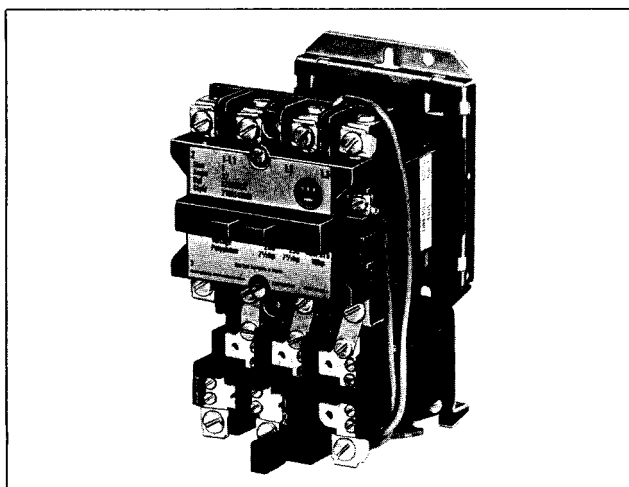


Instructions For A/200 Series, Size 0 and 1 Motor Controller With Block Type Overload Relay



I.L. 13633-B
File 8200



Size 1, A/200 Motor Controller

THE STARTER

The Westinghouse A/200 Series Motor Controller, when wired as shown, will operate as a full voltage starter and will give protection against overload (but not against short circuit currents) when provided with overload heaters as listed in the Heater Application Tables or when used with any means of inherent protection activated by motor temperature.

The starter should be protected against short circuits by fuses not exceeding four times the rated motor current, by a circuit breaker set at not more than four times the full motor current.

The A/200 Series Motor Controller complete is identified by CAT. NO.

The coil style number is marked on the end of the coil along with the voltage and frequency rating.

COIL

The A/200 Series Motor Controller is available with single or dual voltage coil. When supplied with a dual voltage coil, the motor controller is normally wired for the high voltage (HV) connection.

OVERLOAD RELAY

The A/200 Series Motor Controller is equipped with an overload relay Type AN13A mounted below the contactor unit. This relay is a non-compensated bimetal actuated type which is equipped with a trip indicator, trip adjustment covering $\pm 15\%$ of rating, normally closed control contact and which may be operated with either a hand or automatic reset. A STOP function is not incorporated in this mechanism. See I.L. 14568 for more complete information.

Type of operation is determined by the position of the adjusting plate on the load side of the overload relay base. The "HAND" position is set when the adjusting plate is positioned away from the panel. To set for "AUTO" operation: loosen the locking screw, move the adjusting plate toward the panel, and retighten the screw. Automatic reset should not be used with 2-wire master switch.

A temperature compensated overload relay, Type AA13A, is also available for use with the A/200 Series Motor Controller. See I.L. 14568 for complete information.

Each heater is identified by a code marking stamped on one terminal. The heater application table indicates the range of full load motor current to which a given heater may be applied. This range is so selected that the current

Motor Ratings - Horsepower ^①								
NEMA SIZE	Three Phase			Single Phase		Current Rating Amperes	Coil Volt Amp - 60 Cy 2, 3 & 4 Pole	
	200 Volts	230 Volts	460/575 Volts	115 Volts	230 Volts		OPEN VA	CLOSED VA
0	3	3	5	1	2	18	160	25
1	7-1/2	7-1/2	10	2	3	27	160	25

^① Changed since previous issue.

Effective December, 1972. Supersedes I.L. 13633-A dated May, 1971.

to produce ultimate tripping of the relay will be approximately 105% to 125% of rated motor current. The ampere rating of a heater is 125% of the minimum full load current.

ELECTRICAL INTERLOCKS - L56

A universal contact electrical interlock, 180C138G01, is available as standard equipment on all Size 1 A/200 Series devices. It provides NO or NC operation or may be



used as a DPST switch. I.L. 13134 gives more complete details for the electrical interlock.

MAINTENANCE

To remove starter coil - Loosen two screws (1) recessed between the center power poles and also three screws (2) at the relay end of the links between the starter and overload relay. Lift off the top section (3) of the starter unit. The coil (4) will normally be lifted as a part of this assembly. Pull coil loose (withdraw coil stabs). If the starter has been installed and wired, remove the screws as indicated above and tilt the base assembly (5) over the line leads (in closely spaced assemblies it may be necessary to remove the line leads).

