

# AC Magnetic Starters (GE)

## Description of Operation

With Local or Remote Start-Stop Selector Switch (LVR) Control

- Starting** Turning the selector switch to START energizes "M" and starts the motor.
- Stopping** The motor will be stopped by (1) Turning the selector switch to STOP, by (2) An overload which trips OL, and by (3) Loss of, or low line voltage (LVR).
- Restarting** The motor will be restarted after (1) Turning the selector switch to START, after (2) Pressing the "OL" reset button, and after (3) The return to normal line voltage.

| Size of Starter | Catalog Number |
|-----------------|----------------|
|-----------------|----------------|

With Local Pushbuttons

|   |              |
|---|--------------|
| 0 | 139B2810G1S2 |
| 1 | 139B2811G1S2 |
| 2 | 139B2812G1S2 |
| 3 | 139B2813G1S2 |

With Remote Pushbuttons

|   |              |
|---|--------------|
| 0 | 139B6357G1S2 |
| 1 | 149B2103G1S7 |
| 2 | 187B6165G1S2 |
| 3 | 194B8503G1S2 |

| Size of Starter | Catalog Number |
|-----------------|----------------|
|-----------------|----------------|

With Local Selector Switch

|   |              |
|---|--------------|
| 0 | 157B2115G1S2 |
| 1 | 194B8502G1S2 |
| 2 | 194B8510G1S2 |
| 3 | 194B8504G1S2 |

With Remote Selector Switch

|   |              |
|---|--------------|
| 0 | 194B8505G1S2 |
| 1 | 194B8506G1S2 |
| 2 | 194B8507G1S2 |
| 3 | 194B8508G1S2 |

| Description | Catalog Number |
|-------------|----------------|
|-------------|----------------|

|              |            |         |
|--------------|------------|---------|
| Nonreversing | Dripproof  | IC5130B |
|              | Watertight | IC5130D |
| Reversing    | Dripproof  | IC5131B |
|              | Watertight | IC5131D |

# AC Magnetic Starters (GE)

## Type IC5900

### Description of Operation

With Local (And Provisions for Remote) Start-Stop Pushbutton (LVP) Control

**Starting** Pressing the START pushbutton energizes "M" and starts the motor.

**Stopping** The motor will be stopped by (1) Pressing the STOP pushbutton, by (2) An overload which trips OL, and by (3) Loss of, or low line voltage (LVR).

**Restarting** The motor will be restarted after (1) Pressing the START pushbutton, after (2) Pressing the "OL" reset button and then pressing the START pushbutton, and after (3) Pressing the START pushbutton after the return to normal line voltage.

| Size of Starter | Catalog Number |
|-----------------|----------------|
| 0               | 139B2816G1S2   |
| 1               | 139B2817G1S2   |
| 2               | 139B2818G1S2   |
| 3               | 139B8509G1S2   |

### Controllers for Life Boat Winches

| Size | Max. Motor Hp<br>(440 Volts) |
|------|------------------------------|
| 0    | 1                            |
| 1    | 5                            |
| 2    | 15                           |
| 3    | 30                           |
| 4    | 60                           |
| 5    | 150                          |
| 6    | 300                          |

**NOTE:** Controllers are designed to meet Specification MIL-D-17762. Includes main contactor in addition to reversing contactors.

| Size   | Max. Motor HP Rating |           | Continuous Current<br>Rating Amps |
|--|----------------------|-----------|-----------------------------------|
|  | 115 Volts            | 440 Volts |                                   |
| Single-speed   |                      |           |                                   |
| 0  | 2                    | 5         | 18                                |
| 1  | 3                    | 10        | 27                                |
| 2  | 7.5                  | 25        | 45                                |
| 3  | 1.5                  | 50        | 90                                |
| 4*   | 25                   | 100       | 135                               |
| 5*   | –                    | 200       | 270                               |
| 6*   | –                    | 400       | 540                               |
| Two-speed, One-winding, Constant-torque, Variable-torque, or Constant-horsepower<br>(Max Hp rating for constant-horsepower motors shown in parentheses). |                      |           |                                   |
| 0  | 2 (1)                | 5 (3)     | 18                                |
| 1  | 3 (2)                | 10 (7.5)  | 27                                |
| 2  | 7.5 (–)              | 25 (20)   | 45                                |
| 3  | 15 (–)               | 50 (40)   | 90                                |
| 4*   | 25 (–)               | 100 (75)  | 135                               |
| Two-speed, Two-winding, Constant-torque, Variable-torque, or Constant-horsepower<br>(Max Hp rating for constant-horsepower motors shown in parentheses). |                      |           |                                   |
| 0  | 2 (1)                | 5 (3)     | 18                                |
| 1  | 3 (2)                | 10 (7.5)  | 27                                |
| 2  | 7.5 (–)              | 25 (20)   | 45                                |
| 3  | 15 (–)               | 50 (40)   | 90                                |
| 4*   | 25 (–)               | 100 (75)  | 135                               |

\* Select induction type overload relay if third O/L required.

