# 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

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## 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
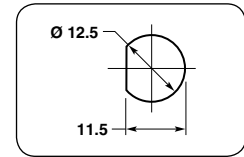
## Other Characteristics

**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

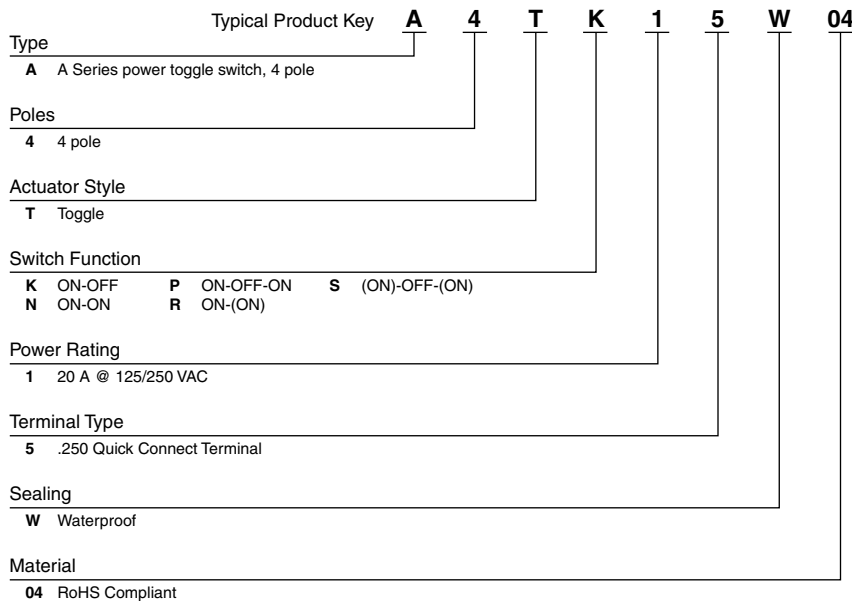**Choice of momentary or maintained circuits**

1 Pole

2 Pole

Panel Mounting Hole

Ø 12.5

11.5

## 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** | | **2 pole** | |
|---|---|---|---|
| A | ON-OFF | N | ON-ON |
| D | ON-ON | P | ON-OFF-ON |
| E | ON-OFF-ON | R | ON-(ON) |
| F | ON-(ON) | S | (ON)-OFF-(ON) |
| G | (ON)-OFF-(ON) | T | ON-OFF-(ON) |
| H | 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

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