



NEMA SIZE 2 SINGLE POLE S UNDER VOLTAGE RELAY FRONT CONNECTED FOLIO 7A FOR DC OPERATION

INSTRUCTIONS

RATING: Relay rating is 8, 12, 25, or 50 amperes continuous depending upon blowout coil supplied.

ELECTRICAL INTERLOCKS: These consist of stationary contacts mounted on the base and a moving contact attached to the magnet arm. The moving contact should provide $\frac{1}{8}$ " follow-up when the magnet arm reaches its limit of travel, either completely closed or completely opened. The rating of these electrical interlocks is as follows:

	Max. Inrush	Cont. Amps.	Rupturing Capacity Amps. Inductive			
			115V.	250V.	440V.	550V.
A.C.	30	10	10	10	5	5
D.C.	30	15	2.5	1.0	.4	.4

OPERATING COILS: Continuous duty operating coils are furnished for 115 volts and 230 volts. For 550 volts, the 230 volt coil is used and connected in series with a suitable resistor.

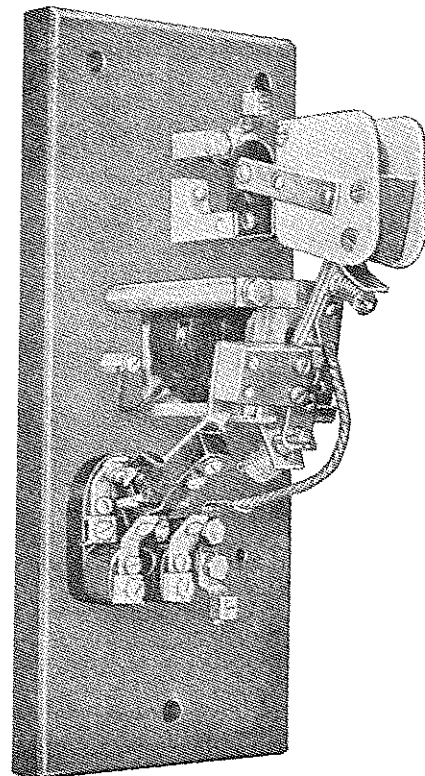
To remove the coil, loosen and rotate the stop plate out of the way and loosen the screws securing the spring retaining plate to the frame. Compress the arm spring and unhook the spring pin from the spring plate. The magnet arm may then be worked out of its bearing, exposing the coil. Remove core cap and coil terminal screws.

The relay will pick up and seal on 80% normal voltage, with the coil hot, will stand 110% voltage continuously, and will hold in to approximately 15% of normal voltage.

Time delay dropout can be provided by the addition of a condenser and resistor to give time delays of .3, .4, .6, or .8 seconds.

MAGNET AIR GAP: The air gap is provided by means of a non-magnetic spacer between the core and the frame which are held together by a brass screw. The armature seals directly against the core plate. See that this point of contact is free of any sticky, foreign material.

BEARINGS: Knife edge bearings are used and require no oiling. After assembly or adjustment, merely see that the knife edge bearing is properly located in its seat so that the arm moves freely. The arm spring has no adjustment but is sufficient to maintain the magnet arm properly in its bearing.



