

# Commercial grade switches



## Designed for the most demanding commercial applications

Arrow Hart's commercial grade switches are designed to provide superior quality, reliability and performance in a variety of commercial environments

### Commercial grade AC switch features & benefits

Automatic grounding eliminates need for bonding jumper in metal enclosures

Welded construction provides superior assembly security under heavy use

Smooth face for ease of cleaning

Built-in wire stripper to speed up installation

Tri-combo head terminal and mounting screws, plus easy-access grounding terminal

Stippled line and ground contacts ensure solid contact; ground screw clamp provides secure wiring

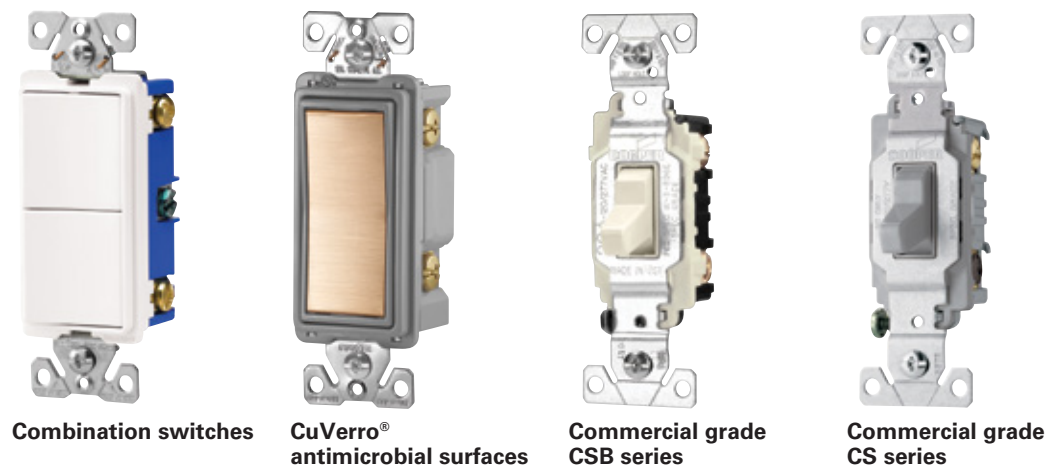
Tapered back-wire openings handle multiple sizes and types, up to #10 AWG solid or stranded wire

Oversized termination screws for simplified wire installation

Horsepower rated for motor loads

Horsepower rated for motor loads per UL20				
Amps	120V/AC	240V/AC	277V/AC	Max.
15A	1/2 HP	2HP	2HP	12A
20A	1HP	2HP	2HP	16A

A complete line of switches available for any commercial application:



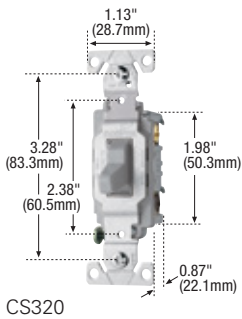
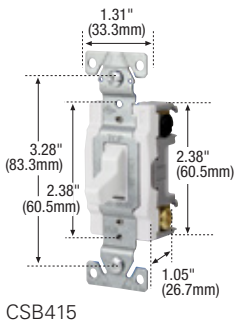
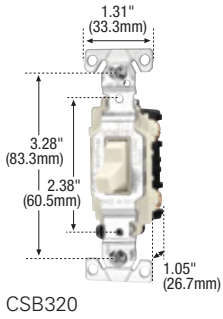
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[www.eaton.com](http://www.eaton.com)  
[www.eaton.com/arrowhart](http://www.eaton.com/arrowhart)

### Commercial grade AC toggle switches

#### Product description

Single-pole, double-pole, 3-way, 4-way  
15A, 120/277V/AC; 20A, 120/277V/AC



#### AC toggle switches, back & side wire



Rating	A	V/AC	Description	Color suffix	Catalog no.			
15	120/277		Single-pole, toggle	B, GY, LA, V, W	<input type="checkbox"/> CSB115__			
			Single-pole, small toggle	A, LA, V, W	<input type="checkbox"/> CSB115ST__			
			Double-pole, toggle	B, GY, LA, V, W	<input type="checkbox"/> CSB215__			
			3-Way, toggle	B, GY, LA, V, W	<input type="checkbox"/> CSB315__			
			3-Way, small toggle	A, B, LA, V, W	<input type="checkbox"/> CSB315ST__			
			4-Way, toggle	B, GY, V, W, LA	<input type="checkbox"/> CSB415__			
20	120/277		Single-pole, toggle	B, GY, LA, V, W	<input type="checkbox"/> CSB120__			
			Double-pole, toggle	B, GY, LA, V, W	<input type="checkbox"/> CSB220__			
			3-Way, toggle	B, GY, LA, V, W	<input type="checkbox"/> CSB320__			
			4-Way, toggle	B, GY, V, W	<input type="checkbox"/> CSB420__			

