

100S/104S-C Safety Contactors 700S-CF Safety Control Relays



With Gold Plated Bifurcated Contacts

Features

Gold plated, bifurcated control circuit contacts

- Low power reliability down to 5V, 3mA
- Meets IEC 60947-5-1 Annex L requirements for “Mechanically Linked” contact performance for both contactors and relays
- Meets IEC 60947-4-1 Annex F requirements for “Mirror Contact” performance for contactors
- Meets GM DHS-1 “Design for Health and Safety” requirements
- SUVA third-party certified to IEC 60947-5-1 Annex L and IEC 60947-4-1 Annex F
- Red contact housing for easy identification
- Permanently fixed front mounted auxiliary contact block
- Protective cover prevents manual operation
- Markings include IEC “mechanically linked” or “mirror contact” symbol
- Compatible MCS family of components

Applications

- Gold plated bifurcated contacts are ideal for low energy feedback safety circuits where high contact reliability is required.



The Bulletin 100S/104S safety contactors and 700S safety control relays are now available with gold plated, bifurcated contacts for high reliability in very low power feedback circuits. They provide mechanically linked or mirror contact performance required in all safety circuits. While optimized for 24V DC applications, tests have shown solid performance down to 5V, 3mA. The contactors use bifurcated contacts in the front mounted adder deck, while the relays come standard with all bifurcated contacts.

3-Pole Safety Contactors (9- 97A) (In four frame sizes)

- 100S-C09...C23
- 100S-C30...C37
- 100S-C43...C55
- 100S-C60...C97

4-Pole Safety Contactors (9- 23A) (In one frame size)

- 100S-C09...C23

8-Pole Safety Control Relays

- 700S-CFB

Reversing Safety Contactors (9- 97A) (In four frame sizes)

- 104S-C09...C23
- 104S-C30...C37
- 104S-C43...C55
- 104S-C60...C97

LISTEN.
THINK.
SOLVE.

Product Selection

100S 3-Pole Safety Contactors with Bifurcated Front Mount Auxiliary Contacts

| I _e [A] | Ratings for switching AC Motors – AC-2, AC-3, AC-4 | | | | | | | | | | | Aux. Contact Configuration | | Cat. No. ¹ |
|-----------------------|--|------|---------|----------|------|-----------|---------|------|---------|------|------|----------------------------|------|------------------------------|
| | 3-phase kW (50Hz) | | | | | HP (60Hz) | | | | | | N.O. | N.C. | |
| | AC-3 | AC-1 | 230V | 400/415V | 500V | 690V | 1-phase | | 3-phase | | | | | |
| | | | | | | 115V | 230V | 200V | 230V | 460V | 575V | | | |
| 9 | 32 | 3 | 4 | 4 | 4 | .5 | 1.5 | 2 | 2 | 5 | 7.5 | 0 | 5 | 100S-C09 ⊗ 05BC |
| | | | | | | | | | | | | 1 | 4 | |
| 12 | 32 | 4 | 5.5 | 5.5 | 5.5 | .5 | 2 | 3 | 3 | 7.5 | 10 | 0 | 5 | 100S-C12 ⊗ 05BC |
| | | | | | | | | | | | | 1 | 4 | 100S-C12 ⊗ 14BC |
| 16 | 32 | 5.5 | 7.5 | 7.5 | 7.5 | 1 | 3 | 5 | 5 | 10 | 15 | 0 | 5 | 100S-C12 ⊗ 05BC |
| | | | | | | | | | | | | 1 | 4 | 100S-C12 ⊗ 14BC |
| 23 | 32 | 7.5 | 11 | 13 | 10 | 2 | 3 | 5 | 7.5 | 15 | 15 | 0 | 5 | 100S-C16 ⊗ 05BC |
| | | | | | | | | | | | | 1 | 4 | 100S-C16 ⊗ 14BC |
| 30 | 65 | 10 | 15 | 15 | 15 | 2 | 5 | 7.5 | 10 | 20 | 25 | 0 | 5 | 100S-C23 ⊗ 05BC |
| | | | | | | | | | | | | 1 | 4 | 100S-C23 ⊗ 14BC |
| 37 | 65 | 11 | 18.5/20 | 20 | 18.5 | 3 | 5 | 10 | 10 | 25 | 30 | 0 | 4 | 100S-C30 ⊗ 04BC |
| | | | | | | | | | | | | 1 | 4 | 100S-C30 ⊗ 14BC |
| 43 | 85 | 13 | 22 | 25 | 22 | 3 | 7.5 | 10 | 15 | 30 | 30 | 0 | 4 | 100S-C43 ⊗ 04BC |
| | | | | | | | | | | | | 1 | 4 | 100S-C43 ⊗ 14BC |
| 55 | 85 | 15 | 30 | 30 | 30 | 5 | 10 | 15 | 20 | 40 | 40 | 0 | 4 | 100S-C55 ⊗ 04BC |
| | | | | | | | | | | | | 1 | 4 | 100S-C55 ⊗ 14BC |
| 60 | 100 | 18.5 | 32 | 37 | 32 | 5 | 10 | 15 | 20 | 40 | 50 | 0 | 4 | 100S-C60 ⊗ 04BC ² |
| | | | | | | | | | | | | 1 | 4 | 100S-C60 ⊗ 14BC ² |
| 72 | 100 | 22 | 40 | 45 | 40 | 5 | 15 | 20 | 25 | 50 | 60 | 0 | 4 | 100S-C72 ⊗ 04BC ² |
| | | | | | | | | | | | | 1 | 4 | 100S-C72 ⊗ 14BC ² |
| 85 | 100 | 25 | 45 | 55 | 45 | 7.5 | 15 | 25 | 30 | 60 | 60 | 0 | 4 | 100S-C85 ⊗ 04BC ² |
| | | | | | | | | | | | | 1 | 4 | 100S-C85 ⊗ 14BC ² |
| 97 | 130 | 30 | 55 | 55 | 55 | 10 | 20 | 30 | 30 | 75 | 75 | 0 | 4 | 100S-C97 ⊗ 04BC |
| | | | | | | | | | | | | 1 | 4 | 100S-C97 ⊗ 14BC |