### Contactor Panels

| Size | Continuous Current<br>Rating Amps (600 Volts Max.) |                      |
|------|--|----------------------|
|      | Heater<br>Load                                     | Tungsten<br>Lighting |
| 0    | 18   | 10                   |
| 1    | 27   | 15                   |
| 2    | 45   | 30                   |
| 3    | 90   | 60                   |
| 4    | 135  | 120                  |
| 5    | 270  | 180                  |
| 6    | 540  | –                    |

**NOTE:** Construction same as single-speed, full-voltage, nonreversing starter except for omission of overload relay.

# AC Magnetic Starters (GE)

## Dripproof Starters (Dimensions and Weights)

| Size                          | Mounting | Dimensions in Inches |       |       |           |       |       | Approx. Weight in Lbs. |           |
|-------------------------------|----------|----------------------|-------|-------|-----------|-------|-------|------------------------|-----------|
|                               |          | Nonreversing         |       |       | Reversing |       |       | Nonreversing           | Reversing |
|                               |          | Height               | Width | Depth | Height    | Width | Depth |                        |           |
| Across-the-line, Single-speed |          |                      |       |       |           |       |       |                        |           |
| 0                             | BHD      | 14                   | 7.75  | 7.38  | 22        | 7.75  | 7.38  | 25                     | 40        |
| 1                             | BHD      | 14                   | 7.75  | 7.38  | 22        | 7.75  | 7.38  | 25                     | 40        |
| 2                             | BHD      | 14                   | 7.75  | 7.38  | 22        | 7.75  | 7.38  | 28                     | 48        |
| 3                             | BHD      | 17                   | 8.88  | 9     | 28        | 8.88  | 9.13  | 45                     | 75        |
| 4                             | BHD      | 18                   | 14    | 10    | 20        | 18    | 10    | 80                     | 110       |
| 5                             | BHD      | 30                   | 22    | 12    | 30        | 24    | 12    | 150                    | 210       |
| 6                             | BHD      | 30                   | 22    | 14    | 30        | 24    | 14    | 170                    | 250       |
| Across-the-line, Two-speed    |          |                      |       |       |           |       |       |                        |           |
| 0                             | BHD      | 22                   | 7.75  | 7.38  | 22        | 18    | 8     | 40                     | 75        |
| 1                             | BHD      | 22                   | 7.75  | 7.38  | 22        | 18    | 8     | 40                     | 75        |
| 2                             | BHD      | 22                   | 7.75  | 7.38  | 22        | 18    | 8     | 48                     | 100       |
| 3                             | BHD      | 28                   | 8.88  | 8     | 36        | 24    | 10    | 75                     | 195       |
| 4                             | BHD      | 20                   | 18    | 10    | 36        | 24    | 10    | 110                    | 210       |
| Reduced-voltage, Single-speed |          |                      |       |       |           |       |       |                        |           |
| 2                             | BHD      | 30                   | 24    | 10    | –         | –     | –     | 200                    | –         |
| 3                             | BHD      | 36                   | 24    | 12    | –         | –     | –     | 265                    | –         |
| 4                             | BHD      | 36                   | 24    | 12    | –         | –     | –     | 325                    | –         |
| 5                             | Deck     | 50                   | 30    | 20    | –         | –     | –     | 685                    | –         |
| 6                             | Deck     | 70                   | 30    | 20    | –         | –     | –     | 1100                   | –         |

## Contactors Panels

| Size | Continuous Current Rating Amps (600 Volts Max.) (440 Volts) |
|------|---|
| 0    | 1   |
| 1    | 5   |
| 2    | 15  |
| 3    | 30  |
| 4    | 60  |
| 5    | 150   |
| 6    | 300   |

**NOTE:** Construction same as single-speed, full-voltage, nonreversing starter except for omission of overload protection.

| Size of Starter | Catalog Number |
|-----------------|----------------|
| 0               | 139B2816G1S2   |
| 1               | 139B2817G1S2   |
| 2               | 139B2818G1S2   |
| 3               | 139B8509G1S2   |

