

Quick Reference Guide Power Series Switches

The Power Series employs a Quick-make/Quick-break wiping action contact mechanism. This high-speed movement reduces the “teasing” of the contact surfaces reducing pitting due to arcing. Large, well separated terminals with arc barriers reduce the possibility of electrical creepage and ensure separation of loose wire strands from adjacent leads. With electrical ratings up to 20A @ 250V AC/DC these switches are designed for heavy duty applications.

FEATURES AND BENEFITS

- Multiple styles; toggles, pushbuttons and rocker
- Self-cleaning (wiping contact action)
- Robust design
- Multiple bat options
- Maintained contact action only
- Thermoset case

PRODUCT APPLICATIONS

- Industrial Machines
- Commercial Appliance
- Small motor application
- Industrial Power Tools
- Medical Equipment
- Military/ Aerospace

Typical Performance Characteristics	
Contact configuration	1PST, 2PST, 2PDT
Contact timing	break-before-make
Contact rating, max	20A @ 250V
Electrical life	Horsepower rating up to 1 1/2 Up to 100,000 cycles
Insulation resistance	1,000 MOhms MIN.
Dielectric strength	1,500 Vrms @ sea level
Environmental Specifications	
Operating temperature	0° C to +55°C
Storage temperature	0° C to +55°C
Solder heat resistance	N/A
Material Specifications	
Contacts	Copper alloy, silver finish
Actuator	Copper alloy, nickel finish
Terminals	Copper alloy
Case	Thermoset
Bushing	Copper alloy finish nickel, or zinc alloy finish nickel
Spring	music wire zinc plated
RoHS Directive 2002/95/EC	Not compliant

