



EMERGENCY POWER

EMERGENCY POWER CONNECTION EQUIPMENT



NEC 700.3 (F) Compliant • UL 1008 LISTED

STORMSWITCH® | TRIPLESWITCH® | TEMPTAP™ | OUTTAP™

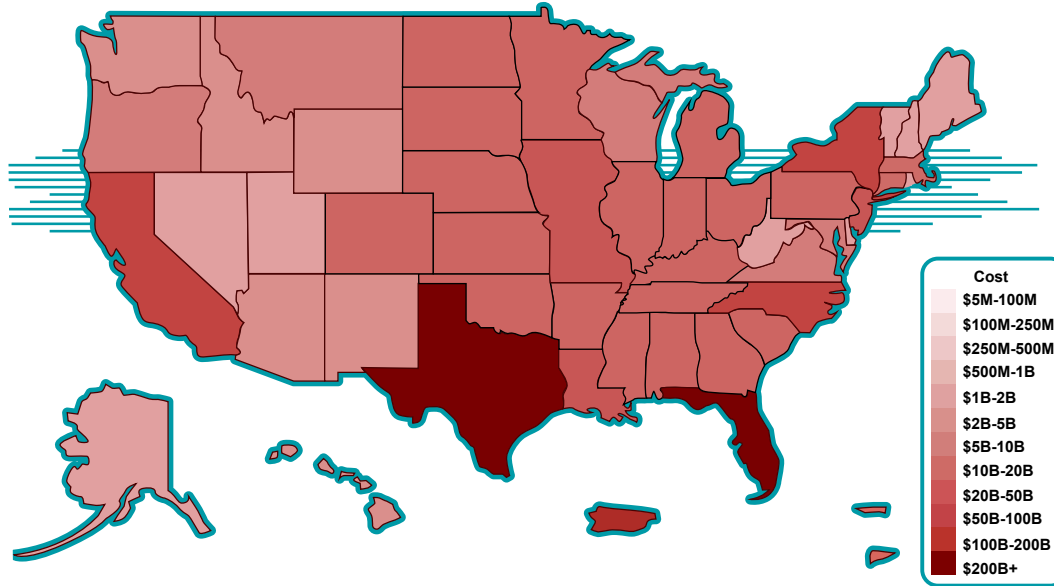
DUALCONNECT™ | READYCONNECT™ | ROTARYCONNECT™

Importance of Emergency Power

The reliability of power over the past decade has been strained by increased demand of growing populations, aging infrastructure and more frequent occurrences of extreme weather. There is often a large cost impact for businesses without backup power during power outages. These costs include lost output and wages, spoiled inventory, inconvenience and the cost of restarting industrial operations.

The graphs below illustrate an unmistakable rise in the number of power grid outages as well as weather related downtime.

2013-2023 Billion Dollar Disaster Cost¹



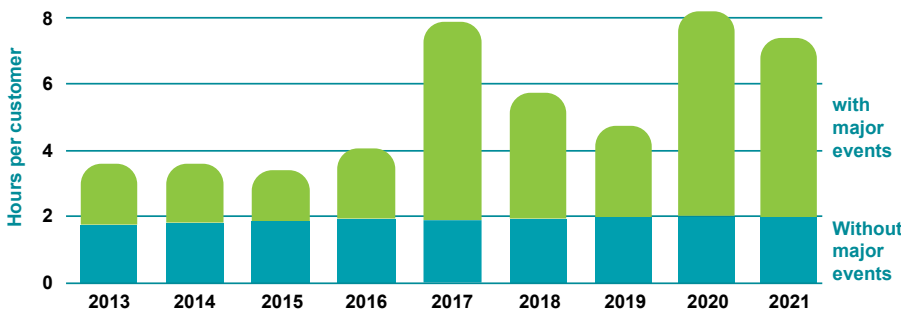
The costs associated with unscheduled power outages (i.e. weather related) are influenced by the amount of time that the power is out.

Interruptions in electricity service to customers vary in frequency and duration across the nearly 3,000 electric distribution systems that serve about 155 million customers in the United States.

The year 2020 marked a historic milestone in power outages for the United States, characterized by an unprecedented Atlantic hurricane season. The surge in extreme weather events has plunged Americans into prolonged periods of darkness, surpassing previous records. This issue is projected to intensify as the impact of climate change gives rise to increasingly fierce weather phenomena.

In the course of 2020, the average American endured more than eight hours without electricity—a duration exceeding that of 2013 by over twice the amount. As the climate changes and infrastructure ages, the economic and social impacts of power outages may be unavoidable.

Average duration of total annual interruption in electricity service²



However, the effects can be mitigated by being diligent and taking appropriate steps to minimize operational downtime.

ESL's emergency power connection equipment is very cost-effective, especially when compared to the cost of being without power for extended periods of time.

In addition, our emergency power products provide users with safe and simple operation so that grid-tied facilities can quickly connect to portable power when it matters most.

(1) NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2023). <https://www.ncei.noaa.gov/access/billions/>, DOI: 10.25921/stkw-7w73

(2) US Energy Information Administration | <https://www.eia.gov>

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Manual transfer switches provide an economical and safe solution for grid-tied facilities to quickly and easily connect a portable generator when utility power is out.	
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StormSwitch®

**UL/cUL
1008
LISTED**

Manual Transfer Switch

UL 1008 Listed 70A – 800A • **Wall Mount**

ESL's UL/cUL 1008 Listed StormSwitch manual transfer switch is the ideal solution for portable generator connection to grid-tied facilities. StormSwitch combines a robust commercial-grade transfer switch with color-coded cam-style connectors for quick connection to a portable power generator.

Integral utility and generator manual disconnects are interlocked to prevent cross connecting the power sources. Once installed by a licensed electrician, the StormSwitch is so easy and safe to operate that only basic training is required.

Buying and installing automatic transfer switches with a permanent generator for each site can be quite costly and requires ongoing maintenance. With StormSwitch, multiple locations can be equipped with a manual transfer switch and share a single portable generator, a significant cost savings.

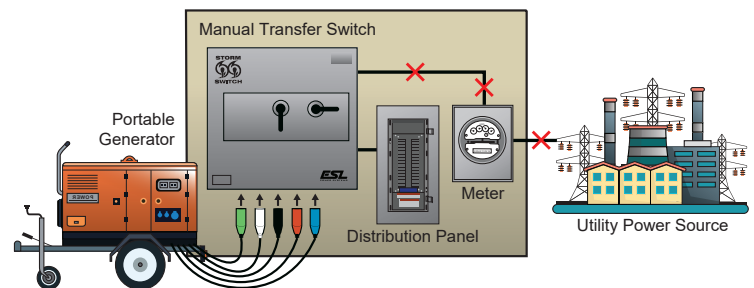


400A StormSwitch

Applications

- Gas Stations/
Convenience Stores
- Water/Wastewater Facilities
- Call Centers
- Manufacturing Facilities
- Financial Centers
- Cold Storage Facilities
- Grocery Stores
- Distribution Centers
- Restaurants
- Petrochemical
- Health Care Facilities

StormSwitch Connection to Portable Generator

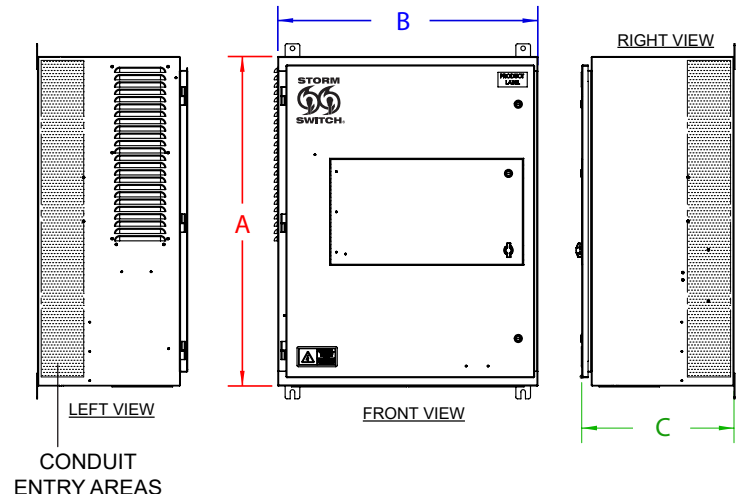


StormSwitch Features:

- Interlocking mechanism prevents cross-connecting power sources
- Safety-interlocked door and dead front panel
- Utility and generator 3-pole disconnects
- 400A rated color-coded cam-style connectors (male) for easy connections
- NEMA 3R double coated, cold-rolled steel enclosure (stainless steel, Type 3RX, & colors optional)
- Hinged, padlockable access door with door stoop
- Hinged plate secures cord entries when not in use
- Aux contacts (to comply with NEC 700.3(F))
- Terminal strip (for devices like remote generator start, remote monitoring)
- Phase monitor
- OSHPD Seismic Certification (OSP)*
*excludes 225A - 400A StormSwitch BeBe™
- Suitable for use as service equipment in USA
- UL /cUL 1008 Listed up to 3000A

Typical StormSwitch Optional Features

- Utility ON indicator (unit mounted or remote mounted)
- 4-pole disconnects (switched neutral)
- 20A & 30A 125VAC or 240VAC receptacles (battery chargers, heaters)
- Heater with thermostat and de-humidistat
- Leg kits
- Other options available



Dim	3020	3040	3060	3080
A	30"	45"	60"	60"
B	25"	35"	48"	48"
C	13.4"	20.8"	24.3"	24.3"
Approx Lbs.	138	310	450	680

Note: Dimensions and weights are subject to change.

• U.S. Pat. #7462792

StormSwitch®

Manual Transfer Switch

UL 1008 Listed 1000A – 3000A • Pad Mount

Available up to 5000A

ESL's UL/cUL 1008 Listed pad-mounted StormSwitches range from 1000A - 3000A and include a main padlockable door with separate lower hinged panel for emergency generator cable access.

These higher amperage units include a fixed deadfront over 3-pole circuit breakers, hinged deadfront for emergency power cable hook-up, ventilation louvers, and removable lifting pads. Left side wire way is standard for bottom feed up to 3000A. Optional larger side wire ways available. Dual side wireway available for all units.

