# Commercial specification grade switches

| Project Name:   | Prepared By: |
|-----------------|--------------|
| Project Number: | Date:        |
| Catalog Number: | Type:        |



CSB115W



CS315W



CSB415W



## **Description**

15A & 20A, 120/277V/AC Single-Pole, Double-Pole, 3-Way, 4-Way

#### **Design features**

- Patent pending spring cup toggle design for robust actuation
- Terminals accept up to #10 AWG solid or stranded
- 120/277V/AC rating ideal for fluorescent lighting fixtures typical in commercial applications
- Terminal screws backed out and ready for wiring
- Tri-combo head mounting and terminal screws ease installation
- Tapered lead-in slots on back wiring holes assist in gathering stranded wires for faster, more secure connections (CSB only)

#### Table 1. Back & Side Wire

| Catalog No. | Description        | Amps | Volts   | Color Suffix    | <b>4</b> |
|-------------|--------------------|------|---------|-----------------|----------|
| ☐ CSB115    | Single-Pole Switch | 15   | 120/277 | B, GY, LA, V, W | •        |
| ☐ CSB215    | Double-Pole Switch | 15   | 120/277 | B, GY, LA, V, W | •        |
| ☐ CSB315    | 3-Way Switch       | 15   | 120/277 | B, GY, LA, V, W | •        |
| ☐ CSB415    | 4-Way Switch       | 15   | 120/277 | B, GY, LA, V, W |          |
| ☐ CSB120    | Single-Pole Switch | 20   | 120/277 | B, GY, LA, V, W | •        |
| ☐ CSB220    | Double-Pole Switch | 20   | 120/277 | B, GY, LA, V, W | •        |
| ☐ CSB320    | 3-Way Switch       | 20   | 120/277 | B, GY, LA, V, W | •        |
| ☐ CSB420    | 4-Way Switch       | 20   | 120/277 | B, GY, V, W     |          |
|             |                    |      |         |                 |          |

#### Table 2. Side Wire

| Catalog No. | Description        | Amps | Volts   | Color Suffix           | <b>_</b> |
|-------------|--------------------|------|---------|------------------------|----------|
| □ CS115     | Single-Pole Switch | 15   | 120/277 | A, B, BK, GY, LA, V, W | •        |
| □ CS215     | Double-Pole Switch | 15   | 120/277 | B, BK, GY, LA, V, W    | •        |
| □ CS315     | 3-Way Switch       | 15   | 120/277 | A, B, BK, GY, LA, V, W | •        |
| □ CS415     | 4-Way Switch       | 15   | 120/277 | B, GY, LA, V, W        |          |
| □ CS120     | Single-Pole Switch | 20   | 120/277 | A, B, BK, GY, LA, V, W | •        |
| □ CS220     | Double-Pole Switch | 20   | 120/277 | B, BK, GY, LA, V, W    | •        |
| □ CS320     | 3-Way Switch       | 20   | 120/277 | B, BK, GY, LA, V, W    | •        |
| □ CS420     | 4-Way Switch       | 20   | 120/277 | B, GY, LA, V, W        |          |
|             |                    |      |         |                        |          |

NAFTA Compliant

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# **Applications**

Commercial specification grade switches are designed to fill the need for high quality in low-abuse commercial areas.

