Instructions for A202 30 Ampere 2, 3, 4 or 5 Pole Lighting Contactor

I.L. 16965A
Model J

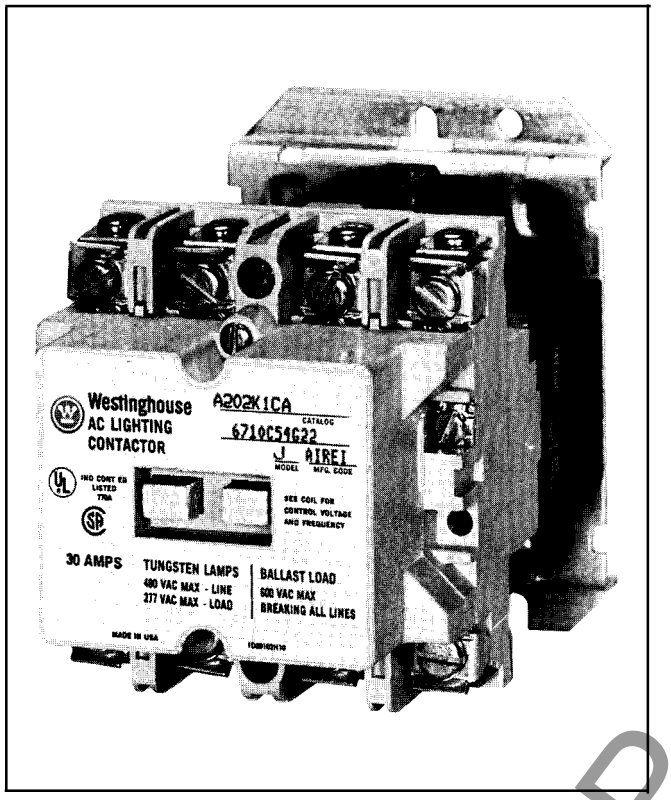

Fig. 1 30 Ampere Lighting Contactor

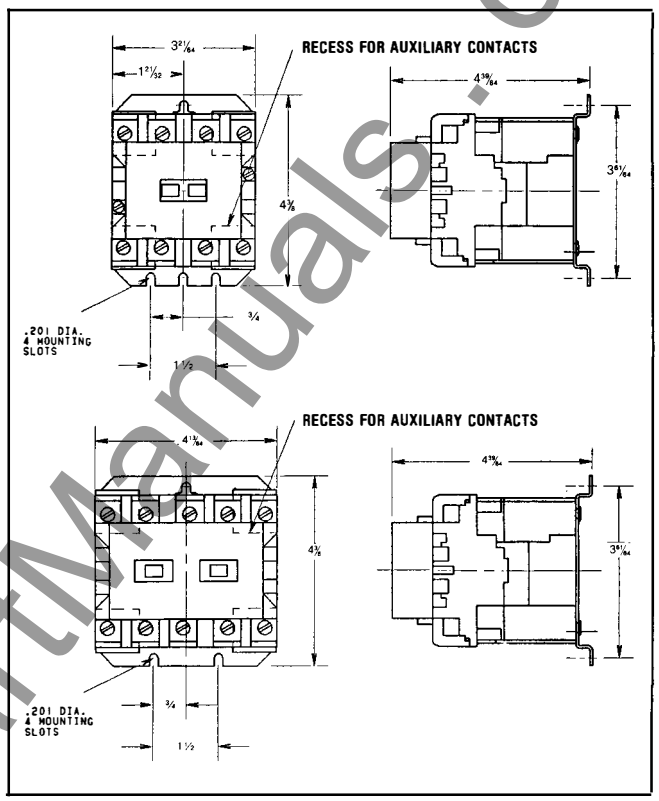

Fig. 2 Dimension Drawing (Dim. in inches)

THE CONTACTOR

The A202 lighting contactors when wired as shown in Figure 5 will control tungsten, fluorescent or metal vapor lamp loads. The contactor and its associated load should be protected against short circuits by a suitable branch circuit protective device selected in accordance with the National Electrical Code (NEC).