Applications

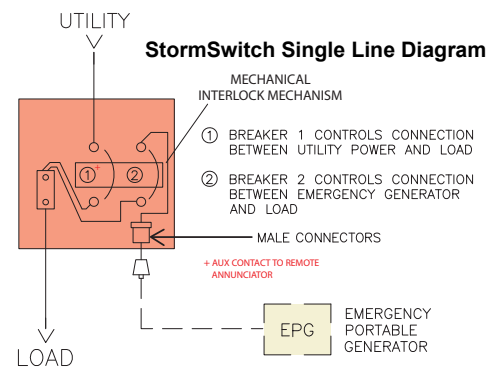
- Banks/Financial Centers
- Grocery Stores
- Gas Stations
- Data Centers
- Cell Sites
- Retail Stores
- Schools
- Healthcare Centers
- Law Enforcement Facilities
- Water/Wastewater Facilities
- Evacuation Centers

StormSwitch Pad Mount Features:

- Interlocking mechanism prevents cross-connecting power sources
- Door & dead front panel for safe generator connection and operation
- Utility and generator 3-pole disconnects
- 400A rated color-coded cam-style connectors (male) for easy connections
- NEMA 3R double coated, cold-rolled steel enclosure (stainless steel, Type 3RX, & colors optional)
- Hinged plate secures cord entries when not in use
- Aux contacts
- NEC 700.3(F)
- Terminal strip (for devices like remote generator start, remote monitoring)
- Phase monitor
- OSHPD Seismic Certification (OSP)
- UL /cUL 1008 Listed up to 3000A (NRTL 3200A-5000A)

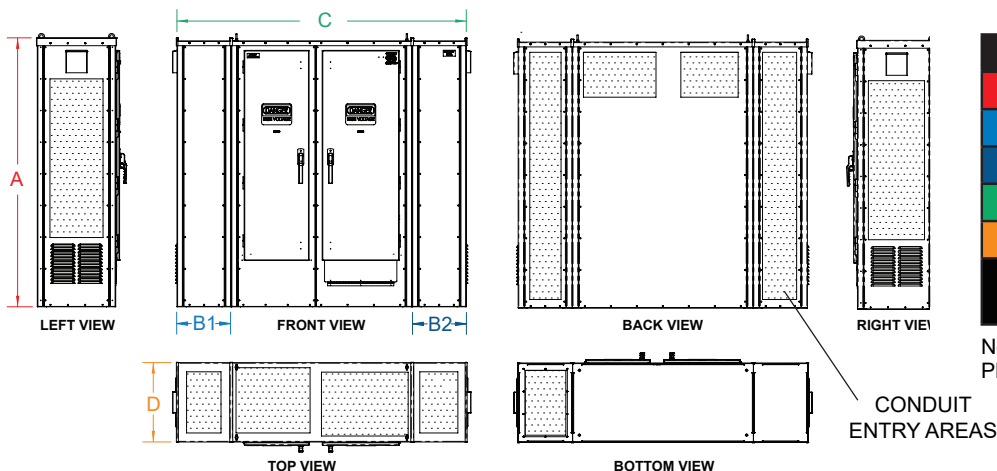


3000A StormSwitch



StormSwitch Pad Mount Optional Features

- Utility ON indicator (unit mounted or remote mounted)
- 4-pole disconnects (switched neutral)
- 20A & 30A 125VAC or 240VAC receptacles (battery chargers, heaters)
- Suitable for use as service equipment in USA

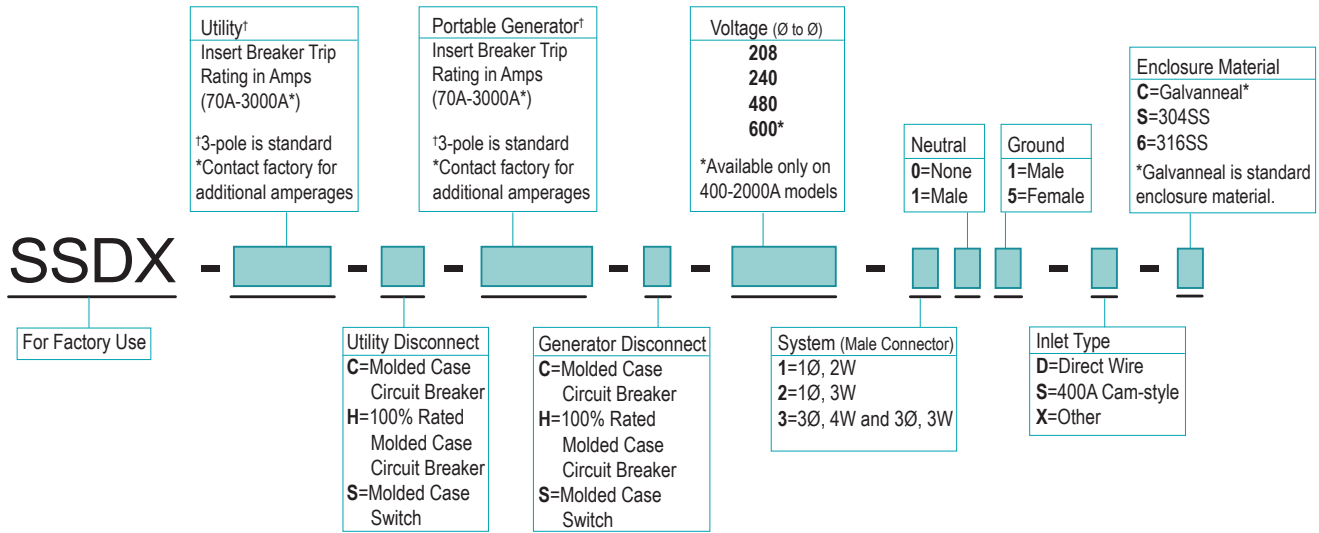


Dim	3012	3024	3028	3032
A	88"	88"	88"	88"
B1	14"	18"	18"	18"
B2	-	18"	18"	18"
C	62"	96"	96"	96"
D	24"	27"	27"	27"
Approx Lbs.	1600	1800	1800	1800

Note: Dimensions and weights are subject to change. Please verify with factory.

StormSwitch • Product Selection Information

Example: SSD8 - 800C - 800C - 480 - 311 - S - C



Typical 3-pole Configurations • 70A - 3000A • Up to 480VAC or 600VAC

Model	Current Rating (Amps)	Line Terminals (Wire Range)	Neutral / Load Terminals (Wire Range)	Ground Lug (Wire Range)	Cam-style Receptacle Size (Amps)
3020 Series	70, 100, 125, 150	(1) #14 - 3/0	(2) #6 - 4/0	(2) #6 - 300	400
	175	(1) #4 - 4/0	(2) #6 - 4/0	(2) #6 - 300	400
	200	(1) 3/0 - 350	(2) #6 - 4/0	(2) #6 - 300	400
3040 Series†	400 max	(2) 2/0-500	(4) #2 - 600	(2) #6 - 300	400
3060 Series	300, 350, 400, 450, 500, 600	(3) 3/0 - 500	(4) #2 - 600	(2) #6 - 300	(2) 400
3080 Series	300, 350, 400, 450, 500, 600, 700, 800	(3) 3/0 - 500	(4) #2 - 600	(2) #6 - 300	(2) 400
3012 Series	1200 max	(4) 300 - 800	(4) 300 - 800	(9) #2 - 600	(3) 400
3024 Series	2400 max	(8) 300 - 800	(8) 300 - 800	(9) #2 - 600	(6) 400
3028 Series	2800 max	(8) 300 - 800	(8) 300 - 800	(9) #2 - 600	(7) 400
3032 Series	3000 max	(8) 300 - 800	(8) 300 - 800	(9) #2 - 600	8) 400

Note: other options such as 4-pole (switched neutral) available - consult the factory.

†3040 Series with circuit breaker are furnished with adjustable electronic trips.



StormSwitch® BeBe

Compact Manual Transfer Switch

UL 1008 Listed 225A – 400A • Wall Mount

The StormSwitch BeBe is UL/cUL 1008 Listed and provides the same ideal solution for portable generator connection to grid-tied facilities but with a 33% smaller footprint than the original 400A StormSwitch.

This compact manual transfer switch weighs less than ESL's standard StormSwitch and makes for an easy installation. The StormSwitch BeBe (Bottom Entry Bottom Exit) accepts conduit entries through the bottom left side of the enclosure only.

Like all of ESL's emergency power products, the StormSwitch BeBe provides operators with color-coded cam-style receptacles to ensure a quick, safe connection to a portable generator, and is a cost effective UL1008 Listed solution to the traditional double throw switch.



400A StormSwitch BeBe

Typical Configurations • 225A - 400A • Up to 600VAC

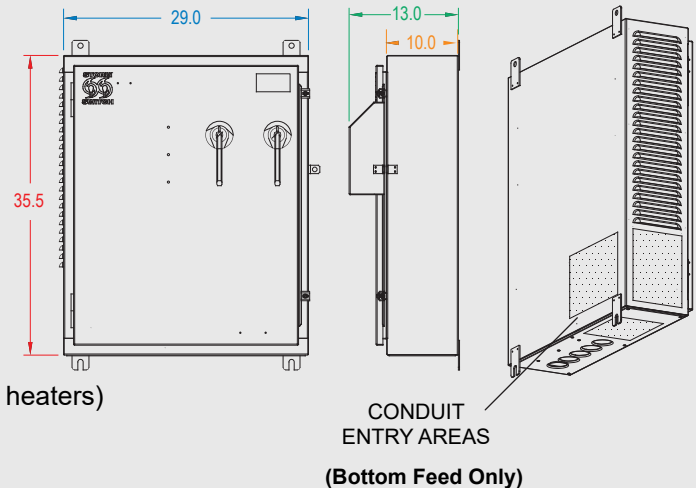
Model	Current Rating (Amps)	Line Terminals (Wire Range)	Neutral / Load Terminals (Wire Range)	Ground Lug (Wire Range)	Cam-style Receptacle Size (Amps)
3042 Series†	225-400	(2) 2/0 - 500	(2) #2 - 500	#6 - 250	400

Note: Other options available - consult the factory.

†3042 Series with circuit breaker are furnished with adjustable electronic trips. Approximate weight: 160 lbs

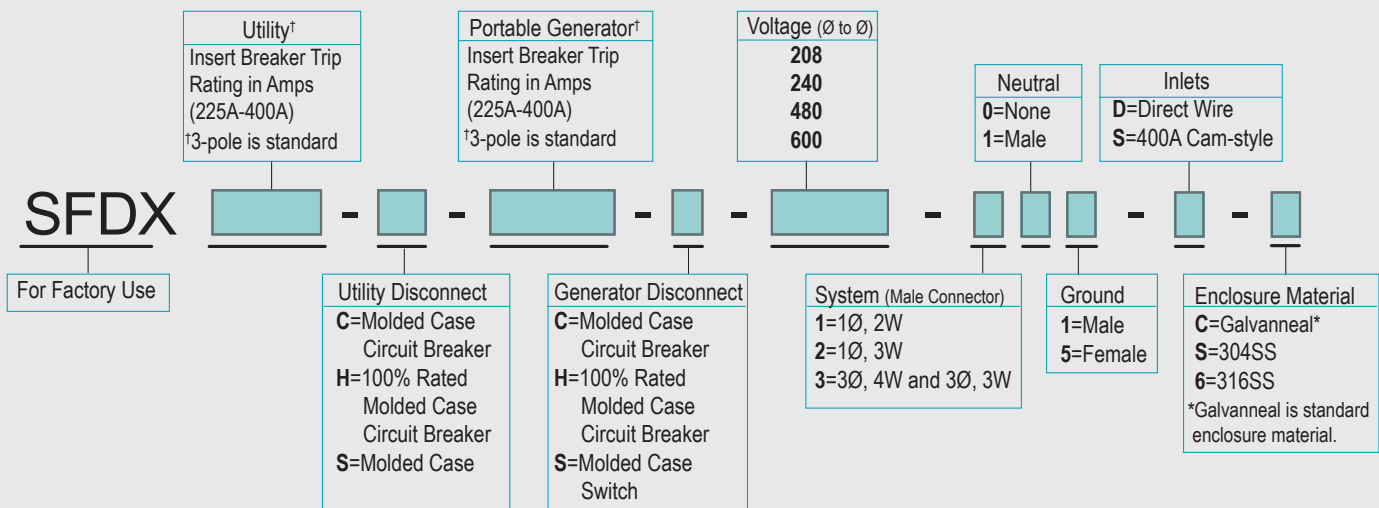
Typical StormSwitch BeBe Optional Features

- Utility ON indicator (unit mounted or remote mounted)
- 4-pole disconnects (switched neutral)
- 20A & 30A 125VAC or 240VAC receptacles (battery chargers, heaters)
- Heater with thermostat and de-humidistat
- Leg kits
- Other options available



StormSwitch BeBe • Product Selection Information

Example: SFD4 - 400C - 400C - 480 - 311- S - C



RotaryConnect™

Manual Transfer Switch

200A - 1200A

ESL's Rotary Switch is a UL/cUL 1008 Listed manual transfer switch designed to assist in situations where a switch is all that's necessary to perform the emergency power transfer. Such instances include applications dealing with fire pumps which by code, only allow 2 breakers in the line, or at existing facilities where adding a breaker based manual transfer switch solution would require an additional coordination study.

