CLASS 7210, D-C. STARTING AND SPEED REGULATING RHEOSTAT (Frame No. 3)

INSTRUCTIONS

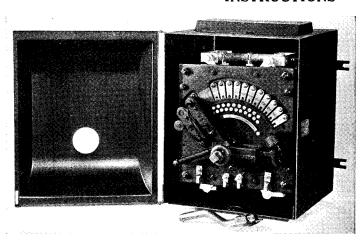


Fig. 1—Easily Installed. Resistor Unit is Readily Removable from Cabinet to Facilitate Mounting. Plenty of Space for Wiring. Terminals are Plainly Marked.

Ratings

 $\frac{1}{2}$ to 10 Hp. 115 Volts, $\frac{1}{2}$ to 25 Hp. 230 Volts.

Resistors

In the smaller ratings wire wound bobbins are used both in the armature and field circuits. In the larger ratings edgewound tubes are used for starting. These resistors are all fastened to the rear of the faceplate, so that the faceplate and resistors as a unit can readily be removed from the cabinet for in-spection or repair. Moreover the wiring is so arranged that either starting or field resistors can be worked upon separately without disturbing the wiring of the other. Fig. 2 shows how this is accomplished.

Installation

The rheostat should be mounted so that the ventilating hood is at the top. Air space both above and below should be allowed for ventilation. Underwriter's and local building codes should be followed. Make connections as shown by diagram.

Operation

To start the motor, close line switch or circuit breaker and turn the operating handle toward the right. The motor should start when the pointer on the arm reaches the position marked start, although in the case of an overload on the motor, it may be necessary to move past that point. Continued motion toward the right should accelerate the motor to full field speed.

The starting resistors are designed for A.E.S. Class 114 which means that the motor should reach full speed in approximately five seconds with a minimum of seventy-five seconds between successive starts. If the starting periods are infrequent a longer starting is allowable.

When the arm has reached the ex-

treme right hand position, the free arm will be held by the low voltage release magnet and the operating handle can be moved back toward the left to increase speed by field control. There is an adjustable interlock shown in Fig. 3 between the two arms by which the maximum motor speed may be adjusted to the correct speed for the application.

Failure of voltage releases the one arm and both arms will be returned to the off position. There is a magnetic blowout on the first starting contact, that so effectively opens the circuit that the motor may be "inched" if desired. To stop motor return arm to off position or open line switch.

Maintenance

Some arcing and burning of the contact making parts is unavoidable and periodic inspection and cleaning should be made. Smoothing the contacts with sandpaper will usually keep the rheostat in good operating condition although dressing with a file may be needed occasionally. After each cleaning, the contacts should be very lightly greased.

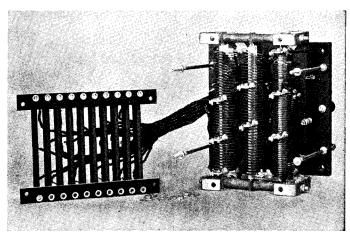
If through abnormal conditions the resistors are damaged, the faceplate together with the resistors can easily be removed from the box and the damaged units repaired or replaced. Where several motors of the same rating are in use a complete spare resistor should be kept on hand. The contacts are reversible and when badly burned or worn should be turned over.

Drip Proof

When drip proof construction is ordered, suitable covers or shields are added to prevent dripping water from entering the rheostat.

Dimensions

See DLP 42A604 for standard. See DLP 45A720 for drip proof.



Pig. 2—Inspection and Repair are Made Easy as Field Resistors are Removable from the Resistor Mounting, without Disconnecting the Wiring

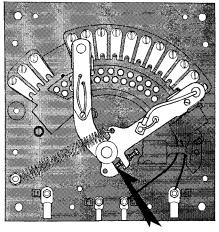
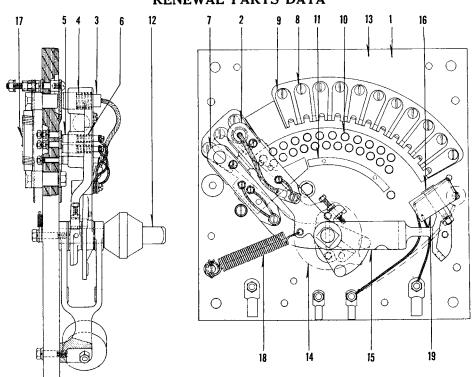


Fig. 3—On Class 7210 Rheostats, a Set Screw on the Starting Arm can be Adjusted to Set the Maximum Speed Position of the Regulating Arm.

^{*}To be filed as an Instruction Leaflet and as Renewal Parts Data; for Renewal Parts, see reverse side of this sheet.

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CLASS 7210, D-C. STARTING AND SPEED REGULATING RHEOSTAT (Frame No. 3) RENEWAL PARTS DATA



Recommended Stock of Renewal Parts

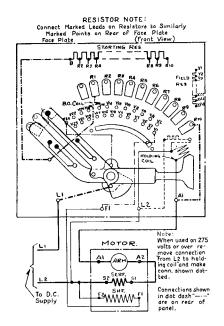


Fig. 5-Wiring Diagram

The above diagram is for compound-wound motors. For shunt-wound motors the series field coil is omitted.

For Face Plates in use up to and including			1	5	
Ref. No.	Name of Part	No. Per Unit	Recommended for Stock		Style No. of Part
1 2 3 4 5 6	Face Plate Complete without Coil Contact Arm Complete with Contacts—Upper. Main Contact with Shunt. Main Contact Spring. Auxiliary Contact without Shunt. Auxiliary Contact Spring.	1 1 1 1	0 0 1 0 1	0 0 1 1 1 1	833722A 885313 850791 809450 833796 809451
7 5 6 8 9	Contact Arm Complete with Contacts—Lower Auxiliary Contact without Shunt Auxiliary Contact Spring Stationary Contact Stationary Contact Dummy Stationary Contact Buttons.	2 2 13 1	0 1 0 7 0 0	0 2 1 13 1 25	885314 833796 809451 833797 833798 822424
11 12 13 14 15	Stationary Contact Segment Shaft Assembly Base Handle Bearing	1 1 1	0 0 0 0	1 0 0 0 0	885315 833723 809446 833794 809447
16 17 18 19 19	Magnet Core. Blowout Coil Return Spring. Magnet Coil—115 Volts. Magnet Coil—230 Volts. Resistor Unit.	1 1 1	0 0 0 1 1 0	0 1 1 1 1 1 1ea.	825012 833795 808449 822168 822169

tNot shown on illustration.
tWhen ordering Resistor Units, always specify the Style Number stamped on the old unit.
Parts indented are included in the part under which they are indented.

This list of Renewal Parts is given ber. Give the complete name plate only as a guide. When continuous operation is a primary consideration, additional insurance against shutdowns is sired by express, freight or by parcel post. Send all orders or correspondence renewal parts stock should be carried,

Ordering Instructions

Name the part and give its style num- at \$1.00.

desirable. Under such conditions more post. Send all orders or correspondence to nearest Sales Office of the company. considering the severity of service and Small orders should be combined so as the time required to secure replace- to amount to a value of at least \$1.00 net. Where the total of the sale is less than this, the material will be invoiced

*To be filed as Renewal Parts Data and as an Instruction Leaflet; for Instructions, see reverse side of this sheet.

Westinghouse Electric & Manufacturing Company

East Pittsburgh, Pa.

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