



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

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

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

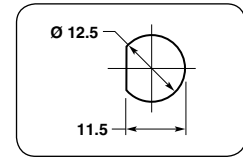
Choice of momentary or maintained circuits



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	(ON)-OFF-(ON)				
N	ON-ON	R	ON-(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

Technical Support

Internet:	www.tycoelectronics.com/help
USA:	+1 (800) 522-6752
Canada:	+1 (905) 470-4425
Mexico & Central America:	+52(0) 55-1106-0814
South America:	+55 (0) 11-2103-6000
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.tycoelectronics.com/leadfree

Tyco Electronics Corporation, Berwyn, PA

tycoelectronics.com

© 2010 Tyco Electronics Corporation. All Rights Reserved.

1-1773458-8 CIS LUG FP 3M 08/2010

ALCO, TE (logo) and Tyco Electronics are trademarks of the Tyco Electronics group of companies and its licensors.

Other products, logos, and company names mentioned herein may be trademarks of their respective owners.

While Tyco Electronics has made every reasonable effort to ensure the accuracy of the information in this catalog, Tyco Electronics does not guarantee that it is error-free, nor does Tyco Electronics make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. Tyco Electronics reserves the right to make any adjustments to the information contained herein at any time without notice. Tyco Electronics 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 Tyco Electronics for the latest dimensions and design specifications.

 **Tyco Electronics**
Our commitment. Your advantage.