ESL's RotaryConnect – 3 Position Rotary switch provides an integrated transfer switch and industry standard Series 16 cam locks, allowing a quick, safe, portable generator connection and operation for any industrial or commercial application.

ESL's solution offers multiple configurations from 100A – 1200A up to 600VAC and includes a phase rotation monitor, 3-point terminal block for remote start stop signal, and aux contact. ESL's RotaryConnect offers portable back up power to any existing facility, in addition to solutions such as:

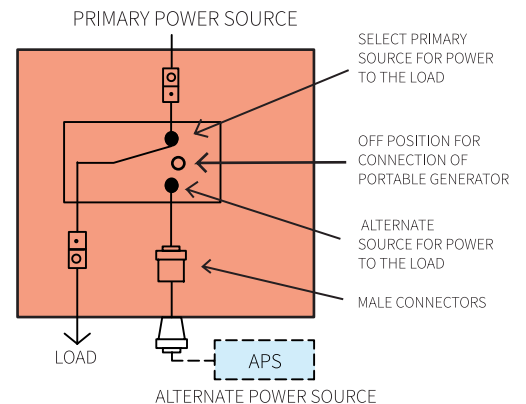
- Portable generator to back up permanent generator applications to meet NEC 700.3(F).
- Portable generator for fire pump applications.



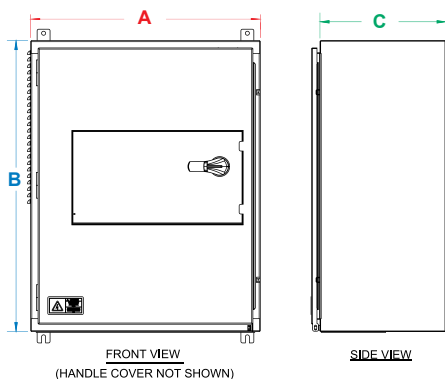
1200A Rotary Connect

RotaryConnect Features:

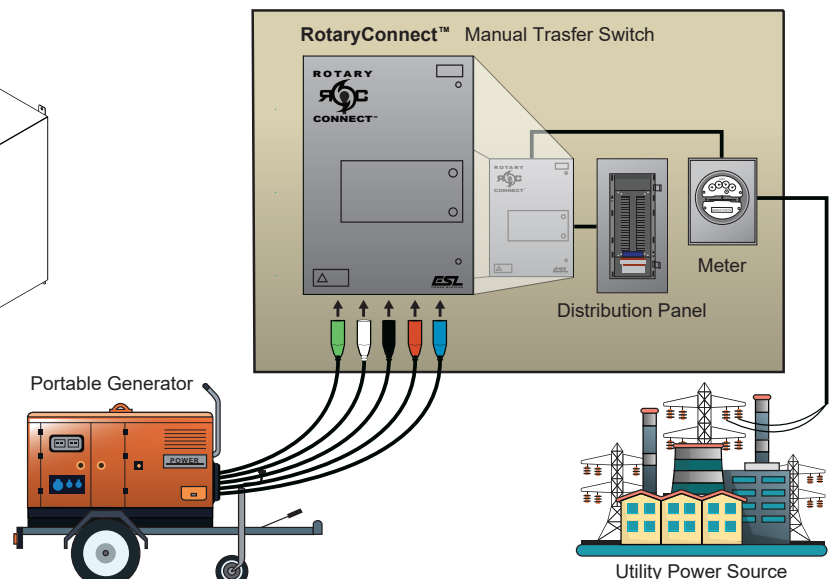
- Quick connect solution for backup alternate power
- Door & dead front panel for safe alternate power connection and operation
- Primary power and alternate power disconnect is a 3-pole as standard
- NEMA 3R heavy gauge steel enclosure with gray powder-coat RAL 7035 (stainless steel & additional colors optional)
- Color-coded Series 16 cam style male connectors for easy alternate power connection
- Direct wire connection available for indoor installations (TempTap Generator Docking Station Required)
- Handle cover provides security from unauthorized use
- Wall mountable; leg kits optional
- Operating instructions silkscreened on the door
- OSHPD Seismic Certification (OSP)



RotaryConnect Single Line Diagram



Dim	8302	8304	8312
A	25.5"	35.5"	48"
B	30"	45"	60"
C	12"	19.5"	24.3"
Approx Lbs.	115	380	630



ReadyConnect™

Automatic Transfer Switch with Cams

30A - 1200A

ESL's ReadyConnect Automatic Transfer Switch (ATS) with Cams, designed exclusively for outdoor use, is UL/cUL1008 Listed from 30A to 400A, and available up to 1200A (NRTL 600A-1200A). This innovative ATS provides the ability for proactive power management by enabling the seamless connection of backup power in anticipation of planned outages. Consequently, the presence of on-site maintenance personnel becomes unnecessary for the transfer of power between sources and subsequent restoration. With quick connect cam-style connectors, ESL's ReadyConnect allows for an easy and safe, portable generator connection and operation for any commercial or industrial buildings.



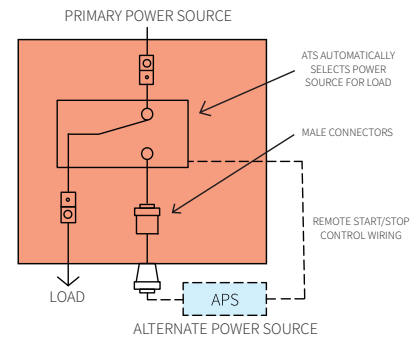
400A Automatic Transfer Switch with Cams

Applications

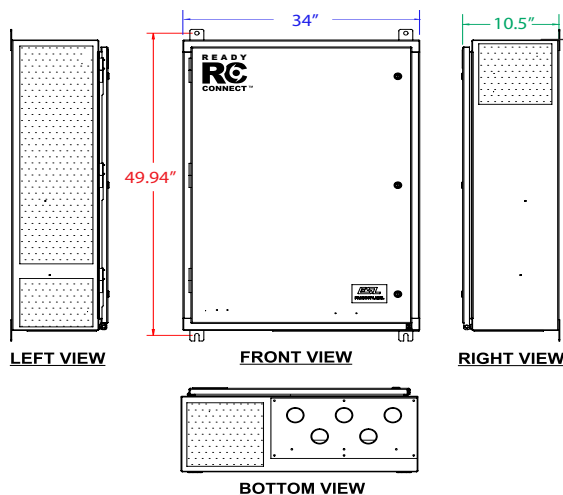
- Banks/Financial Centers
- Water/Wastewater
- Manufacturing
- Financial Centers
- Petrochemical
- Healthcare Facilities
- Office buildings
- Educational Facilities

ReadyConnect Features:

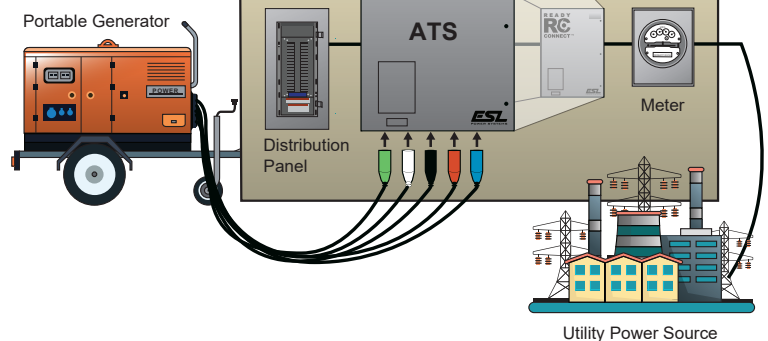
- NEMA 3R double coated, cold-rolled steel enclosure with wrinkle gray RAL 7035 powdercoat (stainless steel & additional colors optional)
- Optional Thermostat, Dehumidistat and Heater
- Operating instructions silkscreened on deadfront
- Door and dead front panel for safe generator connection and operation
- Unit uses 3-pole ATS as standard (4-pole optional)
- 16 Series cam-lock connectors for easy portable generator connection
- Remote Start Stop Connections
- Quick connect solution for primary and alternative sources
- Aux contacts for remote monitoring
- Suitable for Use as Service Equipment (SUSE) Optional



ReadyConnect Single Line Diagram



CONDUIT ENTRY AREAS



Approvals

- UL/cUL 1008 Listed assembly
- UL 1691 Listed receptacles
- UL 1008 Listed molded case switch
- IBC 2015/ASCE 7-10 compliant

Note: Dimensions and weights are subject to change. Please verify with factory.

TripleSwitch®

3-way Manual Transfer Switch

UL 1008 Listed 125A - 3000A

Available up to 5000A

Load bank testing can be challenging and time consuming. ESL's UL/cUL 1008 Listed TripleSwitch is a dual purpose solution designed to service those facilities that utilize an automatic transfer switch and a permanent generator.

The TripleSwitch includes three breakers which allow the permanent generator to be simultaneously connected to both a portable load bank and the ATS. Two mechanically interlocked breakers prevent cross connecting the permanent standby generator and the portable generator.

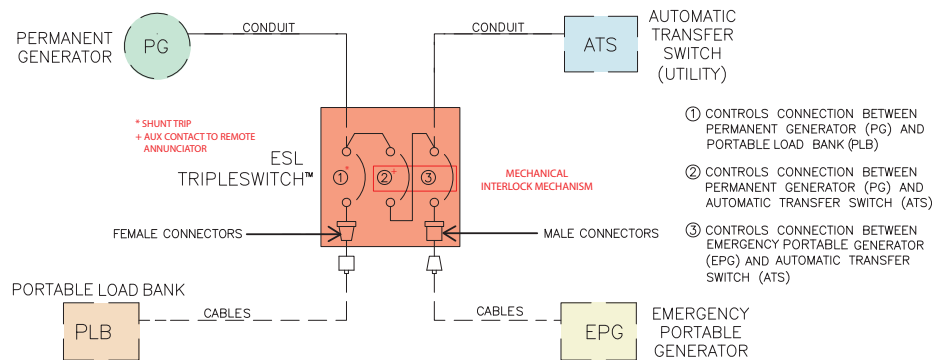
ESL's TripleSwitch combines female quick connect cams for the load bank, and male quick connect cams for a portable backup generator. Connections are simple and quick, reducing set-up times and wiring mistakes.