**Table 3. Specifications** 

| Catalog No.                     | CSB Series 115/120, 215/220, 315/320  | CS Series 115/120, 215/220, 315/320   | CSB 415/420, CS 415/420   |
|---------------------------------|---|---|---|
|                                 | Commercial 15A and 20A 120/277V<br>Toggle Switches  | Commercial 15A and 20A 120/277V<br>Toggle Switches  | Commercial 15A and 20A 120/277V<br>Toggle Switches  |
| Wiring Type                     | Back & side wire  | Side wire   | Back & side wire (CSB) side wire (CS)   |
| Testing & Code<br>Compliance    | cULus Listed to UL 20, file no. E18704<br>UL Verified to Federal Spec.WC-896G   | cULus Listed to UL 20, file no. E18704<br>UL Verified to Federal Spec WC-896G<br>CSA Certified to C22.2, no. 111, file no. 10016<br>(6241-05)   | <b>cULus Listed</b> to UL 20, file no. E18704<br><b>UL Verified</b> to Federal Spec WS-896-F  |
| Environmental<br>Specifications | Flammability: Meets UL94 requirements; V0 rated Temperature Rating: -20°C to 60°C (-4°F to 140°F)   | Flammability: Meets UL94 requirements; V0 rated Temperature Rating: -20°C to 60°C (-4°F to 140°F)   | Flammability: Meets UL94 requirements; V2 rated Temperature Rating: -20°C to 60°C (-4°F to 140°F)   |
| Electrical<br>Specifications    | Dielectric Voltage: Withstands 1500V per UL 20<br>Current Interrupting: Yes, at full-rated current<br>Temperature Rise: Max. 30°C (86°F) after 100<br>cycles of overload and 50,000<br>cycles of endurance testing  | Dielectric Voltage: Withstands 1500V per UL 20<br>Current Interrupting: Yes, at full-rated current<br>Temperature Rise: Max. 30°C (86°F) after 100<br>cycles of overload and 50,000<br>cycles of endurance testing  | Dielectric Voltage: Withstands 1500V per UL 20<br>Current Interrupting: Yes, at full-rated current<br>Temperature Rise: Max. 30°C (86°F) after 100<br>cycles of overload and 30,000<br>cycles of endurance testing  |
| Mechanical<br>Specifications    | Terminal Accommodation: #14 - 10 AWG Voltage Ratings: Permanently marked on device Horsepower Ratings: Rated for motor loads per UL20: 15A: @ 120V/AC = 1/2 HP, @ 240V/AC = 2 HP; @ 277V/AC = 2 HP, Max. amps 12A. 20A: @ 120V/AC = 1 HP, @ 240V/AC = 2 HP; @ 277V/AC = 2 HP; @ 277V/AC = 2 HP, Max. amps 16A | Terminal Accommodation: #14 - 10 AWG  Voltage Ratings: Permanently marked on device Horsepower Ratings: Rated for motor loads per  UL20: 15A: @ 120V/AC = 1/2  HP, @ 240V/AC = 2 HP; @  277V/AC = 2 HP, Max. amps  12A. 20A: @ 120V/AC = 1 HP,  @ 240V/AC = 2 HP; @  277V/AC = 2 HP,  Max. amps 16A | Terminal Accommodation: #14 - 10 AWG Voltage Ratings: Permanently marked on device Horsepower Ratings: Rated for motor loads per UL20: 15A: @ 120V/AC = 1/2 HP, @ 240V/AC = 2 HP; @ 277V/AC = 2 HP, Max. amps 12A. 20A: @ 120V/AC = 1 HP, @ 240V/AC = 2 HP; @ 277V/AC = 2 HP; @ 277V/AC = 2 HP; Max. amps 16A |

**Table 4. Materials** 

| Catalog No.             | CSB Series 115/120, 215/220, 315/320               | CS Series 115/120, 215/220, 315/320                | CSB 415/420, CS 415/420                            |
|-------------------------|--|--|--|
|                         | Commercial 15A and 20A 120/277V<br>Toggle Switches | Commercial 15A and 20A 120/277V<br>Toggle Switches | Commercial 15A and 20A 120/277V<br>Toggle Switches |
| Toggle                  | Nylon  | Nylon  | Nylon  |
| Top Housing             | PVC  | PVC  | Polycarbonate                                      |
| Bottom Housing          | PVC  | PVC  | Polycarbonate                                      |
| Strap                   | 0.045" thick steel, zinc plated                    | 0.045" thick galvanized steel, nickel plated       | 0.050" thick galvanized steel                      |
| Auto Ground Clip        | N/A  | N/A  | 0.015" thick brass                                 |
| Terminals               | 0.031" thick brass                                 | 0.031" thick high performance copper alloy         | 0.030" thick brass                                 |
| Terminal Screws         | #8-32 steel, brass plated or zinc plated           | #8-32 steel, brass plated or zinc plated           | #10-32 brass, black                                |
| Ground Screw            | #8-32 steel, zinc plated, green                    | #8-32 steel, zinc plated, green                    | #8-32 steel, zinc plated, green                    |
| Back wire Clamp         | Brass  | N/A  | 0.070" plated steel                                |
| Contacts                | Silver alloy                                       | Silver alloy                                       | Silver alloy                                       |
| Moveable<br>Contact Arm | Brass  | Brass  | 0.030" thick brass                                 |

### **Table 6. Color Ordering Information**

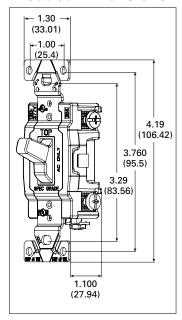
For ordering devices, include Catalog No. followed by the Color Suffix: A (Almond) B (Brown), BK (Black), GY (Gray), LA (Light Almond), V (Ivory), W (White)



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#### **Product Dimensions**



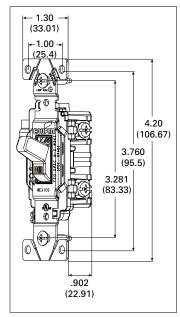


Figure 1. CS/CSB 415, 420

Figure 2. CS/CSB 115, 120, 315, 320

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