- Manual Transfer Switch
- 100-1,200 A, 240 - 600 VAC, 60 Hz
- 2, 3 and 4 Pole
- NEMA 3R
- Manual Transition
- UL 98 Listed
- Available in Fused and Non-fused Versions


## Codes and Standards

CSA C22.2 No. 178 Certified

## Description

The new Manual Power Series Transfer Switch (PSTS) features a double-throw quick-connect that provides a safe and quick means of connecting a portable generator to a facility, transferring the building to backup power.
The Manual PSTS helps to minimize risks associated with connecting portable generators. There are many potential hazards created when temporarily connecting high-amp portable equipment such as large generators. These hazards pose serious risks to life and property, and open businesses and individuals to liability for losses caused by improper or unsafe installation. The Manual PSTS incorporates many design elements to ensure operator and public safety.

## PRODUCT OVERVIEW AND FEATURES

## PRODUCT OVERVIEW

The Manual PSTS is a double-throw switch containing two vertically oriented switches in one enclosure operated by a single handle. Between the two switches is a common bus and lugs for outgoing cables.

The handle has a three-position operation. In the upper position, the upper switch is closed; in the middle position, both switches are open; in the lower position, the lower switch is closed. The two switches are mutually exclusive and cannot both be closed at the same time.

The upper switch serves as the utility main disconnect, and the lower switch is the generator disconnect. The Manual PSTS is supplied with the generator disconnect factory-wired to individual receptacles for each phase neutral and ground conductor. These receptacles are inlets for temporarily connecting a generator to the switch without creating holes in the enclosure to terminate the wires at the mechanical lugs.
The switch can be configured with fused switches in either position. The most common application is shown in the figure below. In this arrangement, the switch is used as a service entrance switch, with the utility switch fused, and the generator switch non-fused. In this manner, the main disconnect switch has the overcurrent protection required by NEC Article 230.90. Fuses are usually not required on the generator switch because generators are supplied with load side overcurrent protection.

The outgoing lugs are fed either from the top switch or the bottom switch. This operation prevents feeding generated power out to the utility wires, preventing injury to line workers and generator overload. It also prevents paralleling utility and generator sources when utility power is restored, which would violate electrical codes and local laws, as well as could cause damage to electrical equipment.

## STANDARD FEATURES

- UL Listed Device
- Meets NEC ${ }^{\circledR}$ Requirements
- Receptacle Compartment Safety Interlocks
- Utility Isolation without Key Interlocks
- Proper Material Selection
- Exclusive Trap-door System
- Color-coordinated CamLock Connections
- Trap-door Design
- Receptacle Compartment Interlock
- Simple Operation
- 2 Year Standard Warranty


## AVAILABLE OPTIONS

- Fusible Upper and Lower Switch
- 700.3 Annunciation Aux Contacts
- 2 Year Extended Limited Warranty
- 5 Year Basic Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty



## UNIT DIMENSIONS*

100-200A Manual PSTS


400A Manual PSTS


600-800A Manual PSTS


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## UNIT DIMENSIONS (CONTINUED)*

## 1,200A Manual PSTS



## LUG CAPACITIES

| Double-Throw <br> Switch Size- <br> Cam-Lok | Service Terminal Openings | Load Terminal Openings | Switched Neutral Pole Load <br> Terminal Openings | Solid Neutral Terminal Openings | Ground Terminal Openings | Receptacle Bypass Terminal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 100 | (1) $1 / 0-14$ AWG Cu/Al | (1) $1 / 0-14$ AWG Cu/AI | (1) $1 / 0-14$ AWG Cu/AI | (2) $1 / 0-14$ AWG, <br> (1) 2 - 14 AWG Cu/Al | (3) $2-14$ AWG Cu/Al | (1) $10-32$ screw mounting |
| 200 | (1) 300 kcmil 6 AWG Cu/AI | (1) 250 kcmil 6 AWG Cu/AI | (1) 250 kcmil 6 AWG Cu/Al | (2) 250 kcmil - 6 AWG, <br> (1) $1 / 0-14$ AWG, <br> (1) 2 - 14 AWG Cu/Al | (3) $2-14$ AWG Cu/Al | (2) $1 / 4$ studs, <br> 1.75 -inch spacing |
| 400 | (1) $750 \mathrm{kcmil}-1 / 0$ or <br> (2) $300 \mathrm{kcmil}-1 / 0$ <br> Cu/AI | (1) $750 \mathrm{kcmil}-1 / 0$ or <br> (2) $300 \mathrm{kcmil}-1 / 0$ <br> $\mathrm{Cu} / \mathrm{Al}$ | (1) $750 \mathrm{kcmil}-1 / 0$ or <br> (2) $300 \mathrm{kcmil}-1 / 0$ <br> $\mathrm{Cu} / \mathrm{Al}$ | (6) $500-250 \mathrm{kcmil}$, <br> (6) 250 kcmil - <br> 6 AWG Cu/AI | (4) 250 kcmil 6 AWG Cu/Al | (2) $1 / 2-13$ UNC studs, 1.75-inch spacing |
| 600 | (4) $750 \mathrm{kcmil}-$ 3/0 Cu/AI | (4) $500-250$ kcmil Cu/Al | (4) $500-250$ kcmil Cu/Al | (6) $500-250 \mathrm{kcmil}$, <br> (4) 250 kcmil - <br> 6 AWG Cu/AI | (4) 250 kcmil 6 AWG Cu/AI | (2) $1 / 2-13$ UNC studs, 1.75-inch spacing |
| 800 | (4) 750 kcmil 3/0 Cu/AI | (4) $500-250$ kcmil Cu/Al | (4) $500-250$ kcmil Cu/Al | (6) $500-250 \mathrm{kcmil}$, <br> (4) $250 \mathrm{kcmil}-6$ AWG | (4) 250 kcmil 6 AWG Cu/AI | (2) $1 / 2-13$ UNC studs, 1.75-inch spacing |
| 1,200 | (4) 750 kcmil 1/0 Cu/AI | (4) $750 \mathrm{kcmil}-$ 1/0 Cu/AI | (4) 750 kcmil 1/0 Cu/AI | (4) $750 \mathrm{kcmil}-$ 1/0 Cu/Al | 250 kcmil 6 AWG Cu/AI | Contact Factory |

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