#### AC toggle switches, side wire



Rating	A	V/AC	Description	Color suffix	Catalog no.			
15	120/277		Single-pole, compact toggle	A, B, BK, GY, LA, V, W	<input type="checkbox"/> CS115__			
			Double-pole, compact toggle	B, BK, GY, LA, V, W	<input type="checkbox"/> CS215__			
			3-Way, compact toggle	B, BK, GY, LA, V, W	<input type="checkbox"/> CS315__			
			4-Way, compact toggle	B, GY, LA, V, W	<input type="checkbox"/> CS415__			
20	120/277		Single-pole, compact toggle	A, B, BK, GY, LA, V, W	<input type="checkbox"/> CS120__			
			Double-pole, compact toggle	B, BK, GY, LA, V, W	<input type="checkbox"/> CS220__			
			3-Way, compact toggle	B, BK, GY, LA, V, W	<input type="checkbox"/> CS320__			
			4-Way, compact toggle	B, GY, LA, V, W	<input type="checkbox"/> CS420__			

#### Accessories for commercial specification grade switches



Description	Catalog no.			
1-Gang, standard size toggle, 302/304 Stainless steel wallplate	<input type="checkbox"/> 93071			
2-Gang, standard size toggle, 302/304 Stainless steel wallplate	<input type="checkbox"/> 93072			
1-Gang, standard size toggle, unbreakable nylon wallplate, red	<input type="checkbox"/> 5134RD			
2-Gang, standard size toggle, unbreakable nylon wallplate, white	<input type="checkbox"/> 5139W			
4-Gang, standard size toggle, unbreakable nylon wallplate, white	<input type="checkbox"/> 5154W			



93071



93072



5124RD



5139W



5154W

#### 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)



(Almond)



(Brown)



(Black)



(Gray)



(Lt. Almond)



(Ivory)



(White)

**Specification information:** 120/277V/AC commercial toggle: E-41

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Build-to-spec customizable devices - Page E-6



Indicates NAFTA compliant - Page Q-32



RoHS compliant - Page Q-32

# Commercial toggle switches specification & performance data

## Commercial grade toggle switches

### Product description

Single-pole, double-pole, 3-way, 4-way  
 15A & 20A, 120/277V/AC  
 15A, 120/277V/AC with 15A, 125V/AC receptacle