3000A TripleSwitch Padmount

Applications

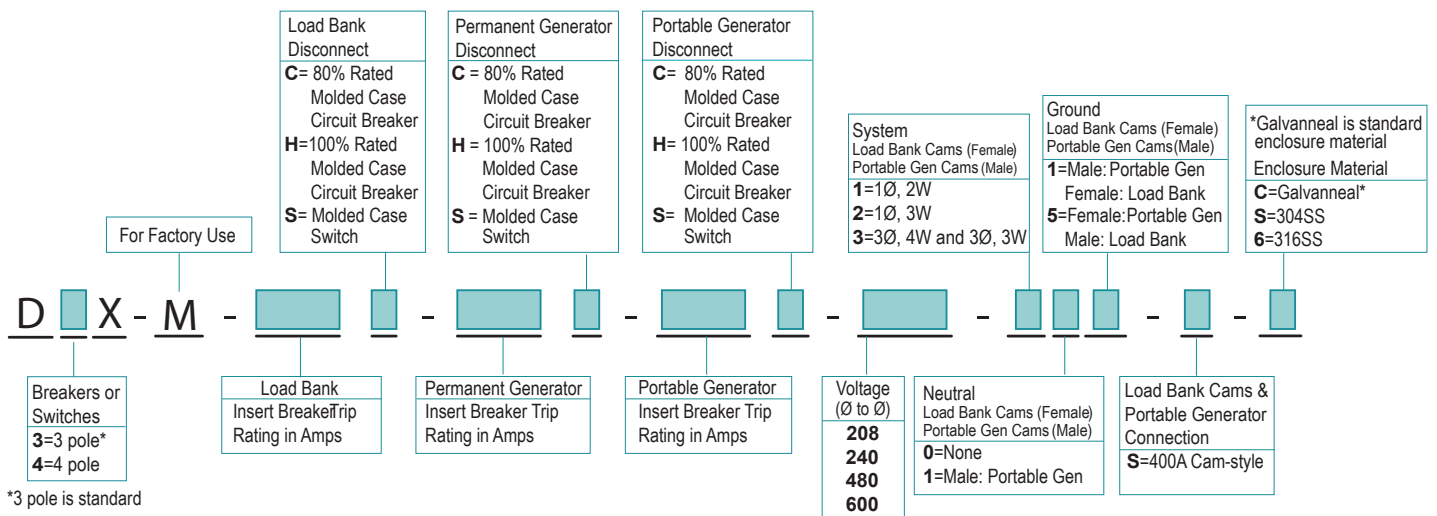
- Healthcare Facilities
- Data Centers
- Banks/Financial Centers
- Emergency Operations Centers
- Tunnels & Bridges
- Cable TV Distribution Centers



TripleSwitch Single Line Diagram

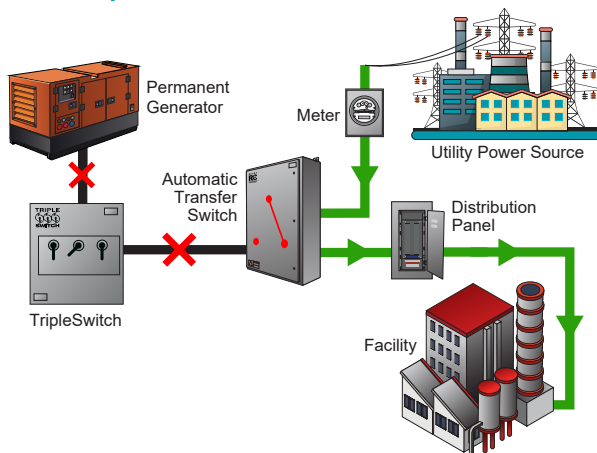
TripleSwitch • Product Selection Information

Example: D3X - M - 800C - 800C - 800C - 480 - 311 - S - C

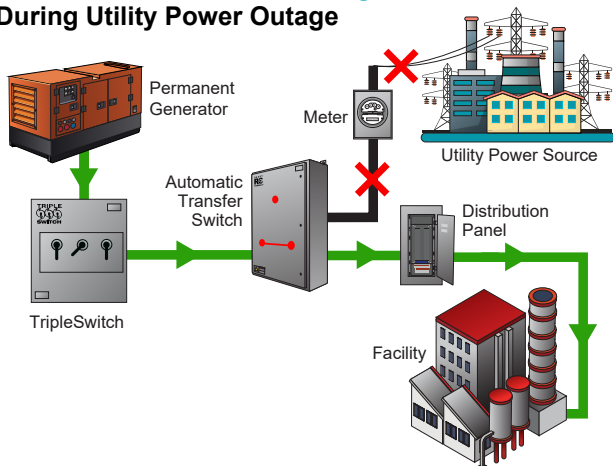


Diagrams below represent TripleSwitch operating functions during various conditions.

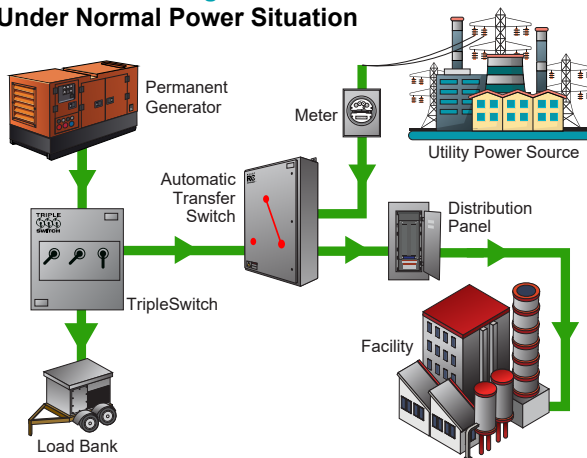
Normal Operation



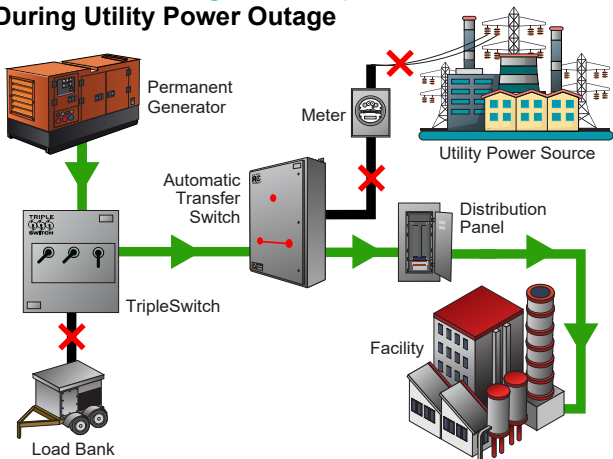
Permanent Generator Running During Utility Power Outage



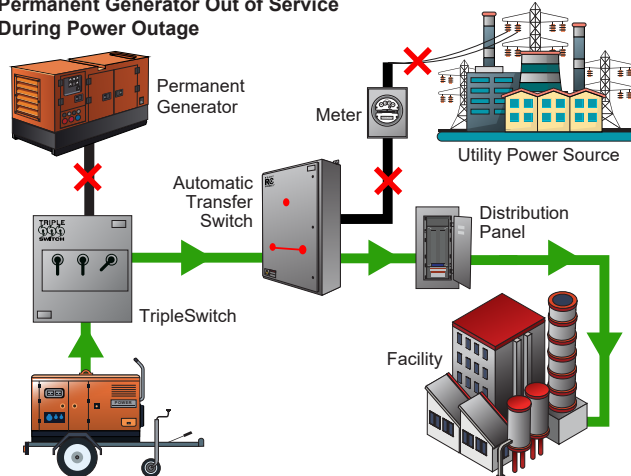
Load Bank Testing Under Normal Power Situation



Load Bank Testing Shunt Trip Activated During Utility Power Outage



Portable Emergency Generator Connected and Running Permanent Generator Out of Service During Power Outage



TripleSwitch®

125A - 800A • Wall Mount

**UL/cUL
1008
LISTED**

TripleSwitch Wallmount Features:

- Mechanically interlocked mechanism prevents cross-connecting power sources
- Door & dead front panel for safe generator connection and operation
- Disconnects are 3-pole circuit breakers as standard (optional 4-pole breakers or molded case switches available)
- Type 3R double coated, cold-rolled steel enclosure with gray powdercoat RAL 7035 (stainless steel & additional colors optional)
- Color-coded cam style connectors for easy back-up generator & load bank connection
- Handle cover provides security from unauthorized use
- Wall mountable; leg kits optional
- NEC 700.12 compliant
- Accepts 24VDC signal from ATS to switch power during load bank testing (other signal trip voltages available)
- UL/cUL 1008 Listed Assembly



400A TripleSwitch

Typical TripleSwitch Optional Features:

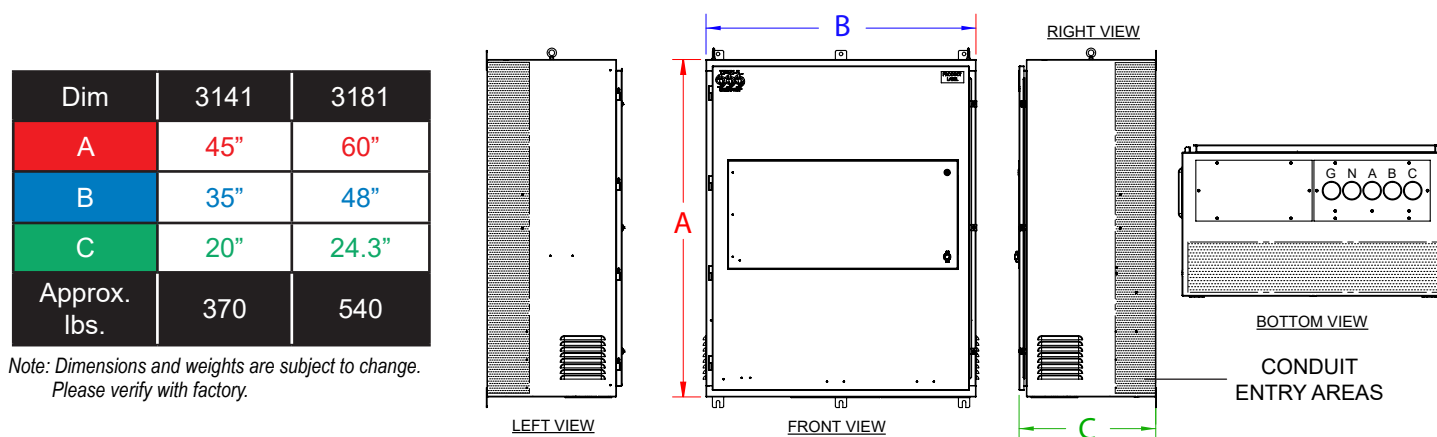
- Utility ON indicator (unit mounted or remote mounted)
- 20A & 30A 125VAC or 240VAC receptacles (for battery chargers, heaters)
- Leg kits for wall mount units
- Heater with thermostat and de-humidistat
- Other options available

Typical Configurations • 125A - 800A • Wall Mount • Up to 600VAC

Model	Current Rating (Amps)	Line / Load Terminals (Wire Range)	Ground Lug (Wire Range)	Cam-style Receptacle Size (Amps)
3141 Series	125 - 400	(2) 2/0 - 500	(2) #6 - 300	400
3181 Series	300, 350, 400, 450, 500, 600, 700, 800	(3) 3/0 - 500	(2) #6 - 300	(2) 400

Other options available - consult the factory.

Note: If neutral switching is required, please contact ESL for details.



TripleSwitch®

1000A - 3000A • Pad Mount

Available up to 5000A

ESL's UL/cUL 1008 Listed pad-mounted TripleSwitches range from 1000A - 3000A up to 480VAC (NRTL 3200A-5000A) and include two main padlockable doors with separate lower hinged cable-pass-through panels for load bank testing and emergency generator connections.

The interior of these higher amperage units include fixed deadfronts over 3-pole circuit breakers and termination lugs; below the breakers are hinged deadfronts for emergency power cable hook-up. Left side wireway is standard for bottom feed. Optional larger side wire ways available. Dual side wireway is available from 2000A - 3000A.