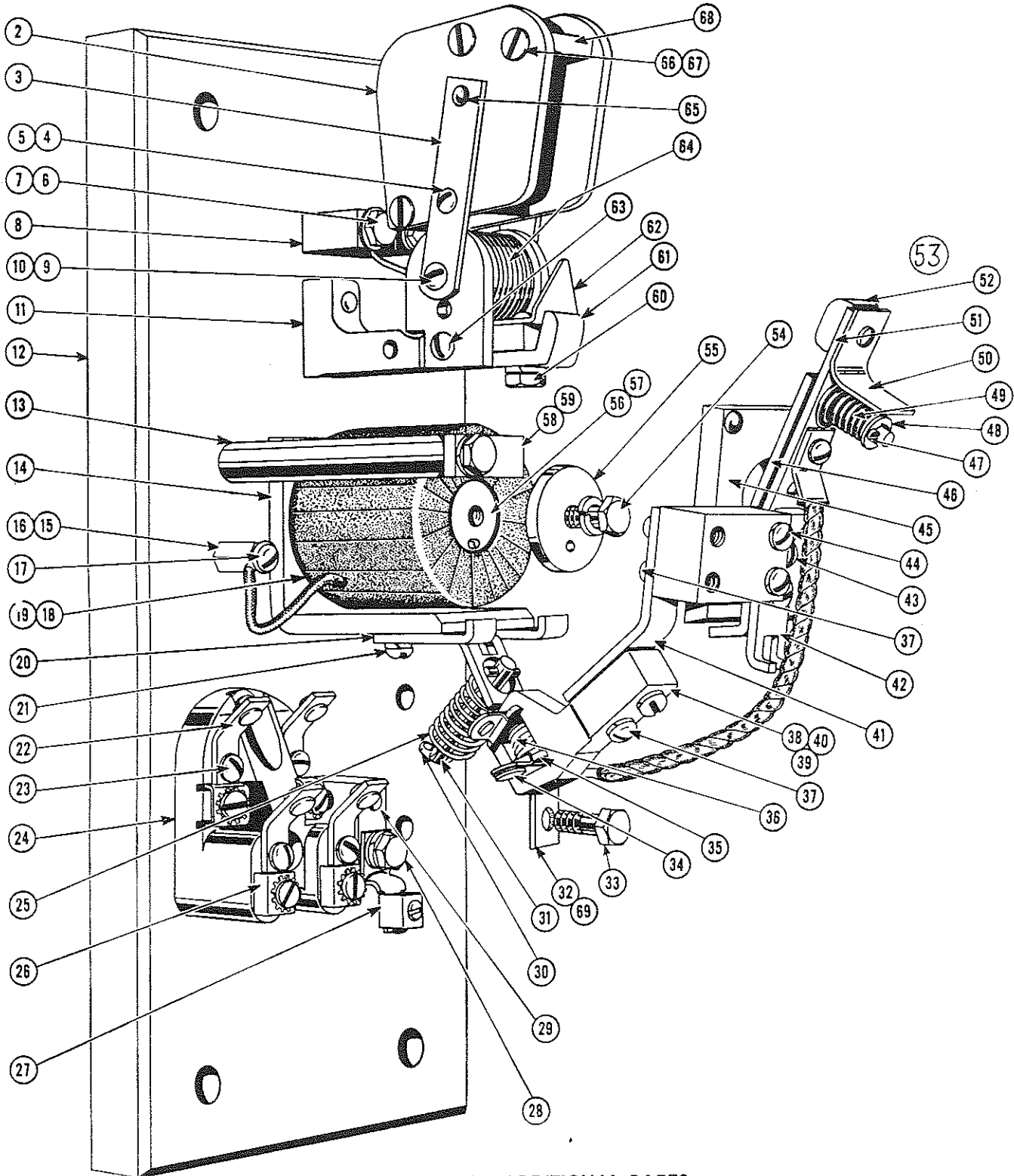
CONTACTS AND CONTACT SPRINGS: The contacts have coin silver facing and the follow-up with new contacts is $\frac{1}{4}$ " which is equivalent to $\frac{1}{8}$ " when measured on the contact arm opposite the contact spring pin. When contacts wear through the silver facing, the contacts should be replaced. The contact spring pressure is not adjustable. The initial pressure should be approx. one pound, and the final sealed pressure approx. $1\frac{1}{2}$ pounds. There is sufficient tolerance in the assembly of arms to permit alignment of the contacts. When replacing contact tips, see that they are properly aligned and that the contact springs do not bind. Always have the arc shields fully down when operating the relay under load.

(Continued on Page 4)



NEMA SIZE 2 SINGLE POLE S UNDER VOLTAGE RELAY FRONT CONNECTED, FOLIO 7A

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SEE PAGE 4 FOR ADDITIONAL PARTS



NEMA SIZE 2 SINGLE POLE S UNDER VOLTAGE RELAY FRONT CONNECTED, FOLIO 7A

NOTE: Indented items are component parts of item immediately preceding.

