# Spec Setter™ Safety Switches We help you get the job done right!





General Electric's Spec Setter $^{\text{\tiny M}}$  safety switches are available for all your disconnect needs, no matter what the application.

GE offers a wide variety of general duty switches for residential and light commercial purposes, while our extensive line of heavy duty switches is best suited for commercial and industrial applications. For the toughest industrial environments – like cement foundries, steel mills and processing plants – mill duty switches are available. We also offer a variety of double throw switches for emergency generators.

No matter what the application, we've got you covered with a rugged, reliable and easy-to-install Spec Setter™ safety switch. When it comes to getting the job done right, you can count on GE!



# **GE Safety Switches at a Glance**

NEMA	_			400 4				200 4	4000 4
Type Enclosure	Type	30 A	60 A	100 A	200 A	400 A	600 A	800 A	1200 A
1	General Duty	2 & 3 Pole (Fusible) 240Vac							
		3 Pole (Non-Fusible) 240Vac							
	Heavy Duty	2 & 3 Pole (Fusible) 240Vac							
		2 Pole (Fusible & Non-Fusible) 600Vdc							
		3 Pole (Fusible & Non-Fusible) 600Vac							
		3 Pole (Non-Fusible) 240Vac & 600Vac							
		3 Pole (Fusible) 240Vac							
			ole) 600Vac						
3R	General Duty	2 Pole (Non-Fusible) 240Vac							
	Heavy Duty	2 & 3 Pole (Fusible) 240Vac 2 Pole (Fusible & Non-Fusible) 600Vdc							
				sible) 600Vdd					
		3 Pole (Fusik							
		3 Pole (Non-Fusible) 600Vac  3 Pole (Fusible) 600Vac							
	Double-Throw								
				2 Pole (Nor 120/240Vc	•				
		3 Pole (Non-	-Fusible) 240		IC				
		3 Pole (Fusible) 240Vac							
		3 Pole (Non-Fusible) 600Vac							
4/4X	Heavy Duty	2 & 3 Pole (Fusible) 240Vac							
		2 Pole (Fusible & Non-Fusible) 600Vdc							
		3 Pole (Fusik							
		3 Pole (Non-	-Fusible) 600	)Vac					
	Mill Duty	2 & 3 Pole (F	usible) 240\	/dc					
		2 Pole (Fusible & Non-Fusible) 600Vdc							
		3 Pole (Fusik	ole & Non-Fu	usible) 600V	ас				
5/12	Heavy Duty	2 & 3 Pole (Fusible) 240Vac							
		2 Pole (Fusible & Non-Fusible) 600Vdc							
		3 Pole (Fusible) 600Vac (also available in 3R)							
		3 Pole (Non-Fusible) 600Vac							
12	Mill Duty	2 & 3 Pole (Fusible) 240Vdc							
			le & Non-Fus						
1		3 Pole (Fusik	ole & Non-Fu	usible) 600V	ac				

# **Safety Switch Nomenclature**

#### J DC Switch **Fusing** Number **Enclosure** Other Number Maximum Ampere Type of Wires of Poles Voltage Rating **Features** Type Rating $\underline{2}$ = 2 wire system $\underline{\mathbf{TG}}$ = General Duty $\underline{\mathbf{N}}$ = Non-Fusible **2** = 2 Poles **2** = 240 Vac 1 = 30 amps(Blank) = NEMA Type 1 $\mathbf{B}$ = Bottom Feed $\underline{\mathbf{TH}}$ = Heavy Duty | (blank) = Fusible 3 = 3 wire system $\underline{\mathbf{3}} = 3 \text{ Poles}$ **<u>6</u>** = 600 Vac 2 = 60 amps $\underline{\mathbf{J}} = NEMA 5/12$ **CL** = Copper Lugs $\underline{\mathbf{4}} = 4$ wire system $\underline{\mathbf{6}} = 6$ Poles 3 = 100 amps<u>M</u> = NEMA 12 (MILL DUTY) DC = 600 Vdc Rated $\mathbf{F}$ = Vertically Hinged Door 4 = 200 amps $\mathbf{R}$ = NEMA Type 3R 5 = 400 ampsSS = NEMA 4/4X (304SS) $\underline{\mathbf{W}}$ = Viewing Window 6 = 600 amps**SS316** = NEMA 4/4X (316SS)

#### **General Duty Safety Switches**

GE's Type TG general duty safety switches are designed for residential and light commercial applications where duty is not severe.

