GE Specialty Control Devices

CR102 Manual Reversing Drum Switches

600 Volts Maximum
2 Horsepower Maximum

Application

GE's CR102 manual drum switches are used to stop, start, and reverse single-phase or inherently protected polyphase motors on small tools, hoists, and farm or commercial machinery up to two horsepower at a maximum of 600 volts. Forms are available to reconnect dual voltage motors; and to operate a motor in one direction and a solenoid in the other. The manual drum switch is the most economical device if your application does not require undervoltage or overload protection.

Three-phase CR102A forms may be used on single-phase motors providing one wire is connected directly to the motor. Single-phase CR102A forms may be used on three-phase motors providing one wire is connected directly to the motor.

CR102A Manual Reversing Drum Switch

Features

- Wrap-Around Cover with 180-Degree Accessibility—for easy installation.
- Large, Easy-to-Use, Screw-Type Terminals.
- Separate Conduit Openings—for incoming and outgoing leads.
- Easy-to-Operate Handle—handles of CR102B forms may be positioned in any of four directions.
- Conversion of CR102A Forms From Maintained Contact to Momentary Contact in the Field—without additional parts or tools.
- Cover Can Be Removed—by loosening one captive screw.

Ordering Directions

Order switches by complete catalog number as listed in the pricing information and modification tables. Order only for the motors described in the Type of Motor column.

CR102B Drum Switches

<table>
<thead>
<tr>
<th>Type of Motor to be Controlled</th>
<th>Wire Per Connection Diagram on Page 10-30 Fig. No.</th>
<th>General-Purpose—NEMA Type 1 Surface-Mounted</th>
<th>Maintained Contact</th>
<th>Momentary Contact</th>
<th>List Price, GO-10G</th>
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<tbody>
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<td>Single-Phase Capacitor Start</td>
<td>14 CR102B311A</td>
<td>CR102B311A1</td>
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<td>Split-Phase</td>
<td>15 CR102B414A</td>
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<td>Split-Phase (use with limit switches)</td>
<td>16 CR102B311A1</td>
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<tr>
<td>Inherently Protected—</td>
<td>17 CR102B412A</td>
<td>CR102B412A1</td>
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<td>5-Lead</td>
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<tr>
<td>Repulsion Induction</td>
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<td>CR102B312A1</td>
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<td>3-Lead</td>
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<tr>
<td>Single-Phase Instantly Reversible</td>
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<td>6-Lead</td>
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References:

Renewal parts GEF-4275
Instructions: GEH-2437 (CR102A)
GEH-2506 (CR102B)

1 Momentary and maintained contact arrangement may be reversed in the field without additional parts.

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Prices and data subject to change without notice.
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Modifications—CR102B Forms, Factory Installed

<table>
<thead>
<tr>
<th>Type Required</th>
<th>Ordering Directions-</th>
<th>List Price</th>
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<tr>
<td>Panel mounted</td>
<td>Change 2nd digit after the B to a 2</td>
<td>$24.00</td>
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<tr>
<td>Cavity mounted with flush plate</td>
<td>Change 2nd digit after the B to a 3</td>
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Example: A CR102B311A except for panel mounting becomes a CR102B321A at $81.00, GO-10G.

Horsepower Ratings

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<th>Catalog Number</th>
<th>Single-Phase</th>
<th>Polyphase</th>
<th>DC</th>
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<tr>
<td>115V</td>
<td>230 V</td>
<td>230-240 V</td>
<td>460-600 V</td>
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<td>CR102A1, A13</td>
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<td>2</td>
<td>2</td>
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<tr>
<td>CR102A2, A3, A16, A23</td>
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<td>2</td>
<td>—</td>
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<td>CR102B (all)</td>
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<td>1 ½</td>
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Connection Diagrams

CR102A Switches

CR102A1, CR102A13

Figure 1

Internal Connections

Figure 2

3- or 2-phase, 3-wire

Figure 3

1-Phase, Repulsion-Induction Motor, 4 leads

Figure 4

2-Phase, 4-Wire

Figure 5

1-Phase, Repulsion-Induction Motor, 3 leads

Figure 6

DC Shunt

Figure 7

DC Series or Compound

CR102A2, CR102A23

Figure 8

Internal Connections

Figure 9

3-phase, 3-wire

Figure 10

1-Phase Repulsion-Induction Motor, 4 leads

CR102A3

Figure 11

1-Phase, Capacitor, Split-Phase

Figure 12

Instantly Reversible Single-Phase, Single Voltage

CR102A16

Figure 13

115-230 V Dual Voltage Nonreversible

References:

Renewal parts GEF-4275
Instructions: GEH-2437 (CR102A)
GEH-2506 (CR102B)

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