

# **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. 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 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

## **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



Ø 12.5 -	$\sim$
	$\mathbb{N}$
	$\mathbf{\nabla}$
11.5	

2 Pole

Panel Mounting Hole

# **Product Key**

-		Ţ	pical Product Key	<u>A</u>	W	Ţ	Ţ	1	5	04
Туре										
Α	A Series power to	ggle s	switch, 1 & 2 pole							
Seali	ing									
w	Waterproof									
Actu	ator Style									
т	Toggle									
Swite	ch Function & Pa	oles								
	1 pole		2 pole							
Α	ON-OFF	Ν	ON-ON							
D	ON-ON	Р	ON-OFF-ON							
Е	ON-OFF-ON	R	ON-(ON)							
F	ON-(ON)	s	(ON)-OFF-(ON)							
G	(ON)-OFF-(ON)	т	ON-OFF-(ON)							
н	ON-OFF-(ON)									
Powe	er Rating									
1	20 A @ 125/250 V	/AC								
Term	ninal Type									
5	.250 Quick Conne	ect Ter	minal							
Mate	vrial									
04	RoHS Compliant									



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 Prod	uct I	Key <b>A</b>	4	т	κ	1	5	w	04
Туре	•				T	T	Т	T	Т	Т	T	T
Α	A Series pow	er tog	gle switch, 4 pole	9								
Pole	s											
4	4 pole											
Actu	ator Style											
т	Toggle											
Swite	ch Function											
K N	ON-OFF ON-ON	P R	ON-OFF-ON ON-(ON)	S	(ON)-OFF-	(ON)						
Powe	er Rating											
1	20 A @ 125/2	250 V.	AC									
Term	ninal Type											
5	.250 Quick C	onneo	ct Terminal									
Seal	ing											
w	Waterproof											
Mate	erial											
04	RoHS Compl	iant										



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 Pole	es:		Number of 1	hrows:		
Number of Operations anticipated:						
Agency Approvals or Listings Desired:						
Mechanical Considerations						
Type of Switch (Actuator Type):	Toggle	Pushbutton	Rota	ary	Rocker _	Other
Switch Function (On/Off/On):		On/Off:		Momen	tary:	
Termination:Thru-Hole (PC)	Surfac	e Mount	Wire Lug	Quic	ck Connect	Other
Sealing Contamination Requirements:						
Product Processing Considerations						
Anticipated Soldering Process:	Hand	_ Wave	SMT	Other		

#### FOR MORE INFORMATION

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