They are available in 30-600 amps, 240 Vac, 250 Vdc maximum in both fusible and non-fusible units, and in NEMA Type 1 (indoor) and Type 3R (outdoor) enclosures. The UL Listed short-circuit rating is 10,000 rms symmetrical amps as standard. When Class R fuses and fuse kits are installed, 30-200 amp switches have a UL

Listed short circuit rating of 100,000 rms symmetrical amps. GE's general duty safety switches are UL Listed as service entrance equipment when installed in accordance with the National Electrical Code.

All GE general duty safety switches are UL Listed and CSA certified (UL98 Enclosed Switches/CSA-C22.2 No. 4-04) and meet NEMA Enclosed Safety Switch Standard KS1-2001.





- 1 Best suited for residential and light commercial applications. Available in indoor (Type 1) and outdoor (Type 3R) enclosures.
- 2 Highly visible ON/OFF label takes the guesswork out of safety and gives a clean, modern appearance.
- 3 Bright red handle is easy to see, easy to grip.
- 4 Direct-drive, quick-make, quick-break mechanism "snaps" the contacts open and closed, providing positive ON/OFF indication while prolonging switch life.
- 5 Wide, unobstructed gutter and removable interior make wire pulling and lug connections quick and easy.
- 6 Three-point mounting pattern speeds installation and simplifies ganging in close quarters.
- 7 Plated stationary and movable contacts deliver reliability and long life.
- 8 Galvanized steel enclosure offers superior rust protection in outdoor applications. There's also a durable polyester powder-coat finish.
- 9 Plated blades provide visible confirmation of contact position.

#### **Heavy Duty Safety Switches**

GE's Type TH heavy duty safety switches are designed for commercial and industrial applications where safety, high performance and continuity of service are essential.

Heavy duty switches are available in 30-1200 amps, 600 Vac, 600 Vdc maximum, fusible and non-fusible units, and in NEMA Type 1 (indoor), Type 3R (outdoor), Type 4/4X (water and dust-tight, corrosion resistant), and Type 5/12 (drip and dust-tight) enclosures. When used with Class R or J fuses, 30-600 amp switches have a UL Listed short-circuit rating of 200,000 rms symmetrical amps. Switches rated 800-1200 amps use

Class L fuses and have a UL Listed short circuit rating of 100,000 rms symmetrical amps. GE's heavy duty safety switches are UL Listed as service entrance equipment when installed in accordance with the National Electrical Code.

All GE heavy duty safety switches are UL Listed and CSA certified (UL98 Enclosed Switches/CSA-C22.2 No. 4-04), meet Federal Specification WS-865C for heavy duty switches and meet NEMA Enclosed Safety Switch Standard KS1-2001.





- 1 Best suited for commercial and industrial applications.
- 2 Highly visible ON/OFF label takes the guesswork out of safety and gives a clean, modern appearance.
- 3 Bright red "donut" handle, molded from rugged SE1 Noryl thermoplastic, is easy to see, easy to grip and ideal for hook stick operation. It accepts three padlocks in OFF position.
- 4 Coin-proof, defeatable dual interlocks meet all safety inspection requirements.
- 5 Wide, unobstructed gutter and removable interior make wire pulling and lug connections quick and easy.
- 6 Three-point mounting pattern speeds installation and simplifies ganging in close quarters.
- 7 Exclusive SE1 Noryl thermoplastic arc shield helps provide maximum UL Listed horsepower ratings while guarding against accidental contact with live parts.
- 8 Accessories, such as auxiliary switch kits, are UL Listed for quick and easy field installation (or they may be factory installed).
- 9 Plated blades provide visible confirmation of contact position.
- 10 Direct-drive, quick-make, quick-break mechanism "snaps" the contacts open and closed, providing positive ON/OFF indication while prolonging switch life.
- 11 Spring-reinforced fuse clips assure reliable contact for cool operation. Suitable for Class H, K, J or R fuses.
- 12 Cu-Al lugs are 60/75°C rated to permit greater wire selection.
- 13 Galvanized steel enclosure offers superior rust protection in outdoor applications. There's also a durable polyester powder-coat finish.