Switch type	Commercial 15A & 20A 120/277V toggle switches: CSB series	Commercial 15A & 20A 120/277V toggle switches: CS series	Commercial 15A toggle combination switches: 270 series, 294	Commercial 15A 120 - 15A, 125V toggle combo switch & receptacle: TR274, TR291, TR293
<b>Wiring type</b>	Back & side wire	Side wire	Back & side wire	Back & side wire
<b>Testing &amp; code compliance</b>	<ul style="list-style-type: none"> <li>cULus Listed to UL20, file no. E18704</li> <li>UL verified to Fed Spec WC-896G</li> </ul>	<ul style="list-style-type: none"> <li>cULus Listed to UL20, file no. E18704</li> <li>UL verified to Fed Spec WC-896G</li> <li>CSA certified to C22.2, no. 11 file no. 10016 (6241-05)</li> </ul>	<ul style="list-style-type: none"> <li>cULus Listed to UL20, file no. E18704 (combination)</li> <li>CSA certified to C22.2, no. 11 file no. 10016 (6241-05)</li> <li>NOM certified</li> </ul>	<ul style="list-style-type: none"> <li>Listed to UL20/UL498, file no. E18704 (combination)</li> <li>NOM certified, except 291</li> </ul>
<b>Environmental specifications</b>	<p><b>Flammability:</b> Meets UL94 requirements; V0 rated</p> <p><b>Temperature rating:</b> -20°C to 60°C (-4°F to 140°F)</p>	<p><b>Flammability:</b> Meets UL94 requirements; V0 rated</p> <p><b>Temperature rating:</b> -20°C to 60°C (-4°F to 140°F)</p>	<p><b>Flammability:</b> Meets UL94 requirements; V2 rated</p> <p><b>Temperature rating:</b> -20°C to 60°C (-4°F to 140°F)</p>	<p><b>Flammability:</b> Meets UL94 requirements; V2 rated</p> <p><b>Temperature rating:</b> -20°C to 60°C (-4°F to 140°F)</p>
<b>Electrical specifications</b>	<p><b>Dielectric voltage:</b> Withstands 1500V per UL20</p> <p><b>Current interrupting:</b> Yes, at full-rated current</p> <p><b>Temperature rise:</b> Max. 30°C (86°F) after 100 cycles of overload and 50,000 cycles of endurance testing</p>	<p><b>Dielectric voltage:</b> Withstands 1500V per UL20</p> <p><b>Current interrupting:</b> Yes, at full-rated current</p> <p><b>Temperature rise:</b> Max. 30°C (86°F) after 100 cycles of overload and 50,000 cycles of endurance testing</p>	<p><b>Dielectric voltage:</b> Withstands 1500V per UL20</p> <p><b>Current interrupting:</b> Yes, at full-rated current</p> <p><b>Temperature rise:</b> Max. 30°C (86°F) after 100 cycles of overload and 30,000 cycles of endurance testing</p>	<p><b>Dielectric voltage:</b> Switch: Withstands 1500V per UL20 Receptacle: Withstands 2000V per UL498</p> <p><b>Current interrupting:</b> Yes, at full-rated current</p> <p><b>Temperature rise:</b> Switch: Max. 30°C (86°F) after 100 cycles of overload and 30,000 cycles of endurance testing Receptacle: Max. 30°C (86°F) after 100 cycles of overload at 150% of rated current (DC)</p>
<b>Mechanical specifications</b>	<p><b>Terminal accommodation:</b> #14 - #10 AWG</p> <p><b>Voltage ratings:</b> Permanently marked on device</p> <p><b>Horsepower ratings:</b> 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</p>	<p><b>Terminal accommodation:</b> #14 - #10 AWG</p> <p><b>Voltage ratings:</b> Permanently marked on device</p> <p><b>Horsepower ratings:</b> 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</p>	<p><b>Terminal accommodation:</b> #14 - #12 AWG</p> <p><b>Voltage ratings:</b> Permanently marked on device</p> <p><b>Horsepower ratings:</b> Rated for motor loads per UL20: 15A: @ 120V/AC = 1/2 HP, @ 240V/AC = 2 HP; @ 277V/AC = 2 HP, max. amps 12A</p>	<p><b>Terminal accommodation:</b> #14 - #12 AWG</p> <p><b>Voltage ratings:</b> Permanently marked on device</p> <p><b>Horsepower ratings:</b> Switch rated for motor loads per UL20: 15A: @ 120V/AC = 1/2 HP, @ 240V/AC = 2 HP; @ 277V/AC = 2 HP, max. amps 12A</p>
<b>Materials</b>	<p><b>Toggle:</b> Nylon</p> <p><b>Top housing:</b> PVC</p> <p><b>Bottom housing:</b> PVC</p> <p><b>Strap:</b> 0.045" thick steel, zinc plated</p> <p><b>Terminals:</b> 0.031" thick brass</p> <p><b>Terminal screws:</b> #8-32 steel, brass plated or zinc plated</p> <p><b>Ground screw:</b> #8-32 steel, zinc plated, green</p> <p><b>Back wire clamp:</b> Brass</p> <p><b>Contacts:</b> Silver alloy</p> <p><b>Moveable contact arm:</b> Brass</p> <p><b>Pilot light models:</b> N/A</p> <p><b>Receptacle line contacts:</b> N/A</p> <p><b>Receptacle ground shunt:</b> N/A</p>	<p><b>Toggle:</b> Nylon</p> <p><b>Top housing:</b> PVC</p> <p><b>Bottom housing:</b> PVC</p> <p><b>Strap:</b> 0.045" thick steel, zinc plated</p> <p><b>Terminals:</b> 0.031" thick brass</p> <p><b>Terminal screws:</b> #8-32 steel, brass plated or zinc plated</p> <p><b>Ground screw:</b> #8-32 steel, zinc plated, green</p> <p><b>Back wire clamp:</b> N/A</p> <p><b>Contacts:</b> Silver alloy</p> <p><b>Moveable contact arm:</b> Brass</p> <p><b>Pilot light models:</b> N/A</p> <p><b>Receptacle line contacts:</b> N/A</p> <p><b>Receptacle ground shunt:</b> N/A</p>	<p><b>Toggle:</b> Nylon</p> <p><b>Top housing:</b> PVC</p> <p><b>Bottom housing:</b> PVC</p> <p><b>Strap:</b> 0.045" thick steel, zinc plated</p> <p><b>Terminals:</b> 0.03" thick brass</p> <p><b>Terminal screws:</b> #8-32 steel, brass plated; neutral screw nickel plated</p> <p><b>Ground screw:</b> #8-32 steel, zinc plated, green</p> <p><b>Back wire clamp:</b> Brass</p> <p><b>Contacts:</b> Silver alloy</p> <p><b>Moveable contact arm:</b> Brass</p> <p><b>Pilot light models:</b> Red polycarbonate pilot lens with long-life neon bulb</p> <p><b>Receptacle line contacts:</b> N/A</p> <p><b>Receptacle ground shunt:</b> N/A</p>	<p><b>Toggle:</b> Nylon</p> <p><b>Top housing:</b> PVC</p> <p><b>Bottom housing:</b> PVC</p> <p><b>Strap:</b> 0.045" thick steel, zinc plated</p> <p><b>Terminals:</b> 0.03" thick brass</p> <p><b>Terminal screws:</b> #8-32 steel, brass plated; neutral screw nickel plated</p> <p><b>Ground screw:</b> #8-32 steel, zinc plated, green</p> <p><b>Back wire clamp:</b> Brass</p> <p><b>Contacts:</b> Silver alloy</p> <p><b>Moveable contact arm:</b> Brass</p> <p><b>Pilot light models:</b> N/A</p> <p><b>Receptacle line contacts:</b> 0.030" thick brass</p> <p><b>Receptacle ground shunt:</b> 0.030" thick brass</p>

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All products on this page are RoHS compliant - Page Q-32