following points on inquiries or orders is essential for correct shipments and prompt service.



Type CS  
Magnetic Contactor  
Nameplate

1. Name the part, using the name shown on the illustration on the preceding page, and state the quantity desired. When ordering operating coils, always give the style or L-number that is stamped on the metal tag attached to the coil.
2. Give the contactor nameplate reading. See illustration above.
3. State whether shipment is to be made by freight, express (and name the route) or by parcel post. If by parcel post, shall we insure the shipment?
4. Send all orders or correspondence to the nearest district office of the company. (List of district offices are shown on page 4.)
5. Small orders should be combined so as to amount to a value of at least one dollar, as order handling and shipping expense prevent us from billing a smaller amount.

## GENERAL INFORMATION

**Interchangeability:**

The contacts, shunts, blowout coils, arc shields and contact hinge pins used on the Type CS Magnetic Contactors are the same as those used on the alternating-current Type F Magnetic Contactors. The same style of contacts, blowout coils and arc shield are used on alternating-current and direct-current manually and motor operated Type S Controllers. The contacts used on Type A Auto Starters, Type 816 Motor Starting Switches and other types of controllers, are interchangeable with those used on Type CS Magnetic Contactors.

This interchangeability of parts makes it possible to obtain the full benefit of controller standardization.

**Operating Coils:**

Owing to the great difference in normal voltage in the various installations, it is impossible to adhere to a standard voltage to meet all requirements, and for that reason the voltage is not marked on the coils.

Repairmen should be instructed to requisition and replace coils by the number stamped on a metal tag which is fastened to each coil, because control panels are frequently equipped with coils of different voltages. If this practice is followed, the annoyance and delay due to the use of improper coils will be avoided.

**Operating Suggestions:**

When renewing contacts, care should be taken that the proper alignment is made between the contact and

the contact support and that the contact screw is tightened securely.

When fastening the leads to the operating coils, avoid straining the terminals of the coils, so as not to injure the coil insulation.

Make certain that a good contact is made between the terminal of the shunt and the surface to which it is attached. Because of the necessity of having a good contact between these two parts, the smaller frame sizes, number 31 to 51 inclusive, are furnished with the shunt permanently attached to the contact support. The bending of the shunt should be evenly distributed.

When replacing operating coils, the surfaces between the pole pieces and the bearing bracket should be cleaned in order to insure a good magnetic circuit.

**Regular weekly inspection** is strongly recommended. You may often prevent expensive repairs by making minor adjustments or by replacing a small part at the time of the inspection, before greater damage results.

**Westinghouse control engineers**, located in the various District Offices of the Company, welcome an opportunity to discuss your general control problems and to make specific recommendations regarding the application and care of magnetic controllers.

## WESTINGHOUSE MAIN AND BRANCH SALES OFFICES

(Sub and Field Offices in all principal cities)

ATLANTA, GA., Westinghouse Elec. Bldg., 426 Marietta St.  
BALTIMORE, MD., Westinghouse Elec. Bldg., 121 E. Baltimore St.  
BOSTON, MASS., Rice Bldg., 10 High St.  
BUFFALO, N. Y., Ellicott Square Bldg., Ellicott Square  
BUTTE, MONT., Montana Elec. Co. Bldg., 52 East Broadway  
CHICAGO, ILL., Conway Bldg., 111 W. Washington St.  
CINCINNATI, OHIO, Westinghouse Elec. Bldg., Third and Elm Sts.  
CLEVELAND, OHIO, Station "B", Westinghouse Elec. Bldg., 2209 Ashland Rd., S. E.  
DALLAS, TEX., Magnolia Bldg., Akard and Commerce Sts.  
DENVER, COLO., Gas & Electric Bldg., 910 Fifteenth St.  
DETROIT, MICH., Westinghouse Elec. Bldg., 1535 Sixth St.  
EL PASO, TEX., Mills Bldg., Oregon and Mills Sts.  
HOUSTON, TEX., Union National Bank Bldg., Main St. and Congress Ave.  
HUNTINGTON, W. Va., Westinghouse Elec. Bldg., Cor. Second Ave. & Ninth St.

INDIANAPOLIS, IND., Westinghouse Elec. Bldg., 820 N. Senate Ave.  
KANSAS CITY, MO., 2126 Wyandotte St., Gateway Station  
LOS ANGELES, CAL., Westinghouse Elec. Bldg., 420 S. San Pedro St.  
MILWAUKEE, WIS., First National Bank Bldg., 425 E. Water St.  
MINNEAPOLIS, MINN., Northwestern Terminal, 2303 Kennedy St., N.E.  
NEW ORLEANS, LA., Maison Blanche Bldg., 921 Canal St.  
PHILADELPHIA, PA., West Elec. & Mfg. Bldg., 30th and Walnut Sts.  
PITTSBURGH, PA., Chamber of Commerce Bldg., 7th and Smithfield Sts.  
PORTLAND, MAINE, 61 Deering St.  
ST. LOUIS, MO., Westinghouse Elec. Bldg., 717 So. Twelfth St.  
SALT LAKE CITY, UTAH, Interurban Terminal Bldg., W. Temple and S. Temple St.  
SAN FRANCISCO, CAL., First National Bank Bldg., 1 Montgomery St.  
SEATTLE, WASH., Westinghouse Elec. Bldg., 3451 E. Marginal Way  
TUCSON, ARIZ., Immigration Bldg., 90 Church St.  
WASHINGTON, D. C., Hibbs Bldg., 723 Fifteenth St., N.W.