#### Mill Duty Safety Switches

GE's mill duty safety switches are designed specifically for the rugged conditions found in steel mills, cement foundries and other process-related environments.

Mill duty switches are available in 30-600 amps, 600 Vac, 600 Vdc maximum, fusible and non-fusible units, and in NEMA Type 4/4X (water and dust-tight, corrosion resistant) and Type 12 (drip and dust-tight) enclosures. Horsepower ratings are to UL Listed maximums; published I<sup>2</sup>t ratings are available. Short circuit ratings

are UL Listed to 200,000 rms symmetrical amps when Class J or R fuses are installed.

All GE mill duty safety switches are UL Listed and CSA certified (UL98 Enclosed Switches/CSA-C22.2 No. 4-04), meet Federal Specification WS-865C for heavy duty switches and meet NEMA Enclosed Safety Switch Standard KS1-2001.





- 1 Best suited for rugged environmental conditions such as mills and foundries.
- 2 Bright red "donut" handle molded from rugged SE1 Noryl thermoplastic is easy to see, easy to grip and ideal for hook stick operation. It accepts three padlocks in OFF position.
- 3 Manual interlock defeat lever permits contact inspection when switch is OFF.
- 4 Standard NEMA 12 enclosure protects interior from dust, lint, fibers, coolants, metal filings and other non-corrosive contaminants. Stainless steel NEMA 4/4X enclosure additionally shields interior from hose directed water, splashing and falling liquids. Interlocks on all enclosure covers assure gasket compression before switch can be turned ON.
- 5 Efficient space-saving enclosures, three-point mounting, unobstructed side wiring gutter, easily removable cover and interior.
- 6 Spring-reinforced fuse clips assure reliable contact for cool operation. Suitable for Class H, K, J or R fuses.
- 7 Equipment ground lugs provided. Lugs approved for both copper and aluminum wire; 60/75°C rated tang lugs are field convertible to compression (crimp) connectors.
- 8 Highly visible ON/OFF label takes the guesswork out of safety and gives a clean, modern appearance.

#### **Double-Throw Safety Switches**



- Bright red "donut" handle molded from rugged SE1 Noryl thermoplastic is easy to see, easy to grip and ideal for hook stick operation.
- 2 Highly visible ON/OFF label takes the guesswork out of safety and gives a clean, modern appearance.
- 3 Three position (ON-OFF-ON) handle is lockable.
- 4 Lockable cover latch and defeatable interlock meet all safety inspection requirements.

GE's Type TC and TDT double-throw safety switches are designed for applications where safety, high performance and continuity of service are essential.

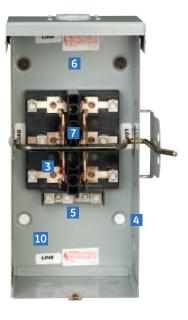
Double-throw switches are available in 30-600 amps, 600 Vac, 250 Vdc maximum in fusible and non-fusible construction, and in NEMA Type 1 (indoor) and Type 3R (outdoor) enclosures. GE's double-throw safety switches

are UL Listed as service entrance equipment when installed in accordance with the National Electrical Code.

All GE double-throw safety switches are UL Listed (UL98 Enclosed Switches) and meet NEMA Enclosed Safety Switch Standard KS1-2001 for type HD 30-200 amps and type GD 400-600 amps.