POWER TOGGLE SWITCHES

Part Number	Reference	UL / CSA 250V Current Rating	UL / CSA 125V Current Rating	UL / CSA 250V Horse Power Rating	UL / CSA 125V Horse Power Rating	LEVER STYLE	CONNECTION STYLE
Double-Pole, Single-Throw							
1520139-1	8980K204	3A 250VAC	6A 125VAC	N/A	N/A	BAT	Screw-In Terminal
1-1520237-5	7321K3	6A 250V	8A 125V	0.5HP 250V	0.5HP 125V	BAT	"
1520285-1	7321K50	6A 250V	8A 125V	0.5HP 250V	0.5HP 125V	BAT	"
1520135-1	7320K12	8A 250V	16A 125V	N/A	1HP 125V	Bat with Ball	"
1520135-2	7320K13	8A 250V	16A 125V	N/A	1HP 125V	BALL	"
1-1520237-3	7320K2	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520237-2	7320K3	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520281-1	7320K50	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520187-5	7443K3	8A 250V	16A 125V	N/A	N/A	BAT	"
1520237-8	8909K12	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520284-3	8909K15	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520187-7	8909K485	8A 250V	16A 125V	N/A	N/A	BAT	"
1520268-1	8910K107	8A 250V	16A 125V	0.75HP 250V	1HP 125V	Bat with Ball	"
1520237-9	8910K13	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520284-4	8910K134	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520175-2	8910K16	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1-1520237-0	8910K201	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520087-1	8910K206	8A 250V	16A 125V	N/A	1HP 125V	Bat with Ball	"
1-1520237-1	8910K207	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520100-1	8910K216	8A 250V	16A 125V	N/A	1HP 125V	Bat with Ball	"
1-1520237-2	8910K222	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520213-4	8910K223	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520115-1	8910K225	8A 250V	16A 125V	N/A	N/A	BAT	"
1520281-2	8910K231	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520291-1	8910K520	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520213-5	8910K7	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520161-1	8910K8	8A 250V	16A 125V	N/A	N/A	BAT	"
1520284-5	8910K9	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520138-1	8980K200	8A 250V	16A 125V	N/A	N/A	BAT	"
1520229-1	7320K2	8A 250V	16A 125V	N/A	1HP 125V	BAT	"
1520136-1	7360K12	10A 250V	20A 125V	1.5HP 250 VAC	1.5HP 125VAC	Bat with Ball	"
1520136-2	7360K13	10A 250V	20A 125V	1.5HP 250 VAC	1.5HP 125VAC	Bat with Ball	"
1520228-3	7360K7	10A 250V	20A 125V	1.5HP 250 VAC	1.5HP 125VAC	BAT	"
1520228-4	7360K8	10A 250V	20A 125V	1.5HP 250 VAC	1.5HP 125VAC	BAT	"
1520228-5	7361K5	10A 250V	20A 125V	1.5HP 250V 1HP 250VAC	N/A	BAT	"
1520228-7	8909K23	10A 250V	20A 125V	1.5HP 250VAC	1.5HP 125VAC	BAT	"
1520213-1	8910K119	10A 250V	20A 125V	1.5HP 250VAC	1.5HP 125VAC	BAT	"
1520175-1	8910K15	10A 250V	20A 125V	1.5HP 250VAC	1.5HP 125VAC	BAT	"
1520270-1	8910K158	10A 250V	20A 125V	1.5HP 250VAC	1.5HP 125VAC	BAT	"
1520106-1	8910K170	10A 250V	20A 125V	1.5HP 250VAC	1.5HP 125VAC	BAT	"
1520290-1	8910K178	10A 250VAC	20A 125V	N/A	N/A	Bat with Ball	"
1-1520228-0	8910K205	10A 250V	20A 125V	1.5HP 250VAC	N/A	BAT	"
1520213-2	8910K215	10A 250V	20A 125V	1.5HP 250VAC	1.5HP 125VAC	BAT	"
1520213-3	8910K217	10A 250V	20A 125V	1.5HP 250VAC	1.5HP 125VAC	BAT	"
1520228-1	8910K219	10A 250V	20A 125V	1.5HP 250VAC	1.5HP 125VAC	BAT	"
1520286-1	8910K532	10A 250V	20A 125V	1.5HP 250V 1HP 250VAC	N/A	BAT	"
1520117-1	8910K94	10A 250V	20A 125V	1.5 HP 250V 1HP 250VAC	N/A	BAT	"
1520117-2	8910K97	10A 250V	20A 125V	1.5HP 250V 1HP 250VAC	N/A	BAT	"
1520258-4	7402K21	20A 250V	N/A	2HP 250V	1.5HP 125V	SMALL	"
1520230-1	7402K3	20A 250V	N/A	2HP 250V	1.5HP 125V	BAT	"
1520230-2	7402K4	20A 250V	N/A	2HP 250V	1.5HP 125V	BAT	"
1520137-1	7402K5	20A 250V	N/A	2HP 250V	1.5HP 125V	Bat with Ball	"
1520231-2	7411K1	20A 250V	N/A	2HP 250V	1.5HP 125V	BAT	"
1520230-7	8910K164	20A 250V	N/A	2HP 250V	1.5HP 125V	SMALL	"
1520230-8	8910K165	20A 250V	N/A	2HP 250V	1.5HP 125V	BAT	"
1520120-1	8910K194	20A 250V	25A 125VAC	2HP 250V	1.5HP 125VAC	BAT	"
1520230-9	8910K202	20A 250V	N/A	2HP 250V	1.5HP 125VAC	BAT	"
1-1520230-0	8910K221	20A 250V	N/A	2HP 250V	1.5HP 125V	BAT	"