Current carrying parts are replaceable. The stationary contact (6) and line or load terminal (7) are parts of one

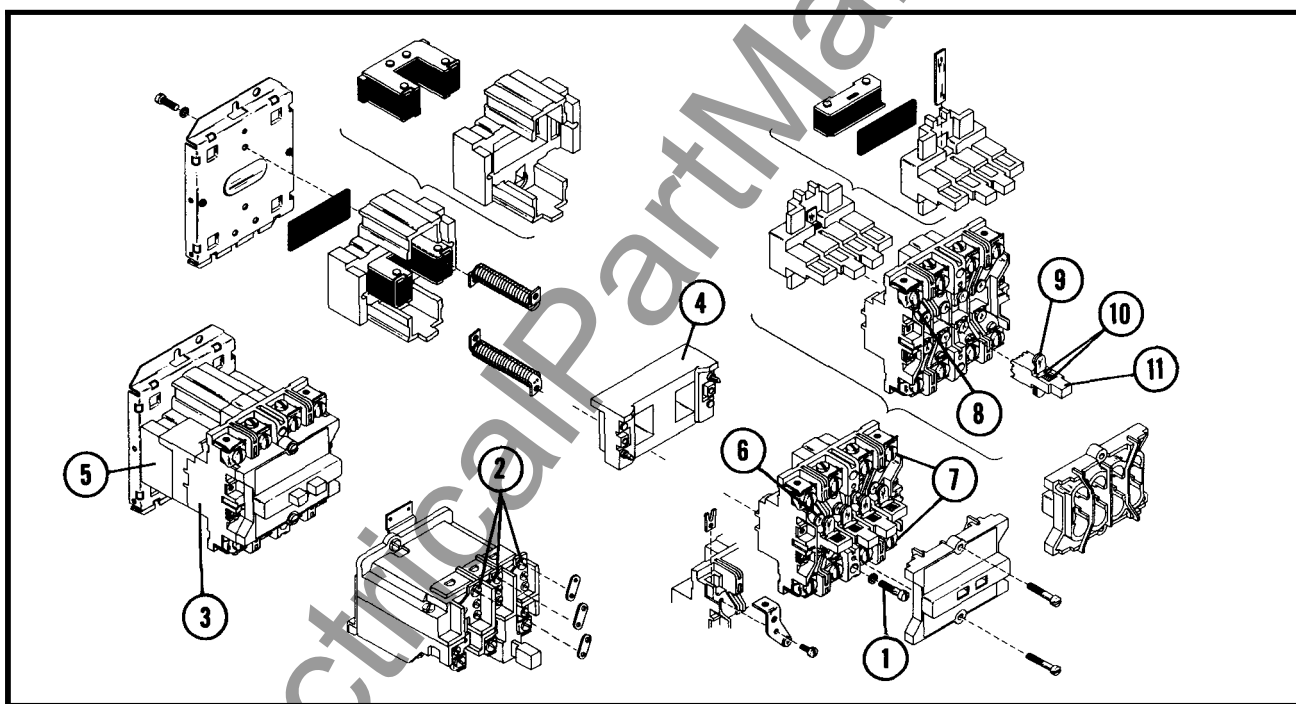
assembly. This assembly may be changed by removing any leads and by removing the screw (8) holding the strap to the molded base. The bridging contact (9) is changed as shown below.

CAUTION: All contacts must be changed as a group to avoid misalignment.

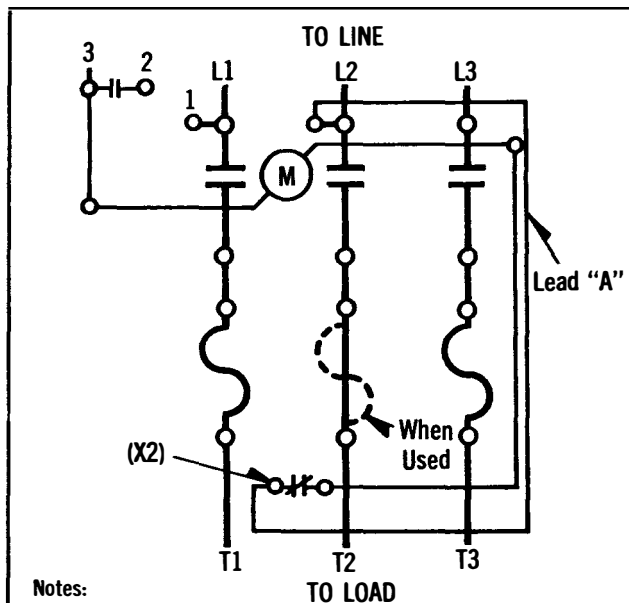
1. Lift the keeper and overtravel spring (10) (preferably using a flat object such as a screw-driver blade).
2. Rotate the bridging contact (9) approximately 45° .
3. Withdraw the bridge from the crossbar (11).

New bridging contacts may be added by a similar process.

