# Commercial specification grade switches

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Туре:





CSB415W

CSB115W



CS315W

CS420W

# 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

Description	Amps	Volts	Color Suffix
Single Pole Switch	15	120/277	B, GY, LA, V, W
Double Pole Switch	15	120/277	B, GY, LA, V, W
3-Way Switch	15	120/277	B, GY, LA, V, W
4-Way Switch	15	120/277	B, GY, LA, V, W
Single Pole Switch	20	120/277	B, GY, LA, V, W
Double Pole Switch	20	120/277	B, GY, LA, V, W
3-Way Switch	20	120/277	B, GY, LA, V, W
4-Way Switch	20	120/277	B, GY, V, W
	Single Pole Switch Double Pole Switch 3-Way Switch 4-Way Switch Single Pole Switch Double Pole Switch 3-Way Switch	Single Pole Switch15Double Pole Switch153-Way Switch154-Way Switch15Single Pole Switch20Double Pole Switch203-Way Switch20	Single Pole Switch         15         120/277           Double Pole Switch         15         120/277           3-Way Switch         15         120/277           4-Way Switch         15         120/277           Single Pole Switch         20         120/277           Double Pole Switch         20         120/277           Double Pole Switch         20         120/277           3-Way Switch         20         120/277           3-Way Switch         20         120/277

#### Table 2. Side Wire

Catalog No.	Description	Amps	Volts	Color Suffix
□ 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	Doubl 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

Compliances, specifications and availability are subject to change without notice.



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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 Toggle Switches	Commercial 15A and 20A 120/277V Toggle Switches	Commercial 15A and 20A 120/277V Toggle Switches
Wiring Type	Back & side wire	Side wire	Back & side wire (CSB) side wire (CS)
Testing & Code Compliance	<ul> <li>cULus Listed to UL 20, file no. E18704</li> <li>UL Verified to Federal Spec.WC-896G</li> <li>File No. 111</li> <li>NOM Certified</li> </ul>	<ul> <li>cULus Listed to UL 20, file no. E18704</li> <li>UL Verified to Federal Spec WC-896G</li> <li>File No. 111</li> <li>NOM Certified</li> </ul>	<ul> <li>cULus Listed to UL 20, file no. E18704</li> <li>UL Verified to Federal Spec WS-896-F</li> <li>File No. 111</li> <li>NOM Certified</li> </ul>
Environmental 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 Specifications	Dielectric Voltage: Withstands 1500V per UL 20 Current Interrupting: Yes, at full-rated current Temperature Rise: Max. 30°C (86°F) after 100 cycles of overload and 50,000 cycles of endurance testing	Dielectric Voltage: Withstands 1500V per UL 20 Current Interrupting: Yes, at full-rated current Temperature Rise: Max. 30°C (86°F) after 100 cycles of overload and 50,000 cycles of endurance testing	Dielectric Voltage: Withstands 1500V per UL 20 Current Interrupting: Yes, at full-rated current Temperature Rise: Max. 30°C (86°F) after 100 cycles of overload and 30,000 cycles of endurance testing
Mechanical 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; @	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, 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 Toggle Switches	Commercial 15A and 20A 120/277V Toggle Switches	Commercial 15A and 20A 120/277V 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
<b>Terminal Screws</b>	#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 Contact Arm	Brass	Brass	0.030" thick brass

# Technical Data Effective June 2017

Project Name:	Prepared By:	
Project Number:	Date:	
Catalog Number:	Туре:	

 
 Table 5 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)
 GY LA v A BK w



# **Product Dimensions**

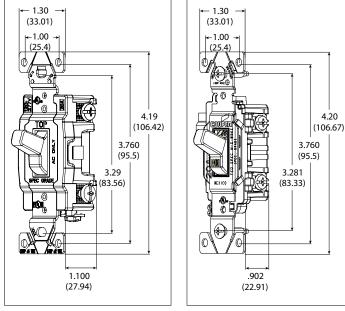


Figure 1. CS/CSB 415, 420

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

4.20

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Туре:

# **Certifications & compliances**

Catalog no.	٩	c (UL) us	٩	<u>Nom</u> 426
CSB115	•	•	•	•
CSB215	•	•	•	•
CSB315	•	•	•	•
CSB415		•	•	•
CSB120	•	•	•	•
CSB220	•	•	•	•
CS320	•	•	•	•
CSB420		•	•	•
CS115	•	•	•	•
CS215	•	•	•	•
CS315	•	•	•	•
CS415		•	•	•
CS120	•	•	•	•
CS220	•	•	•	•
CS320	•	•	•	•
CS420		•	•	•
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Compliances, specifications and availability are subject to change without notice.

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#### Table 1. Back & Side Wire

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3-Way Switch	15	120/277	B, GY, LA, V, W
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Single Pole Switch	20	120/277	B, GY, LA, V, W
Double Pole Switch	20	120/277	B, GY, LA, V, W
3-Way Switch	20	120/277	B, GY, LA, V, W
4-Way Switch	20	120/277	B, GY, V, W
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Catalog No.	Description	Amps	Volts	Color Suffix
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□ 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	Doubl 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

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Wiring Type	Back & side wire	Side wire	Back & side wire (CSB) side wire (CS)
Testing & Code Compliance	<ul> <li>cULus Listed to UL 20, file no. E18704</li> <li>UL Verified to Federal Spec.WC-896G</li> <li>File No. 111</li> <li>NOM Certified</li> </ul>	<ul> <li>cULus Listed to UL 20, file no. E18704</li> <li>UL Verified to Federal Spec WC-896G</li> <li>File No. 111</li> <li>NOM Certified</li> </ul>	<ul> <li>cULus Listed to UL 20, file no. E18704</li> <li>UL Verified to Federal Spec WS-896-F</li> <li>File No. 111</li> <li>NOM Certified</li> </ul>
Environmental 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)
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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
<b>Terminal Screws</b>	#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 Contact Arm	Brass	Brass	0.030" thick brass

# Technical Data Effective June 2017

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 GY LA v A BK w



# **Product Dimensions**

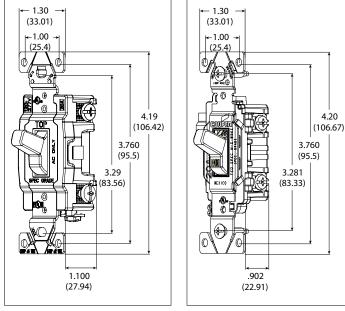


Figure 1. CS/CSB 415, 420

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

4.20

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Туре:

# **Certifications & compliances**

Catalog no.	٩	c (UL) us	\$	<u>Nom</u> 426
CSB115	•	•	•	•
CSB215	•	•	•	•
CSB315	•	•	•	•
CSB415		•	•	•
CSB120	•	•	•	•
CSB220	•	•	•	•
CS320	•	•	•	•
CSB420		•	•	•
CS115	•	•	•	•
CS215	•	•	•	•
CS315	•	•	•	•
CS415		•	•	•
CS120	•	•	•	٠
CS220	•	•	•	•
CS320	•	•	•	•
CS420		•	•	•
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