700S Safety Control Relays with Bifurcated Contacts

| AC-12 | | AC-15 | | | | | | | Aux. Contacts | | | | Cat. No. ¹ |
|-----------------------|------|-----------------------|------|------|------|------|------|------|---------------|------|---------------|------|-----------------------|
| I _e [A] | | I _e [A] | | | | | | | Main Relay | | Contact block | | |
| 40°C | 60°C | 24/48V | 120V | 240V | 400V | 500V | 600V | 690V | N.O. | N.C. | N.O. | N.C. | |
| 10 | 6 | 3 | 3 | 3 | 2 | 1.2 | 0.7 | 0.7 | 3 | 1 | 1 | 3 | 700S-CFB440 ⊗ C |
| | | | | | | | | | 3 | 1 | 2 | 2 | 700S-CFB530 ⊗ C |
| | | | | | | | | | 3 | 1 | 3 | 1 | 700S-CFB620 ⊗ C |

¹) For other contact configurations, please consult your Allen-Bradley distributor. ²) Bifurcated front-mount auxiliary contacts on Cat. Nos. 100S-C60...C97 conform to mirror contact performance only.

⊗ Coil Voltage Code (AC Coils Only)*

| V Hz | 12 | 24 | 32 | 36 | 42 | 48 | 100 | 100-110 | 110 | 120 | 127 | 200 | 200-220 | 208 | 208-240 | 220-230 | 230 | 230-240 | 240 | 277 | 347 | 380 | 380-400 | 400 | 400-415 | 440 | 480 | 500 | 550 | 600 |
|----------|----|----|----|----|----|----|-----|---------|-----|-----|-----|-----|---------|-----|---------|---------|-----|---------|-----|-----|-----|-----|---------|-----|---------|-----|-----|-----|-----|-----|
| 50Hz | R | K | V | W | X | Y | KP | — | D | P | S | KG | L | — | — | F | — | VA | T | — | — | — | N | — | G | B | — | M | C | — |
| 60Hz | Q | J | — | V | — | X | — | KP | — | D | — | — | KG | H | L | — | — | — | A | T | I | E | — | — | — | N | B | — | — | C |
| 50/60 Hz | — | KJ | — | — | — | KY | KP | — | KD | — | — | KG | KL | — | — | — | KF | — | KA | — | — | — | — | KN | — | KB | — | — | — | — |

* The Cat. No. as listed is incomplete. Select a coil voltage code from the table below to complete the Cat. No. **Example:** 120V, 60 Hz: Cat. No. 100S-C16 ⊗ 05BC becomes Cat. No. 100S-C16D05BC.

⊗ Coil Voltage Code (DC Coils Only)*

| DC Voltages (V) | | 9 | 12 | 24 | 36 | 36-48 | 48 | 48-72 | 60 | 64 | 72 | 80 | 110 | 110-125 | 115 | 125 | 220 | 220-250 | 230 | 250 |
|----------------------------------|-----------------------|----|----|----|----|-------|----|-------|----|----|----|----|-----|---------|-----|-----|-----|---------|-----|-----|
| 100S/104S-C09...C55, 700S-CFB | Electronic | — | EQ | EJ | — | EW | — | EY | — | — | — | — | — | ED | — | — | — | EA | — | — |
| 100S/104S-C60...C97 | with Integrated Diode | DR | DQ | DJ | DW | — | DY | — | DZ | DB | DG | DE | DD | — | DP | DS | DA | — | DF | DT |

* The Cat. No. as listed is incomplete. Select a coil voltage code from the table below to complete the Cat. No. **Example:** 24V DC: Cat. No. 100S-C09 ⊗ 14BC becomes Cat. No. 100S-C16EJ14BC.

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