Renewal Parts		
Size 0	1 Pole Kit	373B331G01
	2 Pole Kit	373B331G02
	3 & 4 Pole Kit	373B331G04
Size 1	1 Pole Kit	373B331G06
	2 Pole Kit	373B331G07
	3 & 4 Pole Kit	373B331G09

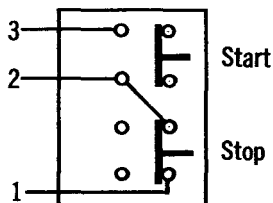


Components of A/200 Motor Controller



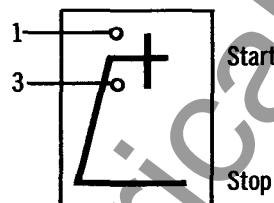
Notes:

1. When Used on Single Phase Circuits, Connect Line Leads to L1 and L2—Load Leads to T1 and T2.
2. For Separate Control Remove Lead "A". Connect One Lead of Separate Control Circuit to OL Relay Terminal "X2" Where Lead "A" Was Removed & Other Lead to Term "1" of PB Station or Master SW. (If Starter is Wired for Separate Control at Factory, Connect Control Supply Leads to Terminal "X2" and Terminal "1" of PB Station.)
3. Customer Should Disregard All Schemes Except the One Used in Connecting His Equipment.



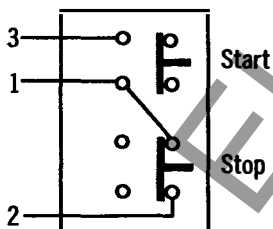
Scheme No. 1

LVP with 3 Wire PB
"Start-Stop" Operation



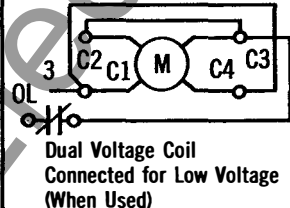
Scheme No. 2

LVR with 2 Wire PB
"Start-Stop" Operation

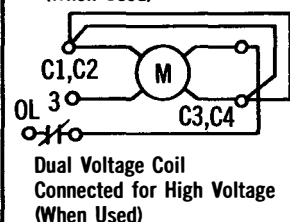


Scheme No. 3

LVP with 3 Wire PB. The Stop Button Having A Mechanical Latch—"Start-Stop-Inch" Operation. To Inch, Latch "Stop" Button Down and Operate "Start" Button



Dual Voltage Coil
Connected for Low Voltage
(When Used)



Dual Voltage Coil
Connected for High Voltage
(When Used)

F Series Heater Application Table^①

For Use With Three Heaters Only		
Code Marking	Full Load Current of Motor (Amperes) (40°C Ambient)	Max. Fuse
FH03	.25 - .27	1
FH04	.28 - .31	1
FH05	.32 - .34	2
FH06	.35 - .38	2
FH07	.39 - .42	2
FH08	.43 - .46	2
FH09	.47 - .50	2
FH10	.51 - .55	2
FH11	.56 - .62	2
FH12	.63 - .68	3
FH13	.69 - .75	3
FH14	.76 - .83	3
FH15	.84 - .91	3
FH16	.92 - 1.00	3
FH17	1.01 - 1.11	4
FH18	1.12 - 1.22	4
FH19	1.23 - 1.34	5
FH20	1.35 - 1.47	5
FH21	1.48 - 1.62	5
FH22	1.63 - 1.78	6
FH23	1.79 - 1.95	6
FH24	1.96 - 2.15	8
FH25	2.16 - 2.35	8
FH26	2.36 - 2.58	8
FH27	2.59 - 2.83	10
FH28	2.84 - 3.11	10
FH29	3.12 - 3.42	15
FH30	3.43 - 3.73	15
FH31	3.74 - 4.07	15
FH32	4.08 - 4.39	15
FH33	4.40 - 4.87	15
FH34	4.88 - 5.3	20
FH35	5.4 - 5.9	20
FH36	6.0 - 6.4	20
FH37	6.5 - 7.1	25
FH38	7.2 - 7.8	25
FH39	7.9 - 8.5	30
FH40	8.6 - 9.4	30
FH41	9.5 - 10.3	35
FH42	10.4 - 11.3	35
FH43	11.4 - 12.4	40
FH44	12.5 - 13.5	45
FH45	13.6 - 14.9	45
FH46	15.0 - 16.3	50
FH47	16.4 - 18.0	60
Above Heaters for use on Size 0		
FH48	18.1 - 19.8	60
FH49	19.9 - 21.7	70
FH50	21.8 - 23.9	80
FH51	24.0 - 26.2	80
Above Heaters for use on Size 1		
FH52	26.3 - 28.7	90
FH53	28.8 - 31.4	100
FH54	31.5 - 34.5	125
FH55	34.6 - 37.9	125
FH56	38.0 - 41.5	125
FH57	41.6 - 45.0	150
Above Heaters for use on Size 2		

① Changed since previous issue.

Wiring Diagrams

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