1201

# **RENEWAL PARTS AND INSTRUCTION PUBLICATION** FOR 75, 90, 110, AND 160KW 3 POLE AC CONTACTORS



#### INTRODUCTION

This publication is designed to simplify inspection and maintenance through the use of photographs and detail views for easy identification of parts. Illustrated steps on assembly and disassembly are shown. This information should be read carefully.

#### DESCRIPTION

This publication covers 3 pole, 3 phase non-reversing contactors with ratings as shown on the nameplates.

#### CARE

These contactors require no mechanical maintenance, Maintenance required can be performed with an electrician's screwdriver. For continued uninterrupted performance, renew all of the power contacts and springs at the same time before the contact tip material has worn away.

When renewing the contacts, check all terminal screws to insure they are tight and secure.

Suggestion-Refer to publication 14183 for helpful information on inspecting and determining when to replace contacts. NOTE - Disconnect power before any functions are performed on this contactor.

# RENEWAL OF OPERATING COIL (Figure 1)

The operating coil is epoxy encapsulated and so constructed to provide long service life. Should the coil require changing, the entire operation can be performed in a few minutes.

Caution - If the device has been in service, many parts may still be thermally hot.

- 1. Disconnect all power to the contactor.
- 2. Unfasten the two pan head cover screws "A" and remove the cover, item 22, Page 3.
- 3. Unfasten the four pan head screws securing the clamp, Item 21, and the armature, Item 18. Remove the clamp and the armature.
- 4. Pull the coil straight out.
- 5. Install the new coil with the coil terminal blades engaging the coil terminal clips.
- 6. Install the armature (narrow end to the left) into its seated operating position.
- 7. Install the clamp and secure the screws.
- 8. Install the cover.



FIGURE 2

#### **RENEWAL OF POWER CONTACTS** (Figure 2)

The power contacts, when used within their rating, will provide long trouble-free life. They should not be filed or dressed.

Caution - If the device has been in service, many parts may still be thermally hot.

- 1. Disconnect all power to the contactor.
- 2. Loosen the two gold-colored slotted hex head screws "B" and pull out the Power Unit. (Continued on Page 4)



# **RENEWAL PARTS – Information Required**

# To insure prompt handling of renewal parts orders, please include the following: DESCRIPTION, PART NUMBER, AND QUANTITY REQUIRED

<b>IA</b>			Quantity			
Item No.	Description	Part No.	75KW	90KW	110KW	160KW
1	Molded Base	17–18965	1	1	1	1
2	Stationary Contact (included with Item 28)	_	6	6	6	6
3	Terminal Plate	80-6168	6	6	6	6
	Mounting Adapters (not shown)					
	75–90KW Contactors	80-4072	6	6		—
	110160KW Contactors	80-6114		—	6	6
	1032 x .438 Flat Head Sems Screw	11–2390	36	36	36	36
4	Power Lug (not provided)	·	—	—		—
5	Control Terminal (not provided)		—	—	_	—
6	Terminal Clamp	551743	2	2	2	2
7	Coil Terminal Clip	80-2747	2	2	2	2
8	Insulator	<del>56</del> –6504	1	1	1	1
9	Movable Contact and Retainer (included with Item 28)		3	3	3	3
10	Contact Spring (included with Item 28)		3	3	3	3
11	Contact Bar	233542	1	1	1	1
12	Arc Chute	62-531	6	6	6	6
13	Magnet Housing	4 <del>9-</del> 6742-2	11	1	1	1
14	Spring	6 <del>9–</del> 2770	1	1	1	1
15	Magnet Frame	48-1030***	1	1	1	1
16	Plate	1 <del>9–</del> 1570	1	1	1	1
17	Magnet Coil (see Page 4)	**	1	1	1	1
18	Armature Assembly	48-1029-2***	1	1	1	1
19	Return Spring	<del>69–</del> 2554	2	2	2	2
20	Push Bar (Right–Hand)	61-1606	1	1	1	1
21	Bracket	7 <del>9</del> –17426	1	1	1	1
22	Cover Assembly	4 <del>9–</del> 6787–2	1	1	1	1
23	Push Bar (Left–Hand)	611612	1	1	1	1
24	Indicator	533050	1	1	1	1
25	10–32 x .938 Pan Head Screw	11–3107	4	4	4	4
26	No. 10 Lockwasher	916–484Z	4	4	4	4
27	No. 10 Flatwasher	916166	4	4	4	4
28	Renewal Contact Kit	**				
	(includes Items 2, 9, 10, and					
	mounting hardware)			l		
	75KW Contactor	6-293	1	—	—	—
	90 KW Contactor	6-294		1		-
	110KW Contactor	6–288	-	-	1	—
	160KW Contactor	6-286	—	—	—	1

# PARTS LIST

\*\* Recommended Spare Parts

\*\*\* It is recommended that Items 15 and 18 be replaced together.

(Continued from Page 1)

# **MOVABLE CONTACTS**

- 1. Remove the contact bar, Item 11, by removing the two screws and washers, Items 25, 26, and 27.
- 2. Refer to sketch "A". Raise the contact retainer, Item 9, against the spring to free the contact so it can drop out.



3. Refer to sketches "B" and "C". Rotate the retainer into the position shown and push it into the window to hold it. Lift the spring off the seat with a small screwdriver. Push the spring and retainer through the window.





- SKETCH "D" 4. Refer to sketch "D". Place and hold the retainer in the position as shown.
- 5. Compress the spring with the thumb and index finger and insert and seat in the cavity above the retainer.
- 6. Raise the retainer against the spring, insert and position the contact. Contact tips must face away from the retainer.
- 7. Install the contact bar to the push bars, Item 20 and 23, with screws and washers.

Note: The contact bar is not reversible. Match the ends of the contact bar to fit inside the raised projections on the push bars.

#### STATIONARY CONTACTS

NOTE: It is not necessary to disconnect any wiring.

- 8. Remove screws and old stationary contacts.
- 9. Install the new statiionary contacts and screws.

#### LUBRICATION

Do not lubricate any part of this equipment.

#### **AUXILIARY CONTACTS**

Are renewable as a complete assembly only. See tables for auxiliary contacts.

#### **ARC CHUTES**

These seldom require renewal. Some burning and discoloration is normal. When the contacts are renewed, brush out any loose accumulations.

# ACCESSORIES **AUXILIARY CONTACTS, TERMINAL BLOCK.** AND TRANSIENT SUPPRESSOR

#### **AUXILIARY CONTACTS BASE MOUNTED**

Circuit	Catalog No.
1 N.O.	C320KGS41
1 N.O. – 1 N.C.	C320KGS42

## **AUXILIARY CONTACTS** FOR MOUNTING ABOVE BASE MOUNTED INTERLOCK

Circuit	Catalog No.
1 N.O.	C320KGS20
1 N.C.	C320KGS21
1 N.O. – 1 N.C.	C320KGS22

#### TRANSIENT SUPPRESSOR

Catalog No.	
C320AS1	

#### **TERMINAL BLOCK**

 Catalog No.	
 C320TB2	

### **OPERATING COILS**

Volts	HZ	Part No.	Volts	HZ	Part No.
120 110	60 50	<del>9</del> 18911	380	50	<del>9</del> –1891–14
240 220	60 50	9–1891–2	24	60	9-1891-15
480 440	60 50	918913	240	50	9–1891–20
600 550	60 50	9–1891–4	415	50	9-1891-21
208	60	9-1891-13	277	60	9-1891-26