1200A TripleSwitch

TripleSwitch Padmount Features:

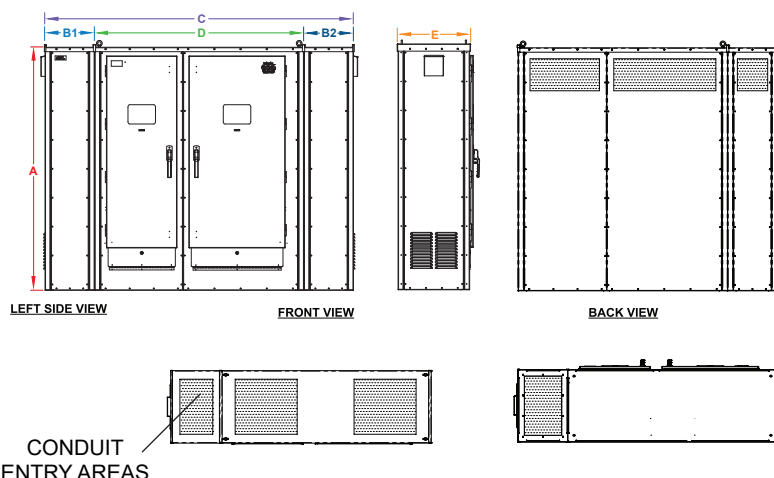
- Quick connect solution for permanent generator load bank testing and a backup portable generator
- Mechanically interlocked mechanism prevents crossconnecting power sources
- Door & dead front panel for safe generator connection and operation
- Disconnects are 3-pole circuit breakers as standard (optional 4-pole breakers or molded case switches available)
- Type 3R freestanding, double coated, cold-rolled steel enclosure with gray powdercoat RAL 7035 (stainless steel & additional colors optional)
- Color-coded cam style connectors for easy back-up generator & load bank connection
- Side wireway extension for top and/or bottom conduit entry/exit
- Ground fault protection option available
- NEC 700.12 compliant
- Accepts 24VDC signal from ATS to switch power during load bank testing (other signal trip voltages available)

Typical Configurations • 1000A - 3000A • Pad Mount • Up to 480VAC

Model	Max Current Rating (Amps)	Line / Load Terminals (Wire Range)	Ground Lug (Wire Range)	Cam-style Receptacle Size (Amps)
3112 Series	1200 max	(4) 300-800	(9) #2 - 600	(3) 400A Male, (3) 400A Female
3116 Series	1600 max	(4) 300-800	(9) #2 - 600	(4) 400A Male, (4) 400A Female
3122 Series	2000 max	(6) 300 - 800	(9) #2 - 600	(5) 400A Male, (5) 400A Female
3124 Series	2400 max	(8) 300 - 800	(9) #2 - 600	(6) 400A Male, (6) 400A Female
3128 Series	2800 max	(8) 300 - 800	(9) #2 - 600	(7) 400A Male, (7) 400A Female
3132 Series	3000 max	(8) 300 - 800	(9) #2 - 600	(8) 400A Male, (8) 400A Female

Other options such as 4-pole (switched neutral) available - consult the factory.

Dim	3112	3116	3122	3124	3128	3132
A	88	89	89.2	89.2	88.2	89.2
B1	28	28	18	18	18	18
B2	-	-	18	18	18	18
C	48	104	113	112	112	113
D	76	76	76	76	76	76
E	23.8	24	26.4	26.5	27	26.5
Approx. lbs.	1300	3100	3300	3400	3400	3400



DualConnect™

Dual Purpose Docking Station UL 1008 Listed 1200A - 5000A

For emergency backup system designs with either multiple or existing generators, ESL's UL 1008 Listed DualConnect™ – Dual Purpose Docking Station (DPDS) provides the flexibility needed to meet your design criteria.

ESL's Dual Purpose Docking Station offers the ability to connect a portable load bank and portable generator at the same time and is UL 1008 Listed from 400A to 5000A. The DualConnect is available in three different versions based on your design needs.

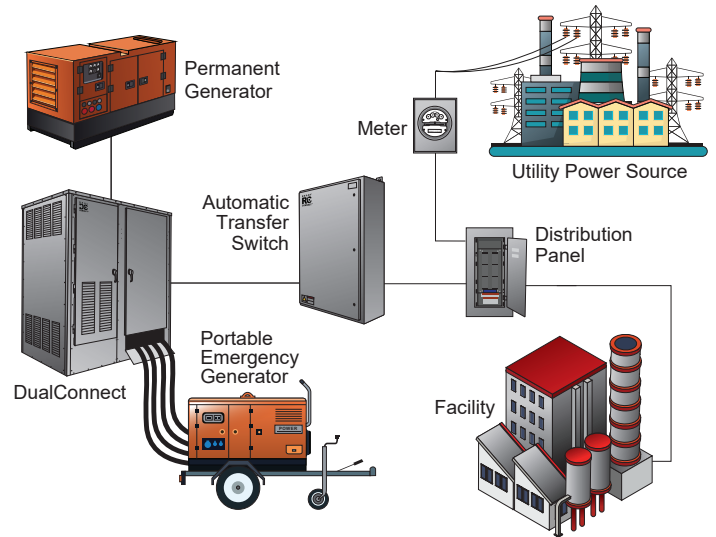


Diagram above represents DualConnect operating function

DualConnect Features:

- Key Interlock with permanent generator and DPDS portable generator cable access door
- All cam lock connections located at the bottom of the unit for easy access and cable connection
- NEC700.3(F) compliant
- 0 breakers, 1 breaker or 2 breakers available
- Phase Rotation Monitor
- Terminal Block for AutoStart
- Auxiliary Contacts on breakers

Typical DualConnect Optional Features

- Utility ON indicator (unit mounted or remote mounted)
- 4-pole disconnects (switched neutral)
- 20A & 30A 125VAC or 240VAC receptacles (battery chargers, heaters)
- Heater with thermostat and de-humidistat
- Leg kits
- Other options available

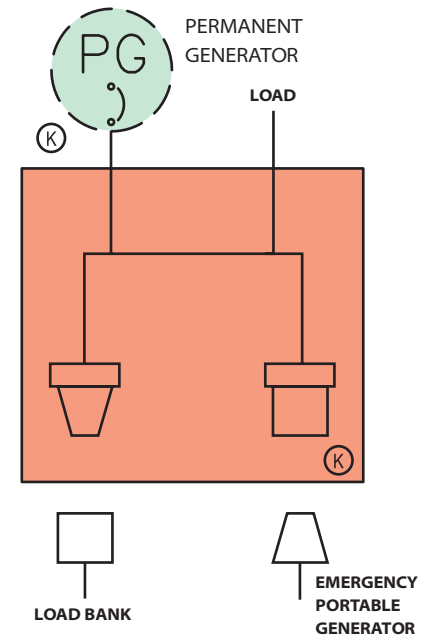
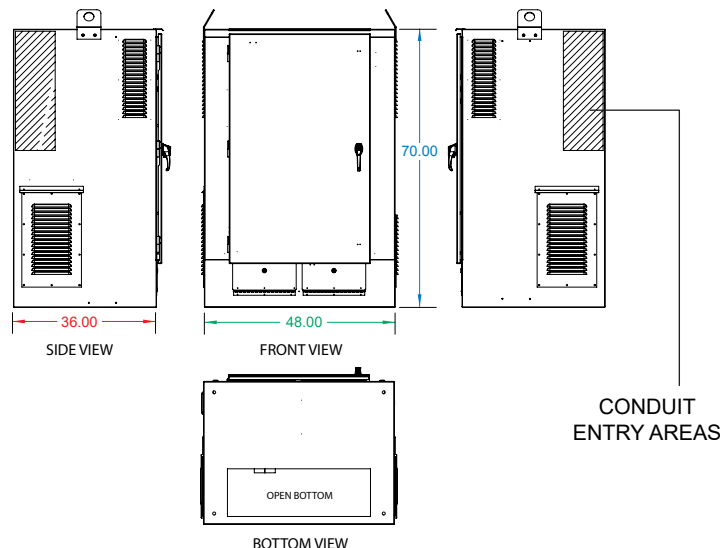
DualConnect

NO Breaker



1200A DualConnect

Where all the controls and/or breakers are currently in the emergency power system. The interlock between the permanent generator and temporary back up generator is accomplished by a key interlock between a designated breaker and the portable generator cable access door.

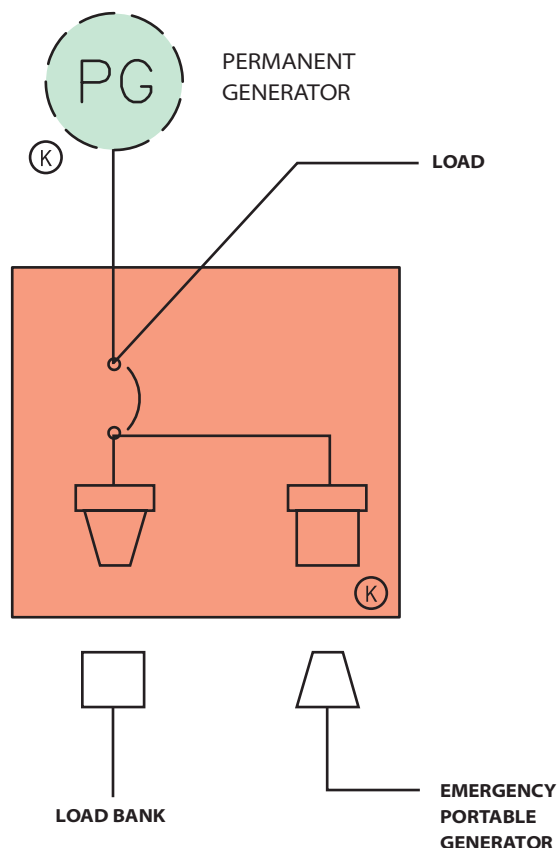
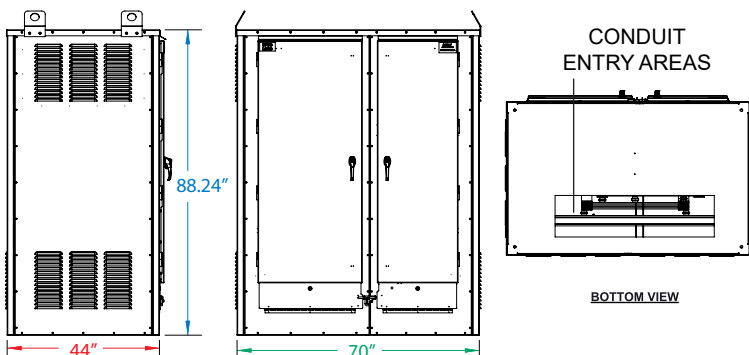


ONE Breaker



The interlock between the permanent generator and temporary back up generator is accomplished by a key interlock between a designated breaker and the portable generator cable access door.

3000A DualConnect



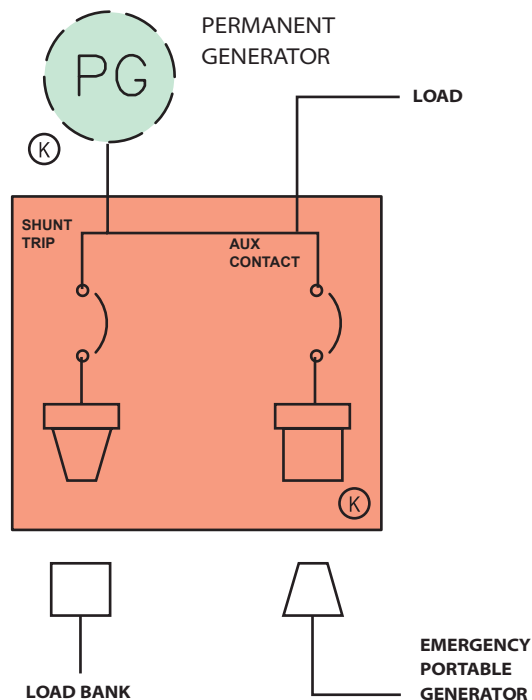
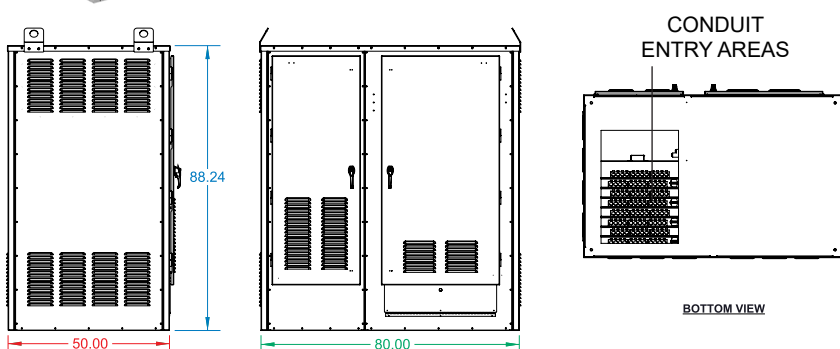
TWO Breakers

Provides overcurrent protection to the unit and disconnects. Breaker position can be determined based on available emergency power system design. The interlock between the permanent generator and temporary back up generator is accomplished by a key interlock between a designated breaker and the portable generator access door keylock in the DPDS.