CONTACTOR RATINGS	
Continuous Current Enclosed, per pole	30A
Incandescent Lamp Control	
Maximum Volts, Line-to-Line	480VAC
Maximum Volts, Line-to-Neutral	277VAC
Electric-Discharge Lamp Control	600VAC
General-Use Switch	600VAC

This industrial type control is designed to be installed, operated, and maintained by adequately trained workmen. These instructions do not cover all details, variations, or combinations of the equipment, its storage, delivery, installation, check out, safe operation, or maintenance. Care must be exercised to comply with local, state, and national regulations, as well as safety practices, for this class of equipment.

AUXILIARY CONTACTS — L56 (RATED B600)

A maximum of four auxiliary units can be installed in the recesses of each contactor. These may be mounted with the terminals in line with the power poles or may be mounted with the terminals in a right angle relationship to the power poles. They mount by means of a spring clip which snaps into locations provided in the contactor. To remove the L56 disengage the top spring clip, by pressing on the extended tab, and withdraw the unit.

L56 AUXILIARY CONTACTS	
Contact Type	**Catalog No.**
1 Normally Closed	L56E
1 Normally Open	L56D
2 Normally Closed	L56C
2 Normally Open	L56B
1 Normally Open and 1 Normally Closed	L56

L56 CONTACT RATINGS (B600)		
AC Volts	**Make**	**Break**
24-120	30A	3A
120-600	3600VA	360VA

POWER CIRCUIT TERMINALS
Wire Size: **14-6 AWG**
Wire with copper conductors only, unless terminals are marked "AL-CU."

COIL

A202 lighting contactors are available with a single or dual voltage coil. When equipped with a single voltage coil, the contactor is wired as shown in Figure 5. A connection diagram for a dual voltage coil is shown in Figure 3. When supplied with a dual voltage coil, the contactor is normally wired for the high voltage connection. The wiring may be changed to the low voltage connection by removing and reconnecting the jumpers as illustrated below.

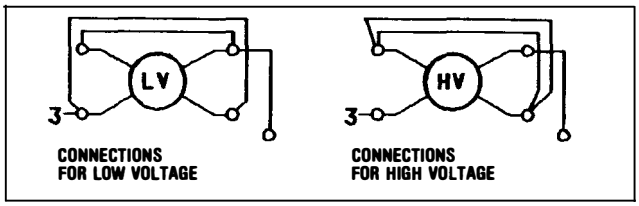

Fig. 3 Dual Voltage Coil Connections

AC COIL DATA, 30 AMPERE CONTACTOR (TYPICAL VALUES)

Poles	Inrush VA	Sealed VA	Sealed Watts
2-3-4	160	25	7.8
5	200	30	9.5
Pickup Time:	16—24 ms.	**Dropout Time:**	12—18 ms.

REPLACEMENT COIL: ORDER BY PART NUMBER, VOLTAGE, AND FREQUENCY

AC OPERATING COILS FOR 30 AMPERE CONTACTORS

Voltage	Freq.	Part Number	
		2, 3, 4 Pole	5 Pole
24	60	505C806G16	Not Available
120/110	60/50	505C806G01	505C808G01
208	60	505C806G02	505C808G02
240	60	505C806G12	505C808G12
277	60	505C806G18	505C808G16
380	50	505C806G07	505C808G07
480/440	60/50	505C806G13	505C808G13
600	60	505C806G05	505C808G05
120/240*	60/60	505C806G10	505C808G10
240/480*	60/60	505C806G03	505C808G03

* - Dual Voltage Coils. Use only on starters originally supplied with a dual voltage coil.

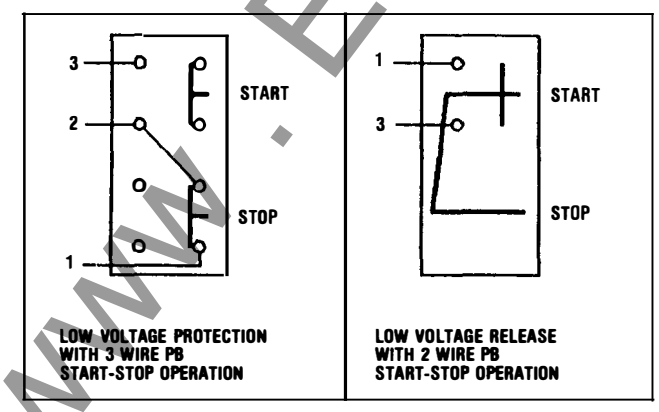

Fig. 4 Control Station Connection Diagram

TABLE I — ACCESSORIES

Fuse Block Kits — Meet requirements of NEC concerning common control fusing.

