

CLASS 7210 DIRECT-CURRENT STARTING AND SPEED REGULATING RHEOSTAT

Frame No. 4 INSTRUCTIONS

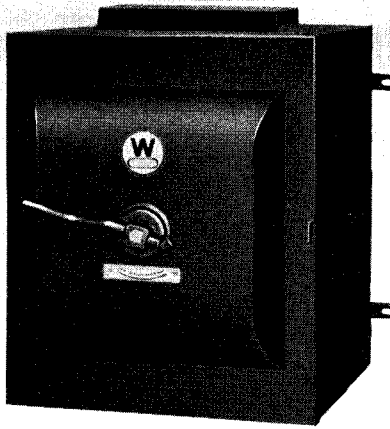


FIG. 1—EXTERNAL VIEW OF CLASS 7210
REGULATOR

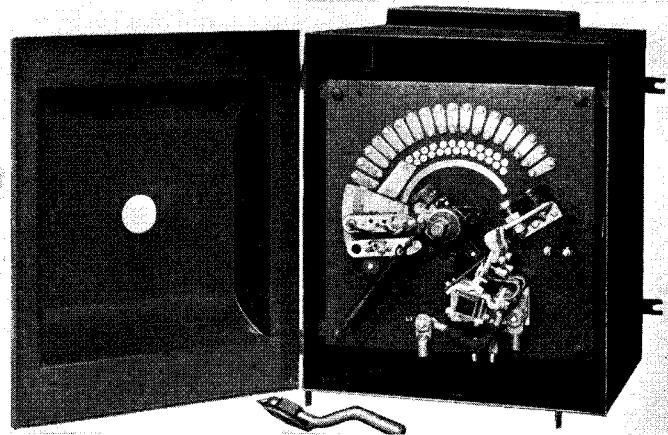


FIG. 2—CLASS 7210 REGULATOR WITH CABINET COVER OPEN

Ratings

15 to 25 Hp. 115 Volts, 30 to 50 Hp., 230 Volts.

Resistors

Edgewound tube resistors are used in the armature starting circuit and wire wound bobbins in the field circuit. Both are fastened to the rear of the faceplate so that the faceplate and resistors as a unit can easily be removed from the cabinet. The construction and wiring are such that either circuit is accessible without disturbing the wiring of the other.

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 of 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 extreme 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 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.

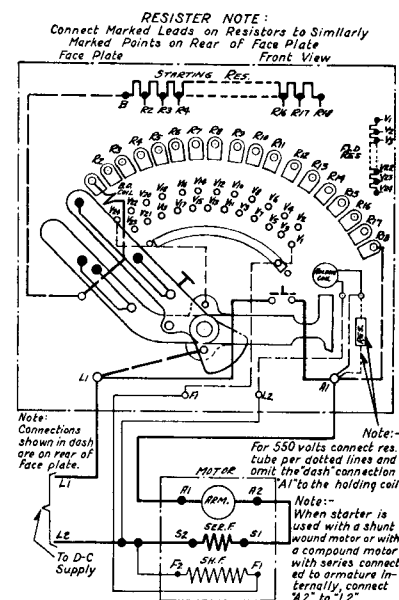
If through abnormal conditions the resistors are damaged, the faceplate together with the resistor can easily be removed from the box and the damaged units repaired or replaced. Where several motors of the same rating are in use a complete spare resistor should be kept on hand. The contacts are reversible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