POWER TOGGLE SWITCHES

Part Number	Reference	UL / CSA 250V Current Rating	UL / CSA 125V Current Rating	UL / CSA 250V Horse Power Rating	UL / CSA 125V Horse Power Rating	LEVER STYLE	CONNECTION STYLE
Double-Pole, Single-Throw							
1520231-3	8910K220	20A 250V	N/A	2HP 250V	1.5HP 125V	BAT	Mounting Plate
1520231-1	7410K4	20A 250V	N/A	2HP 250V	1.5HP 125V	BAT	Mounting Plate
1520183-1	8187K5	20A 250V	N/A	2HP 250V	1.5HP 125V	Bat with Ball	Mounting Plate
1520183-2	8187K6	20A 250V	N/A	2HP 250V	1.5HP 125V	Bat with Ball	Mounting Plate
1520241-1	8909K287	20A 250V	N/A	2HP 250V	1.5HP 125V	BAT	Mounting Plate
1520183-6	8909K36	20A 250V	N/A	2HP 250V	1.5HP 125V	Bat with Ball	Mounting Plate
1520159-1	8910K90	8A 250V	16A 125V	N/A	1HP 125V	BAT	Spade Terminal
1520228-8	8910K12	10A 250V	20A 125V	1.5HP 250VAC	1.5HP 125VAC	BAT	.250 Spade Terminal
Double-Pole, Double-Throw							
1520232-1	8909K44	10A 250V	15A 125V	N/A	N/A	Bat with Ball	DPDT
1520204-1	8690K2	10A 250V	15A 125V	N/A	N/A	BAT	DPDT
3-Pole							
1520193-3	8320K1	20A 250VAC	N/A	2HP 1 OR 3 PH 250 TO 600VAC	1.5HP 1PH 125VAC 2HP 3PH 125VAC	Bat with Ball	3 POLE
1520192-3	8337K2	20A 250VAC	N/A	2HP 1 OR 3 PH 250 TO 600VAC	1.5HP 1PH 125VAC 2HP 3PH 125VAC	Bat with Ball	3 POLE

POWER PUSHBUTTON SWITCHES

Part Number	Reference	UL / CSA 250V Current Rating	UL / CSA 125V Current Rating	UL / CSA 250V HP Rating	UL / CSA 125V HP Rating	LEVER STYLE	CONNECTION STYLE	ACTION
Double-Pole, Single Throw								
1520143-1	8980K250	6A 250V	12A 125V	N/A	N/A	PUSHBUTTON W OVERTRAVEL	Screw-In Terminal	N/O
1520144-1	8980K251	6A 250V	12A 125V	N/A	N/A	PUSHBUTTON W OVERTRAVEL	"	N/C
1520146-1	7228K2	6A 250V	12A 125V	N/A	N/A	PUSHBUTTON	"	N/O
1520147-1	7228K3	10A 250V	20A 125V	1 1/2 HP	1 1/2 HP	PUSHBUTTON	"	N/O
1520149-1	7227K2	8A 250V	16A 125V	N/A	1 HP 125V	PUSHBUTTON	"	N/O
1520150-1	7229K2	10A 250V	20A 125V	1 1/2 HP	1 1/2 HP	PUSHBUTTON	"	N/O
Double-Pole, Double Throw								
1520149-1	7227K2	8A 250V	16A 125V		1 HP	PUSHBUTTON	"	
1520150-1	7229K2	10A 250V	20A 125V	1 1/2HP	1 1/2 HP	PUSHBUTTON	"	
Double-Pole, Single-Throw								
1520230-6	8909K500	20A 250V	N/A	2HP	1 1/2HP	ROCKER	"	ON OFF

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

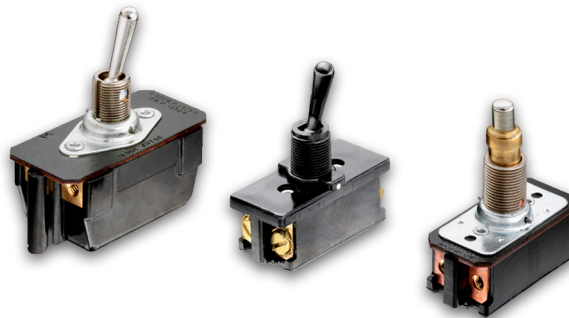
Switch Function (On/Off/On): _____ On/Off: _____ Momentary: _____

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

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