### **Emergency Power Transfer Switches**





- 1 A wide range of interchangeable rain-tight conduit hubs are available.
- 2 Code-gauge steel box is fitted with a drip-shield for protection against rain; resists corrosion, rust and chipping.
- 3 Plated copper current-carrying parts prevent oxidation to assure low-resistance contact and cool operation.
- 4 Mounting holes permit quick, easy installation.
- 5 Bonding strap can be used to ground neutral for service entrance applications.
- 6 Ample wiring space provided within compact enclosure.
- 7 Positive make and break is provided by fiber loop straps between knife blade contacts and one-piece operating yoke.
- 8 Provision for handle locking in ON or OFF position protects against accidental contact with live parts.
- 9 Concentric knockouts are conveniently located, easy to remove.
- 10 Galvanized steel enclosure, offers superior rust protection in outdoor applications. There's also a durable polyester powder-coat finish.

GE's Type TC emergency power transfer switches are specifically designed to permit the connection of power from a standby generator or other emergency source of electricity and are ideally suited for outdoor applications in rural dwellings and farm buildings.

Emergency power transfer switches are non fusible and are available in 100-200 amps for 120/240V three-wire

systems and in 200 amps for 240V four-wire systems and in NEMA Type 3R (outdoor) enclosures. The side operated handle can be locked in either the ON or OFF position.

Type TC emergency power transfer switches are UL Listed (UL98 Enclosed Switches) and are suitable for use as service entrance equipment when installed in accordance with the National Electrical Code.

#### **Enclosure Types**

**NEMA 1** enclosures are suitable for indoor use, primarily to provide protection against contact with the enclosed equipment and where unusual service environments do not exist.

**NEMA 3R** enclosures are intended for outdoor use to provide a degree of protection against falling rain, sleet and external enclosure ice formation.

**NEMA 4/4X** enclosures are intended for indoor or outdoor use to provide a degree of protection against windblown dust and rain, and splashing or hose-directed water and external enclosure ice formation. Additionally, these enclosures meet 4X requirements by providing a degree of protection against corrosion.

**NEMA 5/12** enclosures are intended for indoor use primarily to provide a degree of protection against settling airborne and circulating dust, falling dirt and dripping, non-corrosive liquids.

#### Accessories

GE safety switches provide a full line of factory and field installable accessories to meet your special requirements.

**Equipment Ground Kits:** available for 30-600 amp safety switches

**Neutral Kits:** available for 30-1200 amp safety switches (insulated, groundable and bondable)

**Crimp Type Connector:** available for 30-600 amp safety switches

**Viewing Window:** available for select 30-200 amp heavy duty safety switches, NEMA Types 4/4X and 5/12

**Auxiliary Contact Kits:** available in both single pole double-throw and double pole double-throw (listed for field installation)

**Class J Fuse Conversion Kits:** available for 600 amp safety switches

**Class R Fuse Kits:** available for 30-600 amp safety switches

**Raintight Aluminum Hubs:** available up to 3" conduit diameter

## **Special Purpose GE Safety Switches**

GE provides the following special purpose safety switches to satisfy a variety of unique applications:

**Six-Pole Switches:** available in 30-200 amps, 600 Vac, 250 Vdc maximum, fusible or non-fusible, NEMA Type 1 enclosure.

**Interlocked Receptacle Switches:** available in 60 amps, 600 Vac, fusible or non-fusible, NEMA Type 12 enclosure.

**Plug-Fuse Switches:** available in one and two-pole designs, 30 amps, 240 Vac maximum, NEMA Type 1 enclosure.

**Air Conditioner Disconnects:** available in 30-60 amps, fusible or non-fusible, NEMA Type 3R enclosure (steel or thermoplastic available).

Information provided is subject to change without notice. Please verify all details with GE. All values are design or typical values when measured under laboratory conditions, and GE makes no warranty or guarantee, express or implied, that such performance will be obtained under end-use conditions.

GE

41 Woodford Avenue, Plainville, CT 06062 www.geelectrical.com

© 2009 General Electric Company

