



CR 205 magnetic contactors CR 206 magnetic starters

NEMA SIZE 4

DESCRIPTION

General Electric 200-Line full voltage magnetic motor starters include an open or enclosed magnetic contactor and a three-leg block overload relay, providing motor protection against running and stalled motor overloads. Separate motor branch circuit overcurrent protection against electrical faults should be supplied in accordance with the National Electrical Code.

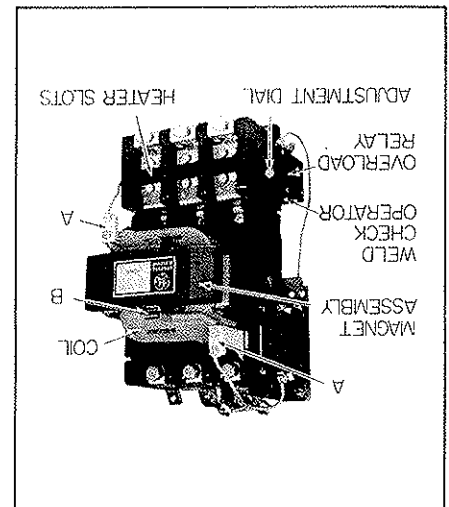


FIGURE 1

RATINGS

Max HP for AC motors	Max AC Volts	Max Current Rating	Max Voltage Rating
40	200	150 amp (open)	600
50	230	135 amp (enclosed)	
100	460-575		

EASE OF INSTALLATION

- Three-point mounting, straight-through wiring saves time, makes installation easy. Before connecting starter to power supply:
 - Remove all packing.
 - Clean magnet mating surfaces of any dirt or foreign matter.

DESCRIPTION

- Install overload relay heaters. To prevent overheating the starter, do not select heaters for a motor of a larger rating than given on the starter nameplate. Select heaters in accordance with heater table, which accompanies each starter unit.
- Operate movable magnet and operating arm by pressing on the nameplate to assure free movement.
- Mount starter on a sturdy vertical support. Make electrical connections, which are quick and convenient, due to 12 knock-outs provided in NEMA 1 enclosures, straight through wiring and pressure terminals.
- The 3-leg block overload relay, included on the starter, is furnished from the factory adjusted for manual reset. (Shift lever is in upper slot.) The relay may be adjusted for automatic reset by positioning lever in lower slot.

CAUTION: Overload relays, when adjusted for automatic reset, should not be used with two-wire, maintained contact pilot devices such as pressure, float and limit switches, as inadvertent restarting of the motor can occur.

EASY COIL REMOVAL

The encapsulated coil is impervious to moisture, contaminants and oil. It resists mechanical damage and failures due to high humidity. No tools are required to remove coil.

QUICK CONTACT REMOVAL

Movable contacts can be inspected and replaced in seconds—without tools.

COIL REMOVAL

- Perform steps 1 through 5 under "EASY COIL REMOVAL".
- Remove magnet from molded cover and movable arm.
- Remove return spring from center of movable arm.
- Remove molded cover from movable arm. Depress and slide movable contact and spring from movable arm.
- Remove screws holding stationary contacts in place and remove stationary contacts.
- Reassemble device by reversing procedure. **NOTE: Do not attempt to remove or replace Arc Traps in Arc Chute Cover.** When re-assembling, note that the Arc Chute Cover will only fit one way and is marked "TOP" in upper right-hand corner. Magnet and movable arm will fit either way but will be quieter if re-assembled the same way they were taken apart.

CHECK FOR WELDED CONTACTS IN OVERLOAD RELAY

This feature permits the maintenance man to check for welded relay contacts by simply depressing the brown operator located at the top of the overload relay contact housing. When the relay is in a reset condition,

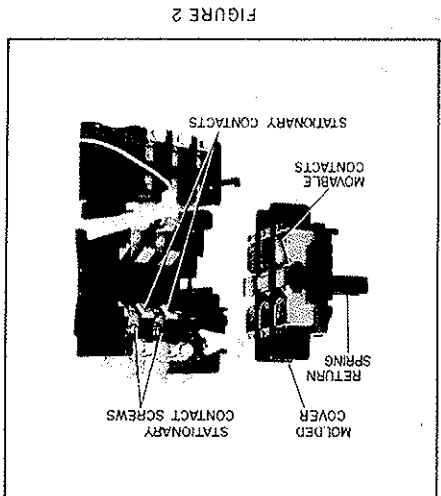


FIGURE 2

an audible "click" will be heard when the operator is depressed, indicating that the contacts are operating normally. A continuity check can also be made by disconnecting the control wiring from the terminals of the relay and placing a bell set or a resistance measuring instrument in the circuit. Connecting either of these across the relay terminals will indicate the relay contact is closed until the contact-check operator is depressed, interrupting the circuit.

The exclusive manual contact-operation check gives positive assurance that contacts have not welded due to short circuits in the control wiring.