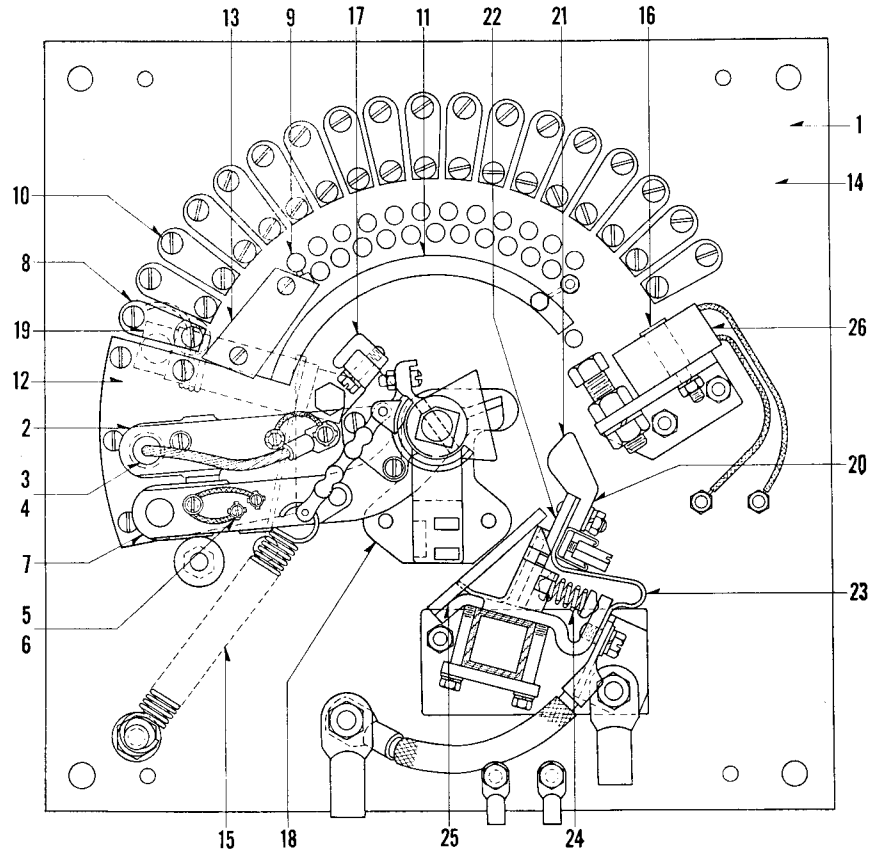
The above diagram is for compound-wound motors. For shunt-wound motors the series field coil is omitted.

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

CLASS 7210, DIRECT-CURRENT STARTING AND SPEED REGULATING RHEOSTAT

Frame No. 4

RENEWAL PARTS DATA



Recommended Stock of Renewal Parts

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	Face Plate Complete without Coil.....	1	0	0	842700A
2	Contact Arm Complete with Contacts—Upper.....	1	0	0	884316
3	Moving Contact with Shunt—Main.....	1	1	1	850791
4	Contact Spring—Main.....	1	0	1	809450
5	Auxiliary Contact without Shunt.....	1	1	1	833796
6	Auxiliary Contact Spring.....	1	0	1	809451
7	Contact Arm Complete with Contacts—Lower.....	1	0	0	885317
5	Auxiliary Contact without Shunt.....	2	1	2	833796
6	Auxiliary Contact Spring.....	2	1	1	809451
8	Stationary Contact—Main.....	18	9	18	833797
9	Stationary Contact—Auxiliary.....	25	0	15	885396
10	Stationary Contact Stud—Main.....	18	2	4	833892
11	Stationary Contact Segment.....	1	0	1	885323
12	Rider—Main.....	1	0	0	884325
13	Rider—Auxiliary.....	1	0	0	884326
14	Base.....	1	0	0	885324
15	Return Spring.....	1	0	1	884908
16	Magnet Core.....	1	0	0	825012
17	Contact.....	1	0	1	884907
18	Bearing Bracket.....	1	0	0	884372
19	Blowout Coil.....	1	0	1	833795
20	Type A Contact Finger.....	2	0	0	764220
21	Finger Tip.....	2	2	4	764207
22	Finger Base.....	2	0	0	809463
23	Finger Shunts.....	40	0	10	764216
24	Finger Spring.....	2	0	1	764208
25	Finger Arx Barrier.....	2	0	1	764217
26	Magnet Coil—115 Volts.....	1	1	1	822168
26	Magnet Coil—230 Volts.....	1	1	1	822169
†	Resistor Unit.....	1 set	0	1 each	†

†When ordering Resistor Units, always specify the Style No. stamped on the old unit.

‡Not shown on illustration.

Parts indented are included in the part under which they are indented.

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Westinghouse Electric & Manufacturing Company

East Pittsburgh, Pa.

This is a list of the Renewal Parts and the quantities of each that we recommend should be stocked by the user of this apparatus to minimize service interruptions caused by breakdowns. The parts recommended are those most subject to wear in normal operation, or to damage or breakage due to possible abnormal conditions.

This list of Renewal Parts is given only as a guide. When continuous operation is a primary consideration, additional insurance against shut-downs is desirable. Under such conditions more renewal parts stock should be carried, considering the severity of service and the time required to secure replacements.

Ordering Instructions

Name the part and give its style number. Give the complete name plate reading. State whether shipment is desired by express, freight or by parcel post. Send all orders or correspondence to nearest Sales Office of the company. Small orders should be combined so as 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 at \$1.00.