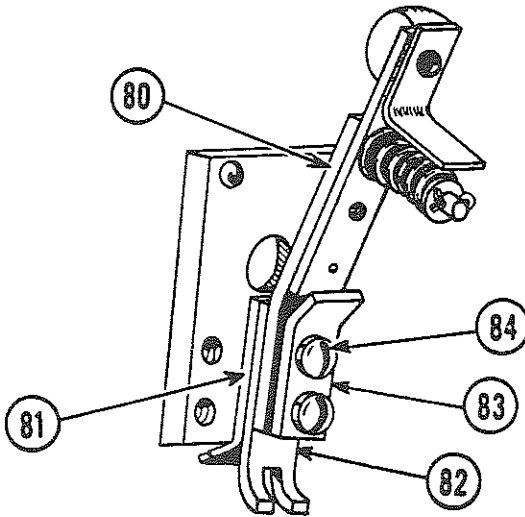
Item No.	List No.	Description	Item No.	List No.	Description
1	SS-0746-A	Assembled Arc Shield, Complete.....	39	EL-2-A	Control Circuit Arm, complete for Open and Closed Control Circuit.....
2	SS-0770	Arc Shield, 2 req'd.....	40	EL-47	Control Circuit Arm, only.....
3	SS-0753	Blowout Ear, 2 req'd.....	41	EL-62	Control Circuit Support.....
④4	19418-1440	Binding Post.....	42	SS-0795	Spring Plate.....
5		8-32x $\frac{3}{16}$ " R.H. Aluminum Screw.....	43		10-24x $\frac{1}{2}$ " R.I. Screw and Lk. Washer, 2 req'd.
6		$\frac{1}{4}$ "-20x $\frac{1}{2}$ " H.Stl. Machine Screw.....	44		10-24x1" R.I. Screw and Lk. Washer, 2 req'd.
7	ZO-1150	Cup Washer, 2 req'd.....	45	SS-0922-A	Armature.....
8	S-0317-A	Assembled Terminal Block.....	46	SS-0796-A	Assembled Contact Bracket.....
9	SS-0781	Blowout Core (Not Shown).....	47		$\frac{1}{8}$ "x $\frac{1}{2}$ " Cotter Pin.....
10		10-24x1 $\frac{3}{4}$ " R.I. Screw, Nut and Lk. Washer	48	ZS-0349	Spring Guide.....
11	SS-0750	Contact Bracket.....	†49	SS-0896	Contact Spring.....
12		Base, Advise Name Plate marking.....	50	SS-0786	Guard.....
13	SS-0806	Stop Bar.....	51	SS-0754	Contact Finger, only.....
14	SS-0827-A	Assembled Frame.....	52	{ AS5005-851-58 SS-0898	Contact tip (silver faced) (For Relays)..... Contact tip (For Contactors).....
15	L-1721	Coil Terminal Stud, for 1" Base.....	†53	{ SS-0755-AS SS-0755-A	Aux. Contact arm (For Relays)..... Aux. Contact arm (For Contactors).....
16	L-1722	Coil Terminal Stud, for 1 $\frac{1}{4}$ " Base.....	54		$\frac{1}{4}$ "-20x $\frac{3}{4}$ " Everdur Hex. Machine Screw and Lk. Washer.....
17		10-24x $\frac{3}{8}$ " R.Stl. Mach. Screw and Lk. Washer	55	LT-1067	Core Cap.....
†18	SS-0782-AE	Operating Coil, 115 volt.....	56	S-0107-A	Assembled Core.....
†19	SS-0785-AE	Operating Coil, 230 volt.....	57	SS-0803	Non-Magnetic Spacer (At rear of Core, not shown).....
20	SS-0798	Spring Retaining Plate.....	58	SS-0805	Stop Plate.....
21		10-24x $\frac{3}{8}$ " R.I. Screw and Lk. Washer, 2 req'd.	59		$\frac{1}{4}$ "-20x $\frac{3}{4}$ " H.I. Cap Screw and Lk. Washer
†22	EL-109-A	Assembled Contact.....	60		$\frac{1}{4}$ "-20x $\frac{1}{2}$ " H.I. Cap Screw and Lk. Washer
23		10-32x $\frac{3}{8}$ " R. Stl. Mach. Screw and Lk. Washer	†61	{ AS5005-842-58 AS5005-840-01	Contact Tip (silver faced) (For Relays)..... Contact Tip (For Contactors).....
24	EL-100-A	Contact Block.....	62	SS-0752	Arc Horn.....
†25	SS-0802	Arm Spring.....	63		10-24x1 $\frac{1}{2}$ " R.I. Mach. Screw, Nut and Lk. Washer.....
26	FP-28H1-10	Terminal.....		{ SS-0867-A SS-0891-A	Blowout Coil, for 8 Amp. Service..... Blowout Coil, for 12 Amp. Service.....
27	FP-28C20	Terminal, 2 req'd.....	64	{ SS-0748-A SS-0747-A	Blowout Coil, for 25 Amp. Service..... Blowout Coil, for 50 Amp. Service.....
28		$\frac{1}{4}$ "-20x $\frac{1}{2}$ " H. Stl. Machine Screw and Lk. Washer.....	65		# 6x $\frac{3}{16}$ " Wafer Hd. Type "U" Drive Screw, 2 req'd.....
29	S-0317-A	Assembled Terminal Block.....	66	19418-14120	Binding Post, 3 req'd.....
30		$\frac{3}{32}$ "x $\frac{3}{4}$ " cotter pin.....	⑥67	22993-14480	Binding Screw, 3 req'd.....
31	SS-0769-A	Assembled Spring Pin.....	68	SS-0771	Arc Shield Spacer, 2 req'd.....
†32	S-0305-A	Assembled Connector.....	†69	SS-0828-A	Assembled Connector, for Use on Relays without Control Circuit.....
33		$\frac{1}{4}$ "-20x $\frac{1}{2}$ " H.I. Cap Screw and Lk. Washer			
†34	EL-84-A	Contact Bridge, 1 req'd. for Item 38, 2 req'd. for Item 39.....			
35	EL-87	Spring Retainer, 2 req'd.....			
†36	EL-49	Spring.....			
37		10-24x $\frac{3}{4}$ " R.I. Screw and Lk. Washer, 4 req'd.			
38	EL-1-A	Control Circuit Arm, complete for Open or Closed Control Circuit.....			

†Essential Parts for General Maintenance.
④Minor revisions since previous issue



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This contact assembly has been designed to provide extra contact wipe. Where greater wipe is needed on existing contactors, the necessary parts can be purchased separately or the new complete assembled contact arm SS-0955-A (as illustrated below) can be installed quickly and easily.



Item No.	List No.	Description
80	SS-0957-A	Assembled Contact Bracket.....
81	SS-0958	Armature Centering Plate.....
82	SS-0960	Spring Plate.....
83	SS-0959	Retaining Plate.....
84		10-24 x 3/4" R.I. Machine Screw and Lk. Washer

NOTE: Parts not numbered are the same as parts on Page 2.

ADVISE NAMEPLATE MARKING WHEN ORDERING SPARE PARTS