Order Cat. No.	Qty.	Description
F56	2	Contactor mounted Fuse Holder for 1 600 volt Bussman KTK Fuse
FKR	1	Panel mounted Fuse Holder for 2 Class CC (Bussman KTKR) Fuses*

*Use when available fault current exceeds 10,000 amperes.

Order Fuses Separately By Ampere Rating.

Contactor Size	Minimum Wire Size in Control Circuit	Suggested Fuse Size
30A	#16 AWG	10 AMP†

† - When using a control transformer, select fuse size based on National Electrical Code requirements.

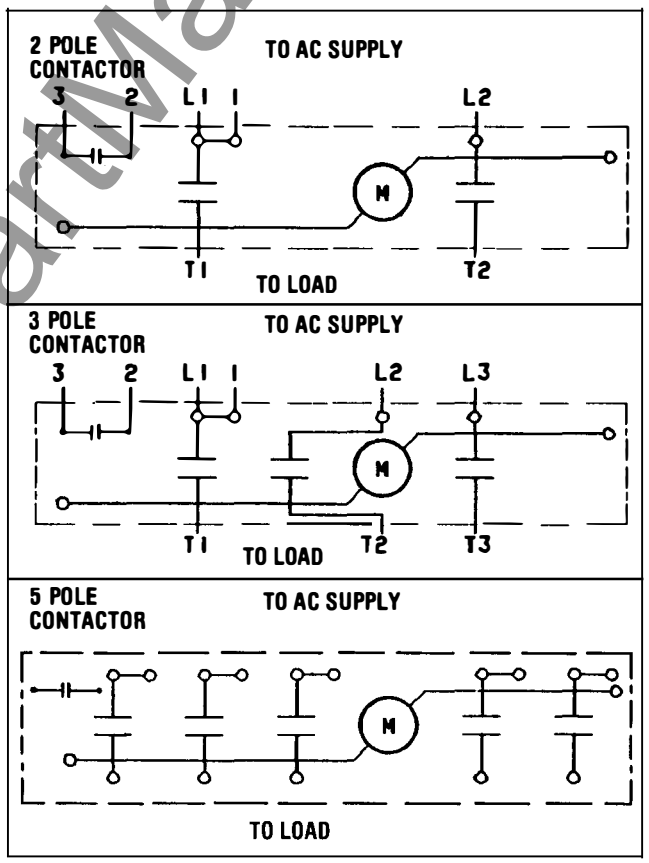

Fig. 5 Connection Diagram

REPLACEMENT CONTACT KITS

Contactor Rating and Pole Combination	Part Number
30 Amp 2 Pole	373B331G06
30 Amp 3 Pole	373B331G07
30 Amp 4 Pole	373B331G09

For each 5 pole device order one 2 pole kit and one 3 pole kit.