# AC Magnetic Starters (WL)

| Size Starter  | Max. Motor Hp<br>(3 Ph. 60 Hz) |       | Non-reversing   |            | Reversing  |            |
|---|--------------------------------|-------|-----------------|------------|------------|------------|
|   | 115 V                          | 440 V | Dripproof       | Watertight | Dripproof  | Watertight |
|   |                                |       | Catalog Number* |            |            |            |
| Across-the-line, Single-speed                                       |                                |       |                 |            |            |            |
| 0   | 2                              | 5     | 4010-3801-      | 4010-3401- | 4210-3801- | 4210-3401- |
| 1   | 3                              | 10    | 4011-3801-      | 4011-3401- | 4211-3801- | 4211-3401- |
| 2   | 7.5                            | 25    | 4012-3801-      | 4012-3401- | 4212-3801- | 4212-3401- |
| 3   | 15                             | 50    | 4013-3801-      | 4013-3401- | 4213-3801- | 4213-3401- |
| 4   | 25                             | 100   | 4014-3801-      | 4014-3401- | 4214-3801- | 4214-3401- |
| 5   | –                              | 200   | 4015-3801-      | 4015-3401- | 4215-3801- | 4215-3401- |
| 6   | –                              | 400   | 4016-3801-      | 4016-3401- | 4216-3801- | 4216-3401- |
| Across-the-line, Two-speed, One Winding Constant or Variable Torque |                                |       |                 |            |            |            |
| 0   | 2                              | 5     | 4310-1801-      | 4310-1401- | 4910-1801- | 4910-1401- |
| 1   | 3                              | 10    | 4311-1801-      | 4311-1401- | 4911-1801- | 4911-1401- |
| 2   | 7.5                            | 25    | 4312-1801-      | 4312-1401- | 4912-1801- | 4912-1401- |
| 3   | 15                             | 50    | 4313-1801-      | 4313-1401- | 4913-1801- | 4913-1401- |
| 4   | 25                             | 100   | 4314-1801-      | 4314-1401- | 4914-1801- | 4914-1401- |
| 5   | –                              | 200   | 4315-1801-      | 4315-1401- | 4915-1801- | 4915-1401- |
| 6   | –                              | 400   | 4316-1801-      | 4316-1401- | 4916-1801- | 4916-1401- |
| Across-the-line, Two-speed, One Winding Constant or Variable Torque |                                |       |                 |            |            |            |
| 0   | 2                              | 5     | 4310-2802-      | 4310-2402- | 4910-2802- | 4910-2402- |
| 1   | 3                              | 10    | 4311-2802-      | 4311-2402- | 4911-2802- | 4911-2402- |
| 2   | 7.5                            | 25    | 4312-2802-      | 4312-2402- | 4912-2802- | 4912-2402- |
| 3   | 15                             | 50    | 4313-2802-      | 4313-2402- | 4913-2802- | 4913-2402- |
| 4   | 25                             | 100   | 4314-2802-      | 4314-2402- | 4914-2802- | 4914-2402- |
| 5   | –                              | 200   | 4315-2802-      | 4315-2402- | 4915-2802- | 4915-2402- |
| 6   | –                              | 400   | 4316-2802-      | 4316-2402- | 4916-2802- | 4916-2402- |

\* For complete catalog number add coil soffice numbers from next page.

# AC Magnetic Starters (WL)

| Size Starter   | Max. Motor Hp<br>(3 Ph., 440 V,<br>60 Hz) | Nonreversing    |            |
|--|---|-----------------|------------|
|  |   | Dripproof       | Watertight |
|  |   | Catalog Number* |            |
| Reduced Voltage Autotransformer – Single-speed                                       |   |                 |            |
| 1  | 3   | 10              | 27         |
| 2  | 7.5                                       | 25              | 45         |
| 3  | 1.5                                       | 50              | 90         |
| 4*   | 25  | 100             | 135        |
| 5*   | –   | 200             | 270        |
| 6*   | –   | 400             | 540        |
| Reduced Voltage Autotransformer – Two-speed, Two Winding Constant or Variable Torque |   |                 |            |
| 1  | 3   | 10              | 27         |
| 2  | 7.5                                       | 25              | 45         |
| 3  | 1.5                                       | 50              | 90         |
| 4*   | 25  | 100             | 135        |
| 5*   | –   | 200             | 270        |
| 6*   | –   | 400             | 540        |
| Reduced Voltage Autotransformer – Two-speed, One Winding Constant or Variable Torque |   |                 |            |
| 1  | 3   | 10              | 27         |
| 2  | 7.5                                       | 25              | 45         |
| 3  | 1.5                                       | 50              | 90         |
| 4*   | 25  | 100             | 135        |
| 5*   | –   | 200             | 270        |
| 6*   | –   | 400             | 540        |

\* For complete Catalog Number add coil suffix numbers from above table.

## Coil Suffix Numbers

| A.C. Volts (60 Hz) | Suffix Nos. |
|--------------------|-------------|
| 115                | 11          |
| 220                | 21          |
| 440                | 41          |



## AC Control Centers



### Across-the-Line Starters - Nonreversing, Single speed

| Starter<br>Size | Dripproof Enclosure<br>Dimensions Approx. in Inches |        |        | Weight<br>lbs. |
|-----------------|---|--------|--------|----------------|
|                 | A   | B      | C      |                |
| 0, 1, 2         | 8 1/2   | 13     | 7      | 18             |
| 3, 4            | 16  | 20     | 8      | 24             |
| 5, 6            | 17  | 34 3/8 | 10 1/4 | 105            |