



## Quick Reference Guide AW Series Switches

The AW Series toggle switch features many circuit configurations, including SPST, SPDT, DPST, DPDT and 4PDT, with a choice of momentary or maintained circuits. The switch provides superior switching power through brass silver alloy contacts. This toggle is UL, CSA recognized for 20A at 30VDC and 20A at 250VAC. Electrical life is 20,000 cycles at full load. Other electrical parameters include contact resistance of 10 milliohms max., insulation resistance of 1,000 megohms and actuation force of 29.4 N max.

The AW Series switches have .250 quick connect terminals and all are panel mountable with 12 mm threaded bushing which is brass with chrome plating. The series mounting design conforms to standard panel cut outs, easing the task of installation.

### Features

- IP67 panel mounting seal
- Sleeve and Frame perfect sealed
- Fixed contact molded-inserting construction
- Wide range switch functions available
- Meets requirements of industrial and outdoor environments

### Applications

These devices are ideal for any design requiring human interface via toggle-style switch in harsh environments, including:

- Industrial equipment
- Heavy machinery
- Construction equipment
- Transportation vehicles
- Outdoor concert and lighting equipment
- Portable power tools

[te.com/products/switches](https://te.com/products/switches)



Typical Performance Characteristics

**Number of Poles** : 1, 2 and 4 pole  
**Switch Functions** : ON-OFF, ON-ON, ON-(ON), ON-OFF-ON, ON-OFF-(ON), (ON)-OFF-(ON)  
**Contact Rating** : 20 A @250 VAC, 20 A @125 VAC, 20 A @30 VDC  
**Electrical Life** : 20,000 cycles  
**Mechanical Life** : 40,000 cycles  
**Contact Resistance** : Max. 10 mOhm at 2-4 VDC 1 A  
**Insulation Resistance** : Min. 1,000 MOhm  
**Dielectric Strength** : 1,500 VAC for 1 min.  
**Actuation Force** : Max. 29.4 N  
**Panel Cut-out** : D-cut, 12.5 mm  
**Standards and Specs** : UL, CSA

Environmental Specification

**Operating Temperature** : -20 to +70°C  
**Storage Temperature** : -20 to +70°C  
**Vibration Resistance** : 1.5 mm 10-55 Hz  
**Shock Resistance** : 50 g for 11±1 msec  
**Terminal Strength** : 24.5 N

Material Specifications

**Contacts** : Brass silver alloy finish  
**Toggle** : Brass chromium plated  
**Terminals** : Brass plate  
**Case** : Phenol resin  
**Cover** : Steel zinc plated  
**Seal** : Rubber “o” ring panel seal, insert molded internal toggle seal

Other Characteristics

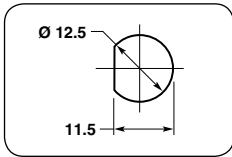
**Contact Timing** : Break before Make  
**Right Angle Versions** : No  
**Standard Number of Positions** : 2 or 3  
**Terminals / Mounting Style** : Quick connect  
**Actuator Style** : Standard toggle  
**Dimensions Case (LxWxH)** : 33 x 19.5 ... 36.5 x 24.5 mm  
**Packaging** : Bulk  
**Choice of momentary or maintained circuits**



1 Pole



2 Pole



Panel Mounting Hole

Product Key

Typical Product Key		A	W	T	T	1	5	04
Type	A A Series power toggle switch, 1 & 2 pole							
Sealing	W Waterproof							
Actuator Style	T Toggle							
Switch Function & Poles								
	1 pole							
	A ON-OFF							
	D ON-ON							
	E ON-OFF-ON							
	F ON-(ON)							
	G (ON)-OFF-(ON)							
	H ON-OFF-(ON)							
	2 pole							
	N ON-ON							
	P ON-OFF-ON							
	R ON-(ON)							
	S (ON)-OFF-(ON)							
	T ON-OFF-(ON)							
Power Rating	1 20 A @ 125/250 VAC							
Terminal Type	5 .250 Quick Connect Terminal							
Material	04 RoHS Compliant							

PART NUMBERS						
Product Key	Sealing	Poles	Switch Function	Terminal	Rating	Part Number
AWTA1504	Waterproof	1 pole	ON-OFF	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-3
AWTD1504	Waterproof	1 pole	ON-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-0
AWTE1504	Waterproof	1 pole	ON-OFF-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-1
AWTF1504	Waterproof	1 pole	ON-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-4
AWTG1504	Waterproof	1 pole	(ON)-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-5
AWTH1504	Waterproof	1 pole	ON-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-6
AWTN1504	Waterproof	2 poles	ON-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-2
AWTP1504	Waterproof	2 poles	ON-OFF-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	3-6437592-9
AWTR1504	Waterproof	2 poles	ON-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	5-6437630-0
AWTS1504	Waterproof	2 poles	(ON)-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	1-6437630-1
AWTT1504	Waterproof	2 poles	ON-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	1-6437630-0

# Product Key

Typical Product Key				A	4	T	K	1	5	W	04
Type											
A				A Series power toggle switch, 4 pole							
Poles											
4				4 pole							
Actuator Style											
T				Toggle							
Switch Function											
K		ON-OFF		P		ON-OFF-ON		S			
N		ON-ON		R		ON-(ON)		(ON)-OFF-(ON)			
Power Rating											
1		20 A @ 125/250 VAC									
Terminal Type											
5		.250 Quick Connect Terminal									
Sealing											
W		Waterproof									
Material											
04		RoHS Compliant									



4 Pole

PART NUMBERS						
Product Key	Sealing	Poles	Switch Function	Terminal	Rating	Part Number
A4TK15W04	Waterproof	4 poles	ON-OFF	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-0
A4TN15W04	Waterproof	4 poles	ON-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-1
A4TP15W04	Waterproof	4 poles	ON-OFF-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-2
A4TR15W04	Waterproof	4 poles	ON-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-3
A4TS15W04	Waterproof	4 poles	(ON)-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-4

# How to Specify in a Switch

## Electrical Considerations

Voltage of Applications: \_\_\_\_\_ Current of Application: \_\_\_\_\_

Circuitry Configuration: Number of Poles: \_\_\_\_\_ Number of Throws: \_\_\_\_\_

Number of Operations anticipated: \_\_\_\_\_

Agency Approvals or Listings Desired: \_\_\_\_\_

## Mechanical Considerations

Type of Switch (Actuator Type): \_\_\_\_\_ Toggle \_\_\_\_\_ Pushbutton \_\_\_\_\_ Rotary \_\_\_\_\_ Rocker \_\_\_\_\_ Other

Switch Function (On/Off/On): \_\_\_\_\_ On/Off: \_\_\_\_\_ Momentary: \_\_\_\_\_

Termination: \_\_\_\_\_ Thru-Hole (PC) \_\_\_\_\_ Surface Mount \_\_\_\_\_ Wire Lug \_\_\_\_\_ Quick Connect \_\_\_\_\_ Other

Sealing Contamination Requirements: \_\_\_\_\_

## Product Processing Considerations

Anticipated Soldering Process: \_\_\_\_\_ Hand \_\_\_\_\_ Wave \_\_\_\_\_ SMT \_\_\_\_\_ Other

## FOR MORE INFORMATION

### TE Technical Support Center

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

Part numbers in this brochure are RoHS Compliant\*, unless marked otherwise.

\*as defined [www.te.com/leadfree](http://www.te.com/leadfree)

## te.com

© 2011 Tyco Electronics Corporation, a TE Connectivity Ltd. Company. All Rights Reserved.

1-1773458-8 CIS LUG FP 1M 04/2011

ALCO, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