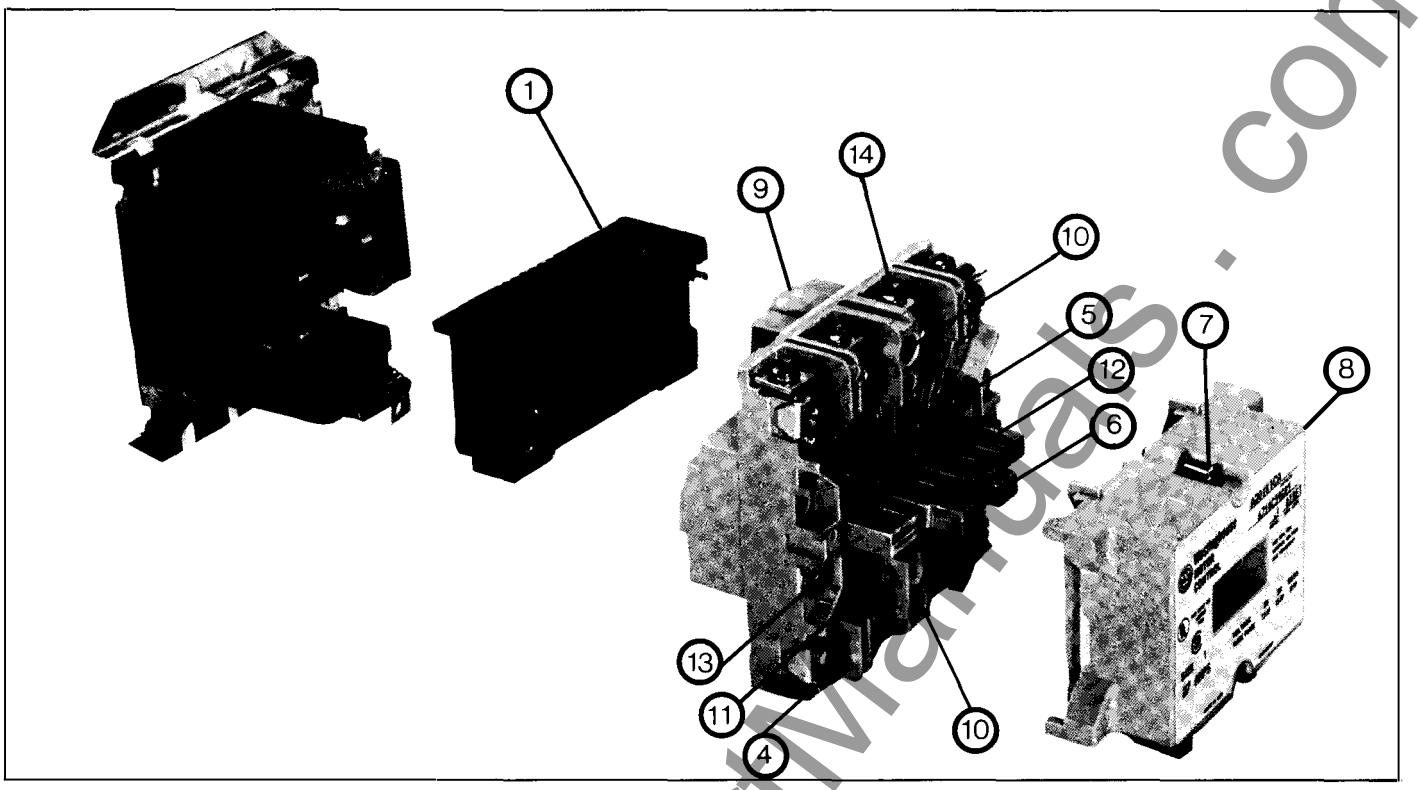

Fig. 6 30 Ampere, A202 Contactor (Exploded View)

MAINTENANCE — First Turn Off Power

To Inspect Contacts

Refer to Figure 6. Loosen the two arc box assembly screws (7) located immediately above and below the nameplate and remove the arc box (8). Contacts (5) are visible. Retighten the screws per Table II.

To Replace Contacts

After removing the arc box and with replacement contacts at hand, compress the overtravel spring (12) and remove the moving contact (5) from the crossbar (6). Remove any power connections. Remove screws (11) and lift out the stationary contact carriers (14).

To replace contacts, reverse the above procedure, making sure that stationary contacts are secure, (see Table II) moving contacts are free to move, overtravel springs are seated and the crossbar moves freely when the arc box is in position.

The silver cadmium oxide contact buttons need **NO** dressing or lubricant throughout their life.

Important — Replace all contacts and springs as a group to avoid misalignment.

To Replace The Coil

Refer to Figure 6. Loosen the assembly screws (10) located to the immediate top and bottom of the arc box. Pull the loosened upper base structure (9) forward. Pull the coil (1) from the upper base, plug in a new coil, replace the upper base structure and check the auxiliary contacts for secureness when repositioning the upper base. Tighten the assembly screws referring to Table II.

Magnet — Armature Assembly

Self alignment and permanent air gap features of the magnet armature make replacement unnecessary. Mating pole face surfaces should be kept clean.

Arc box must be in place when the contactor interrupts a circuit.

TABLE II — RECOMMENDED DRIVING TORQUE

Location (Qty.)	Driving Torque (lb.-in.)	Fig. 6 Item
Cover Screw (2)	7— 9	7
Coil Wire Connector (2)	7— 9	13
Stationary Contact Screw (2/pole)	7— 9	11
Main Power Connector (2/pole)	18—21	4

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