All of ESL's DualConnect units with 2 breakers can be configured to meet NEC700.3(F) if required.

5000A DualConnect



Generator Tap Box (Inlet box) 400A-5000A

ESL's UL/cUL 1008 Listed TempTap generator docking stations are designed with or without breakers and provide end users with a safe and simple solution to connect a portable generator to a grid-tied facility without the need for a certified electrician.

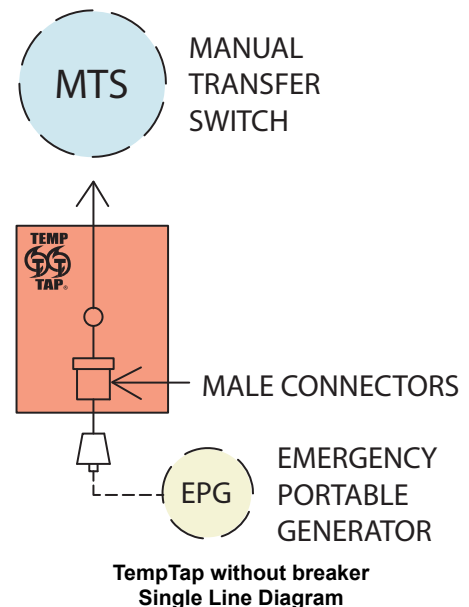
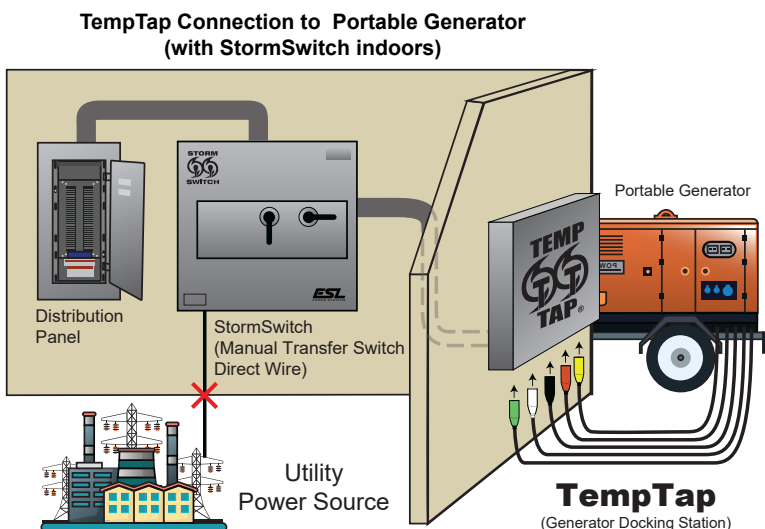
TempTap is a pass-through junction box that can be mounted to a building and is typically hard-wired to an upstream circuit breaker enclosure or system, such as a transfer switch or utility disconnect. Like all ESL emergency power units, the TempTap provides operators with color-coded cam-style receptacles to ensure a quick, safe connection to a portable generator.



1600A TempTap

Applications

- Banks/Financial Centers
- Grocery Stores
- Gas Stations
- Data Centers
- Cell Sites
- Retail Stores
- Evacuation Centers
- Schools
- Healthcare Centers
- Law Enforcement Facilities
- Water/Wastewater Facilities
- Load Bank Testing
- Toll Booths



TempTap Standard Features:

- 400A rated color-coded cam-style connectors (male) for easy connection
- Terminal strip (for devices like remote generator start, remote monitoring)
- NEMA 3R double coated, cold-rolled steel enclosure (stainless steel, Type 3RX & colors optional)
- Phase Rotation Monitor
- Hinged, padlockable access door with door stop
- Hinged plate secures cord entries when not in use
- Use in conjunction with a manual/automatic transfer switch
- UL/cUL 1008 Listed up to 3200A
- OSHPD Seismic Certification (OSP)

Typical TempTap Optional Features:

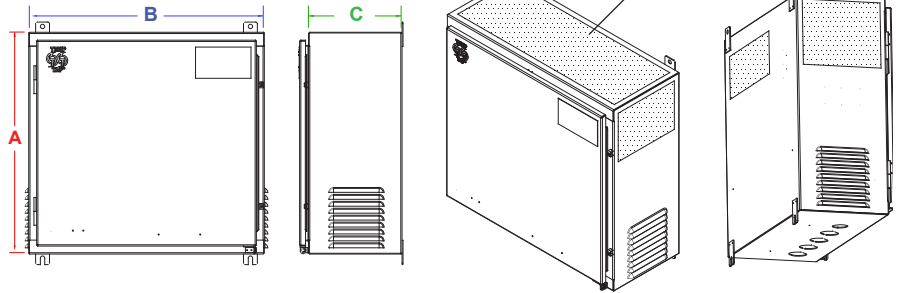
- Utility ON indicator (unit mounted bottom feed optional or remote mounted)
- 20A & 30A 125VAC or 240VAC receptacles (for portable generators, battery chargers, heaters)
- Leg kits
- Extended depth enclosures for bottom-fed units
- Auxiliary contacts (for units with breakers)
- Key locks available
- Heater with thermostat and de-humidistat
- Other options available

Generator Tap Box (Inlet Box)- Without Breaker

400A – 1600A • **Wall Mount**

Dim	200A	400A	600A, 800A
A	29"	45"	60"
B	25"	35"	48"
C	13"	20"	24.3"
Approx. lbs.	60	195	260

Note: Dimensions and weights are subject to change. Please verify with factory.

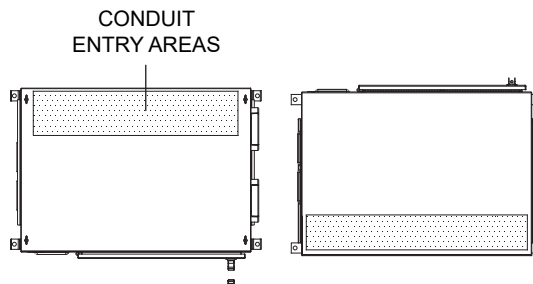
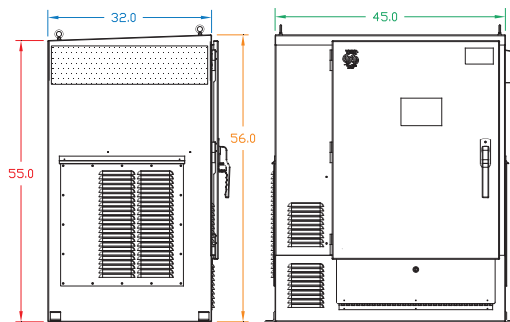


Generator Tap Box (Inlet box) - Without Breaker

UL 1008 Listed 2000A - 3200A • **Pad Mount** Available up to 5000A

Designed with multiple conduit entry locations, the pad mounted TempTap provides a cost effective, easy install and convenient hook up for large trailer mounted portable generators. Major uses include:

- Use with a portable generator as the primary emergency generator quick connection point outside a facility (in conjunction with StormSwitch)
- Use as a quick exterior connection point for a portable generator to back up the permanent standby generator at a critical facility (in conjunction with TripleSwitch).



2000-3200A TempTap

Typical Configurations - No Breaker • 400A - 1600A • **Wall Mount** • Up to 600VAC

Max Current Rating (Amps)	Model	Load Terminals Per Phase & Neutral	Ground Lug (Wire Range)	Cam-style Receptacle Size Per Phase & Neutral (Amps)	Ground Cam-style Receptacle Size (Amps)	Max Current Withstand Rating (KA)
400	IB4	(1) 1/2 -13x7/8" stud	(1) #6-250	(1) 400	(1) 400	22 (Single PH) 42 (3 PH)
800	IB8	Copper pad with (6) 0.53" holes on 1 3/4" V x 1" H	(1) #6-250	(2) 400	(1) 400	42
1200	IB12	Copper pad with (4) 0.53" holes on 1 3/4" V x 2" H; (2) 0.44" holes on 1 3/8" V	(1) #6-250	(3) 400	(1) 400	42
1600	IB16	Copper pad with (4) 0.53" holes on 1 3/4" V x 2" H; (2) 0.44" holes on 1 3/8" V	(1) #6-250	(4) 400	(1) 400	42

Other options available - consult the factory.

Typical Configurations - No Breaker • 2000A - 3200A • **Pad Mount** • Up to 480VAC

Max Current Rating (Amps)	Model	Load Terminals Per Phase & Neutral	Ground Lug (Wire Range)	Cam-style Receptacle Size Per Phase & Neutral (Amps)	Ground Cam-style Receptacle Size (Amps)	Max Current Withstand Rating (KA)
2000	IB20	Mech lugs accept (8) 300 - 800	(6) #2 - 600	(5) 400	(3) 400	42
2400	IB24	Mech lugs accept (8) 300 - 800	(6) #2 - 600	(6) 400	(3) 400	42
2800	IB28	Mech lugs accept (8) 300 - 800	(6) #2 - 600	(7) 400	(3) 400	42
3200	IB32	Mech lugs accept (8) 300 - 800	(6) #2 - 600	(8) 400	(3) 400	42

Other options available - consult the factory.

Approximate weight: 725lbs

Generator Tap Box (Inlet box) - With Breaker

UL 1008 Listed 200A - 800A • Wall Mount

Available up to 5000A

TempTap - with Breaker Features

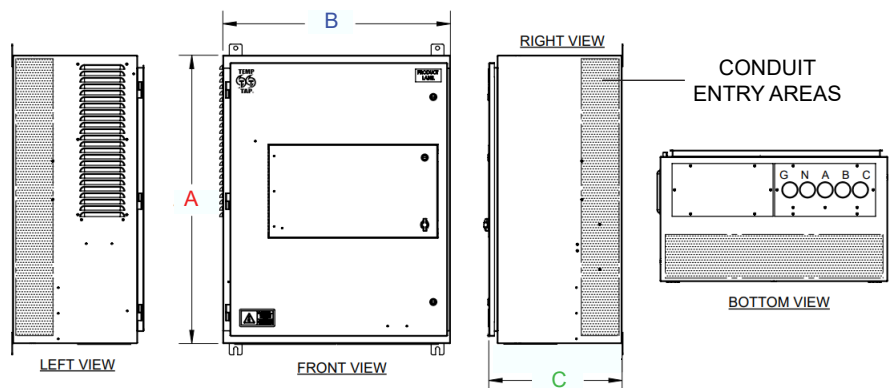
- Quick connect solution for a backup portable generator
- 3-pole circuit breaker disconnect
- Type 3R double-coated, cold-rolled steel enclosure with gray powder coat RAL 7035 (stainless steel & additional colors optional)
- Color-coded cam-style male inlets
- Hinged, pad-lockable access door & dead front panel for safe cam connection and operation
- Hinged access plate secure cable entry compartment when not in use
- Handle cover provides security from unauthorized use
- Wall mountable; leg kits optional
- UL/cUL 1008 Listed Assembly



400A TempTap
Wallmount with Breaker

Dim	200A	400A	600A 800A
A	29"	45"	60"
B	25"	35"	48"
C	13"	20"	24.3"
Approx. lbs.	60	195	260

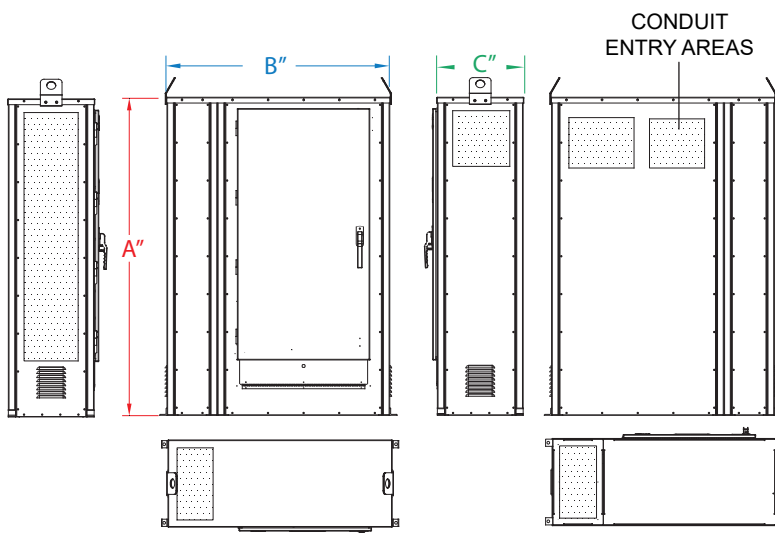
Note: Dimensions and weights are subject to change. Please verify with factory.



