

# Commercial grade switches



Designed for reliability and durability in 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

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

Horsepower rated for motor loads

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

A complete line of switches available for any commercial application:

**Lighted & pilot lighted**

**Combination switches**

**CuVerro® antimicrobial surfaces**

**Commercial grade CSB series**

**Commercial grade CS series**

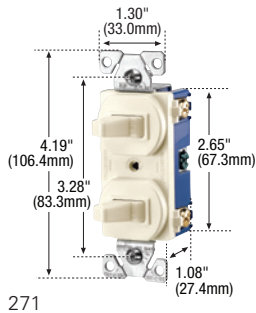
Compliances, specifications and availability are subject to change without notice.

www.eaton.com  
www.arrowhart.com

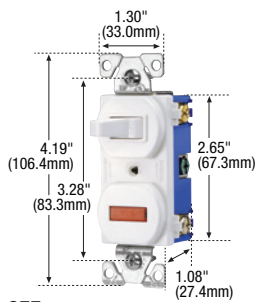
### Commercial grade AC toggle combination switches

#### Product description

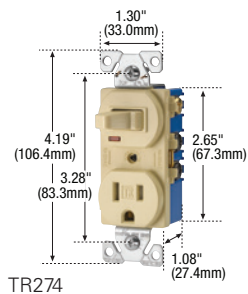
Single-pole, 3-way  
 15A, 120/277V/AC; 15A, 120V/AC  
 20A, 120V/AC



271



277



TR274

#### Toggle combination switches, back & side wire



Rating	A	V/AC	Description	Color suffix	Catalog no.	
15	120/277	(2) Single-pole, switches		A, B, LA, V, W	□ 271__	•
			(1) Single-pole, switch with (1) 3-Way switch	B, LA, V, W	□ 275__	•
			(2) 3-Way, switches	LA, V, W	□ 276__	•
15	120	(1) Single-pole, switch 1/25w (1) 125V pilot light		B, LA, V, W	□ 277__*	•
			(1) 3-Way, switch w/pilot light 1/25w (1) 125V pilot light	B, V	□ 294__*	•

\* Not NOM cert

#### Toggle switch with receptacle, back & side wire



Rating	A	V/AC	Description	Color suffix	Catalog no.	
15	120	(1) Single-pole, switch with nema 5-15	A, B, BK, LA, V, W	□ TR274__	•	
15	125	(1) 2-Pole, 3-wire tamper resistant receptacle				•
15	120	(1) 3-Way switch with nema 5-15	A, B, BK, LA, V, W	□ TR293__	•	
15	125	(1) 2-Pole, 3-wire tamper resistant receptacle				•
15	120	(1) Single-pole, switch with nema 5-20	A, B, BK, LA, V, W	□ TR291__*	•	
20	125	(1) 2-Pole, 3-wire tamper resistant receptacle				•

\* Not NOM cert

#### Accessories for commercial specification grade toggle combination switches



Description	Catalog no.	
1-Gang, standard size duplex, 302/304 stainless steel receptacle wallplate	□ 93101	• •
1-Gang, standard size duplex, unbreakable nylon receptacle wallplate, almond	□ 5132A	• •



93101



5132A

#### Color ordering information:

For ordering devices, include Catalog no. Followed by the Color suffix: A (Almond), B (Brown), BK (Black), LA (Light Almond), V (Ivory), W (White)

A	B	BK	LA	V	W
(Almond)	(Brown)	(Black)	(Lt. Almond)	(Ivory)	(White)

**Specification information:** 120/277 V/AC commercial toggle combination: E-40

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Indicates NAFTA compliant - Page Q-30

RoHS compliant - Page Q-30

# Commercial toggle switches specification & performance data



## Commercial grade 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-30