SIMPLE MAINTENANCE

- 200-Line starters and contactors require virtually no corrective maintenance. Preventive maintenance will assure many years of dependable on-line service.
- Always remove power from device before performing any maintenance.
- Keep magnet mating surfaces free of accumulated dirt or dust.
- DO NOT OIL OR GREASE the magnet mating surfaces.
- Contacts are carefully designed for maximum life. They need only be replaced when nearly all the silver tip is gone and the contact tip support is exposed. DO NOT FILE the contacts. Filing or otherwise dressing the contacts only results in lost tip material and reduces contactor or starter life.
- The ultimate tripping current of the installed relay heater can be adjusted $\pm 10\%$ by using adjustment dial shown in Fig. 1.

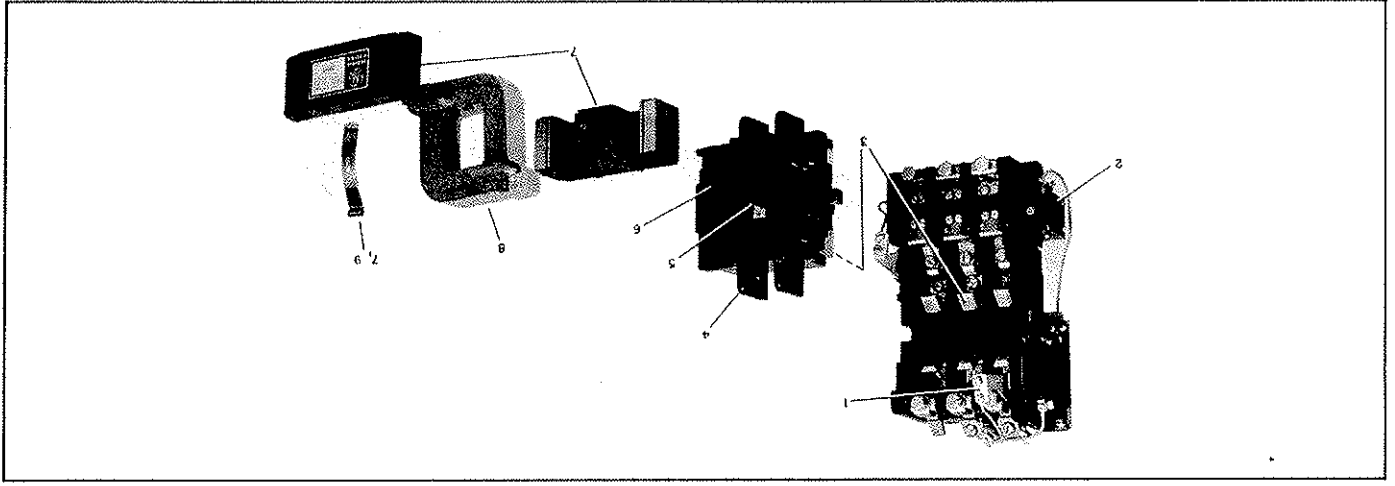
COIL DATA (Order 55-501463G plus no. per table below)

Frequency	115V	208V/230V	230V	460V	575V	600V
60 Hz	2	23	3	4	5	6
50 Hz	7	8	4	9	10	11
Frequency	110V	220V	380V	440V	550V	600V

Use 22 for 120V, 60 Hz/110V, 50 Hz coil.

ACCESSORY KITS

- CR205X300A 1st. Aux. Cont. N.O. for CR205, 206 (Right Side Mounting)
- CR205X300B 1st. Aux. Cont. N.C. for CR205, 206 (Right Side Mounting)
- CR205X300C 1st. Aux. Cont. N.O.-N.C. for CR205, 206 (Right Side Mounting)
- CR205X100D Additional N.O. Aux. Cont. for All Forms
- CR205X100E Additional N.C. Aux. Cont. for All Forms
- CR205X20B Push Button
- CR205X320B Selector Switch H-O-A
- CR205X330B Selector Switch OFF-ON
- CR205X330D Indicating Light



PRINCIPAL RENEWAL PARTS

Ref. No.	Description	Part Number	Quantity Required
1	Coil retainer assembly	55-153677G4	2
2	Overload relay (3-heater, non-compensated form)	CR224F310F	-
3	Set of stationary and movable contacts with springs and screws for 3 poles	55-153678G2	1
4	Molded cover for stationary and movable contacts	55-152655G2	1
5	Return spring for movable contact support	55-152821G1	1
6	Molded movable contact support 2, 3 pole	55-750320P1	1
7	Armature and frame (magnet) with retainer	55-153677G5	1
8	Operating coil	55-501463G**	1
9	Spring retainer for armature	55-501321P1	1

** Add Suffix numbers for particular coil rating required. See COIL TABLE above.

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the nearest GE Sales Office.

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