Generator Tap Box (Inlet box) - With Breaker

UL 1008 Listed 1200A - 3000A • Pad Mount

Available up to 5000A



1600A TempTap
Padmount

Dim	1200A 1600A 2000A	2400A 2800A 3000A
A	88"	88"
B	62"	78"
C	24"	26"

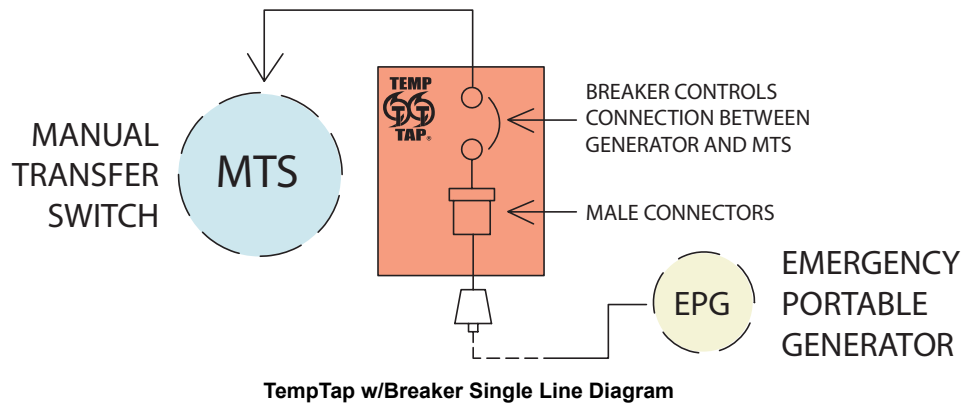
Note: Dimensions and weights are subject to change. Please verify with factory.

Typical 3-pole Configurations - With Breaker • 70A - 3000A • Up to 480VAC or 600VAC

Model	Current Rating (Amps)	Line Terminals (Wire Range)	Neutral / Load Terminals (Wire Range)	Ground Lug (Wire Range)	Cam-style Receptacle Size (Amps)
4820 Series	70, 100, 125, 150	(1) #14 - 3/0	(2) #6 - 4/0	(2) #6 - 300	400
	175	(1) #4 - 4/0	(2) #6 - 4/0	(2) #6 - 300	400
	200	(1) 3/0 - 350	(2) #6 - 4/0	(2) #6 - 300	400
4840 Series†	400 max	(2) 2/0-500	(4) #2 - 600	(2) #6 - 300	400
4860 Series	300, 350, 400, 450, 500, 600	(3) 3/0 - 500	(4) #2 - 600	(2) #6 - 300	(2) 400
4880 Series	300, 350, 400, 450, 500, 600, 700, 800	(3) 3/0 - 500	(4) #2 - 600	(2) #6 - 300	(2) 400
4812 Series	1200 max	(4) 300 - 800	(4) 300 - 800	(9) #2 - 600	(3) 400
4816 Series	1200 max	(4) 300 - 800	(4) 300 - 800	(9) #2 - 600	(3) 400
4822 Series	2400 max	(8) 300 - 800	(8) 300 - 800	(9) #2 - 600	(6) 400
4824 Series	2400 max	(8) 300 - 800	(8) 300 - 800	(9) #2 - 600	(6) 400
4828 Series	2800 max	(8) 300 - 800	(8) 300 - 800	(9) #2 - 600	(7) 400
4832 Series	3000 max	(8) 300 - 800	(8) 300 - 800	(9) #2 - 600	(8) 400

Note: other options such as 4-pole (switched neutral) available - consult the factory.

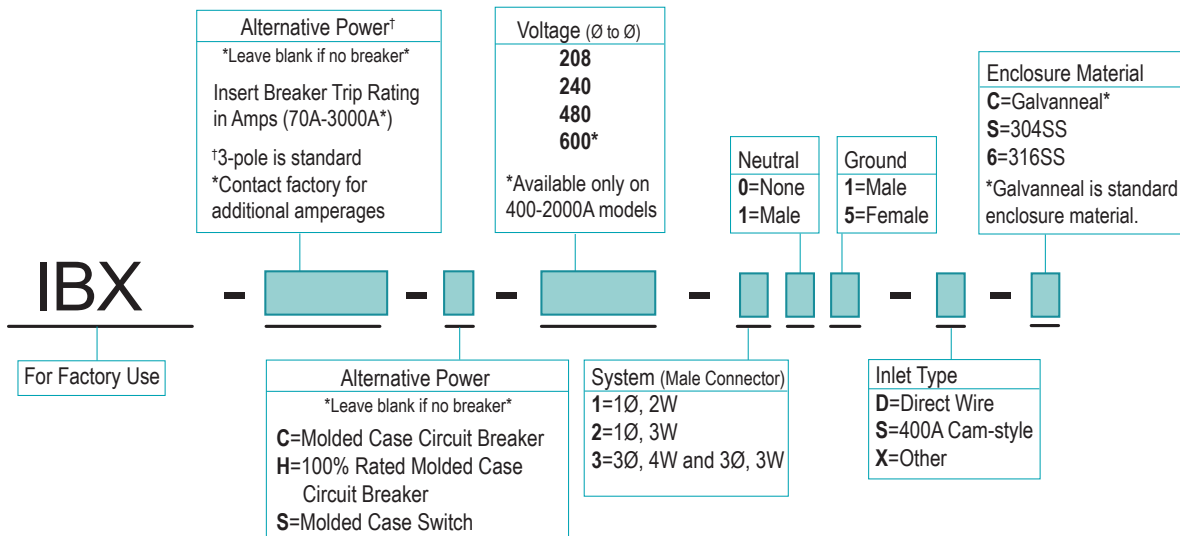
†4840 Series with circuit breaker are furnished with adjustable electronic trips.



TempTap - With or Without Breaker • Product Selection Information

Example: IBX8 - 480 - 311 - S - C (Without Breaker)

IBX8 - 800 - C - 480 - 311 - S - C (With Breaker)



Outlet Box Without Circuit Breaker

UL 1008 Listed 400A - 3200A

Available up to 5000A

ESL's OutTap is an UL/cUL 891 Listed outlet box designed to provide end users a safe and simple temporary method of using a facility's electrical power source and distributing it to exterior electrical equipment via quick connect 400A cam-lock cables. This solution is often used in lieu of utilizing a portable generator with remote equipment.

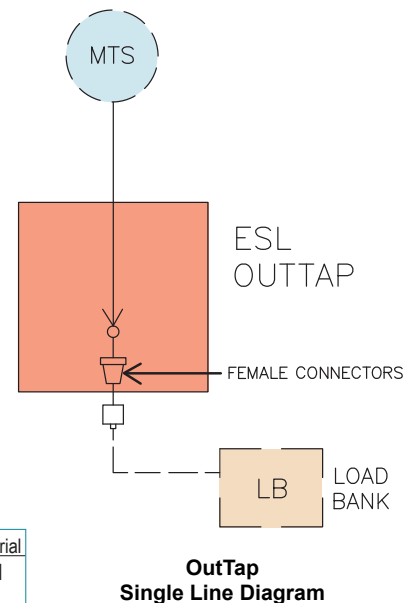
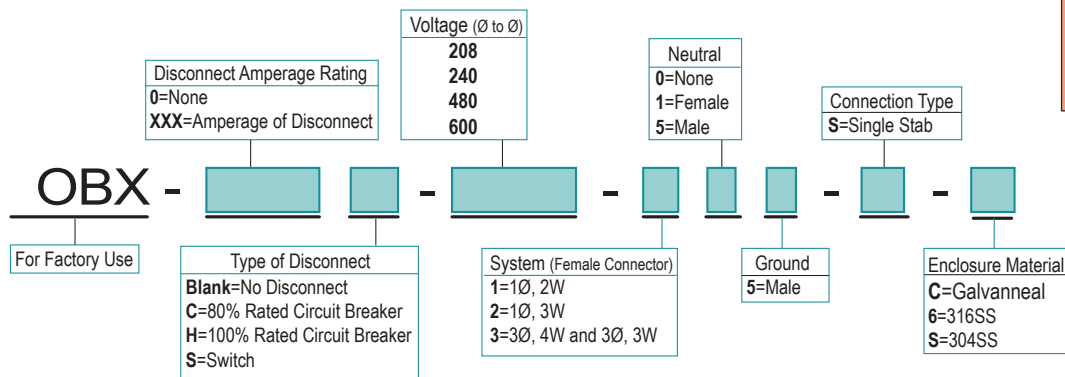
Outlet boxes are simple pass-through boxes that are mounted on or adjacent to a building and hard-wired to an existing power source. ESL's OutTap can be designed with or without a breaker based on your needs.



400A OutTap
without Breaker

OutTap • Product Selection Information

Example: OB8 - 0 - 480 - 311 - S - C (Without Circuit Breaker)
OB8 - 800C - 480 - 311 - S - C (With Circuit Breaker)



Typical Configurations • 400A - 3200A Without a Breaker

(For standard dimensions refer to corresponding TempTap amperage on pages 14 & 15)

Max Current Rating (Amps)	Model	Load Terminals Per Phase & Neutral	Ground Lug (Wire Range)	Cam-style Receptacle Size Per Phase & Neutral (Amps)	Ground Cam-style Receptacle Size (Amps)	Max Current Withstand Rating (KA)
400	OB4	(1) 1/2 - 13x7/8" stud	(1) #6-250	(1) 400	(1) 400	22 (Single PH) 42 (3 PH)
800	OB8	Copper pad with (6) .53" holes on 1 3/4" V x 1" H	(1) #6-250	(2) 400	(1) 400	42
1200	OB12	Copper pad with (4) .53" holes on 1 3/4" V x 2" H; (2).44" holes on 1 3/8" V	(1) #6-250	(3) 400	(1) 400	42
1600	OB16	Copper pad with (4) .53" holes on 1 3/4" V x 2" H; (2).44" holes on 1 3/8" V	(1) #6-250	(4) 400	(1) 400	42
2000	OB20	Mech lugs accept (8) 300 - 800	(6) #2 - 600	(5) 400	(2) 400	42
2400	OB24	Mech lugs accept (8) 300 - 800	(6) #2 - 600	(6) 400	(2) 400	42
2800	OB28	Mech lugs accept (8) 300 - 800	(6) #2 - 600	(7) 400	(2) 400	42
3200	OB32	Mech lugs accept (8) 300 - 800	(6) #2 - 600	(8) 400	(2) 400	42

Other options available - consult the factory.

Outlet Box With Circuit Breaker 125A - 3200A

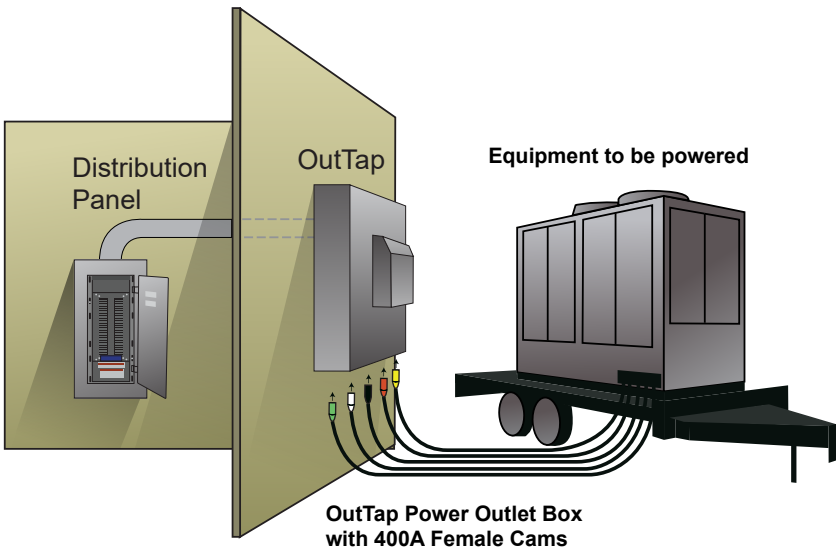
ESL's OutTap with Circuit Breaker includes a safety-interlocked door for safe connection and operation. All outlet boxes are UL 891 Listed and provide a quick and safe connection with color-coded female cam-style receptacles.

OutTap Features:

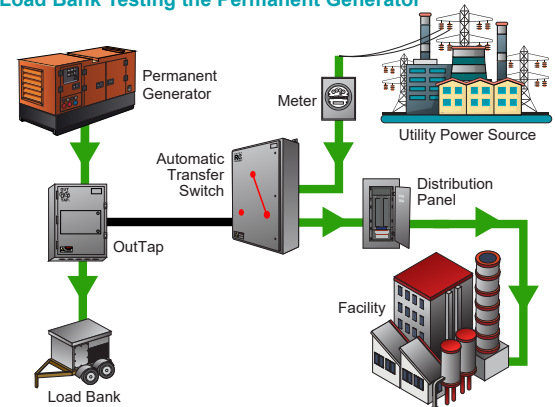
- Safety-interlocked door and dead front panel
- 400A rated color-coded cam-style connectors (male) for easy connections
- NEMA 3R double coated, cold-rolled steel enclosure (stainless steel, Type 3RX, & colors optional)
- Hinged, padlockable access door with door stoop
- UL /cUL 891 Listed up to 3000A
- OSHPD Seismic Certification (OSP)



800A OutTap
with Breaker



OutTap™ with Breaker Load Bank Testing the Permanent Generator



OutTap Power Outlet Box
for portable load bank connection

Typical Configurations With Breaker • 125A - 3000A

(For standard dimensions refer to corresponding StormSwitch amperage on pages 1 & 2)

Model	Current Rating (Amps)	Line Terminals (Wire Range)	Ground Lug (Wire Range)	Cam-style Receptacle Size (Amps)
OB4	400 max	(1) #2-600	(2) #6-250	400
OB8	300, 350, 400, 450, 500, 600, 700, 800	(3) 3/0-500	(2) #6-300	(2) 400
OB12	1200 max	(4) 3/0-500	(4) 1/0-750 (1) #2-600	(3) 400
OB16	1600 max	(4) 300 - 800	(9) #2-600	(4) 400
OB20	2000 max	(6) 300 - 800	(9) #2-600	(5) 400
OB24	2400 max	(8) 300 - 800	(9) #2-600	(6) 400
OB28	2800 max	(8) 300 - 800	(9) #2-600	(7) 400
OB32	3000 max	(8) 300 - 800	(9) #2-600	(8) 400

DirecTap™

Termination Cabinet (Junction Box)

100A - 1500A

ESL's industrial grade DirecTap is a UL1773 Listed termination box. Equipped with power distribution blocks, these direct wire tap boxes are designed to make lug connections to permanently installed equipment such as an ATS, UPS, or supporting switchgear.

DirecTap enclosures are available in a variety of types ranging from Type 1-4X. ESL's termination boxes provide a permanent connection to emergency power systems for a variety of facilities, including refineries, pharmaceutical, food processing and manufacturing.



**UL 1773
LISTED**

100A - 1500A DirecTap

DirecTap Features:

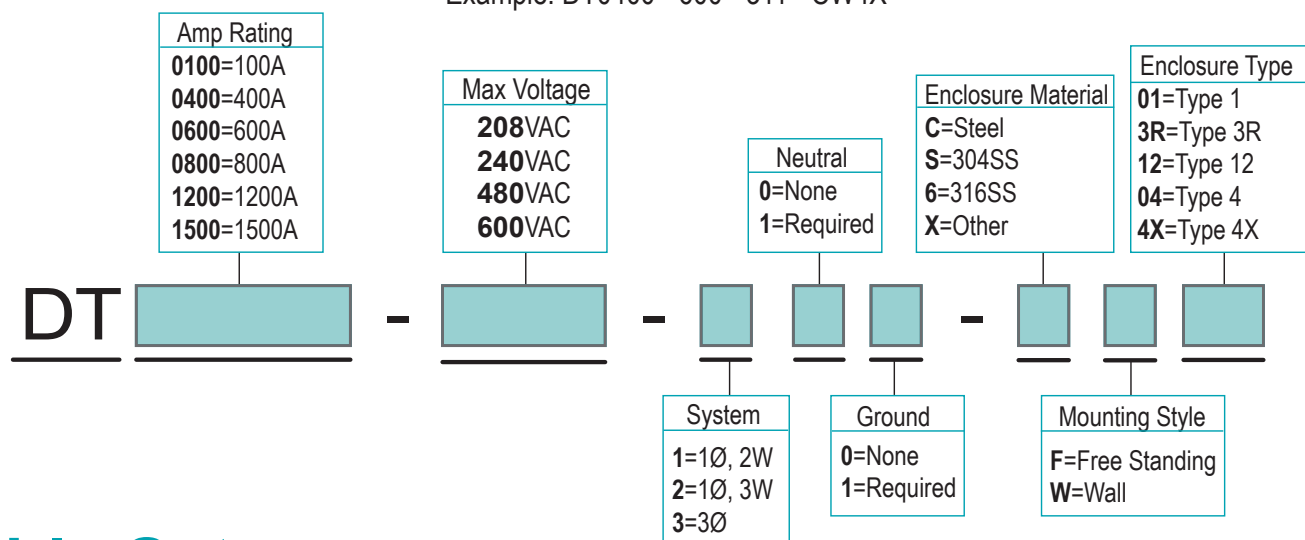
- Terminal blocks or Power distribution blocks
- Various types of enclosures available
- Hinged, padlockable access door
- UL 1773 Listed

Applications

- Refineries
- Pharmaceutical
- Food Processing
- Manufacturing

DirectTap • Product Selection Information

Example: DT0400 - 600 - 311 - CW4X

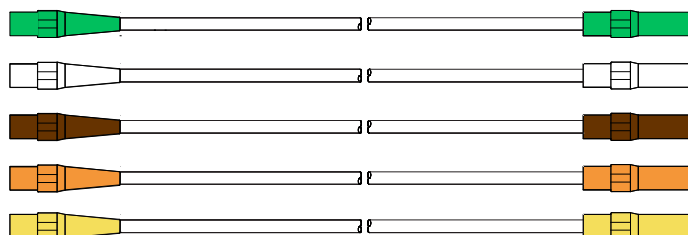


Cable Sets

208VAC - 480VAC - 600VAC

ESL offers cord assembly sets for our emergency power connection equipment in 208VAC, 480VAC and 600VAC color-coded configurations.

Each standard set is 25 feet (optional lengths available) of 4/0 UL Listed flexible welding cable and includes (3) phase cables, (1) ground cable and (1) neutral. Standard cables are factory wired with a 400A camlok female connector and a 400A camlok male connector.



- One cable set is required per 400A increase
- Color configuration varies based on voltage rating
- Customer can specify custom lengths

Why UL 1008 Should Be Specified

When comparing NRTL Listings of different products, it is important to know what the appropriate UL standards are and how they apply to your specific application. You may not always be purchasing what you think you are. UL 1008 is specifically designed for transfer switch equipment. Products with a UL 1008 certification ensure the complete assembly is certified and has undergone rigorous testing to validate performance, safety, and reliability. Non-Automatic transfer switches that are Listed under the UL 1008 standard are evaluated in accordance with Articles 517-Health Care Facilities, 702-Optional Standby Systems of the National Electrical Code (ANSI/NFPA 70) and the National Fire Protection Association Standard for Health Care Facilities (ANSI/NFPA 99). The local inspection process by the AHJ is typically much easier when emergency power transfer switch equipment is UL 1008 Listed.

Frequently Asked Questions

What are the advantages and disadvantages of using a manual transfer switch with a portable generator versus an automatic transfer switch with a permanent generator?

The Advantages are:

- Significantly lower initial and lifetime cost
- No on-site fuel storage required
- No maintenance or standard periodic testing
- Easier installation – days instead of weeks
- Smaller size
- Portable generator can be rented or used at other facilities
- Does not require multiple permits that a permanent generator install would require

Disadvantages:

- Longer time before generator power is established

What is UL 1008 and how does it affect me?

Local building inspectors (AHJ) typically require all new electrical equipment installed in their jurisdiction to be “Listed” which means the equipment has been approved by Underwriter Laboratories or another recognized test lab. For standby systems that allow portable generator connection, UL 1008 is the proper standard for manual transfer use. If the equipment is not Listed, or if only the enclosure is Listed under UL 50, it may not be acceptable to the inspector.

Can't I just connect my generator directly to my panel?

Accidentally backfeeding the utility grid can be very dangerous. For a direct connection you would need a licensed electrician to be present anytime you needed to hook up your generator. There are other methods and products available for powering up from a portable generator, but the StormSwitch® is the best product available that combines the simplicity of cam-style connectors with a safety interlock device that prevents backfeeding the utility grid.

Can vandals open or steal the StormSwitch? Can they shut off my power?

Once installed, the device is always in use. The StormSwitch door can be padlocked, preventing unauthorized entry. The disconnect handles can be padlocked in the “OFF” position for further security. With a minor modification, the disconnect handles can also be padlocked in the “ON” position, however this is not recommended. For additional security the StormSwitch is equipped with a lockable handle cover to prevent unauthorized use.

Where can I make conduit penetrations on the StormSwitch?

Conduit line/load penetrations can be made around the top portion of the enclosure (top left, top right, top back, top top) and/or bottom left of the enclosure only. For the StormSwitch BeBe®, conduit line/load penetrations can only be made through the bottom left side of the enclosure.

Can the StormSwitch be Service Entrance Rated?

Yes, the StormSwitch has the option to be SUSE (Suitable for use as Service Entrance in the USA). This option should only be used when the StormSwitch is installed at the building service entrance.

I am in Texas. Can the StormSwitch survive the rain/heat/cold/bugs here?

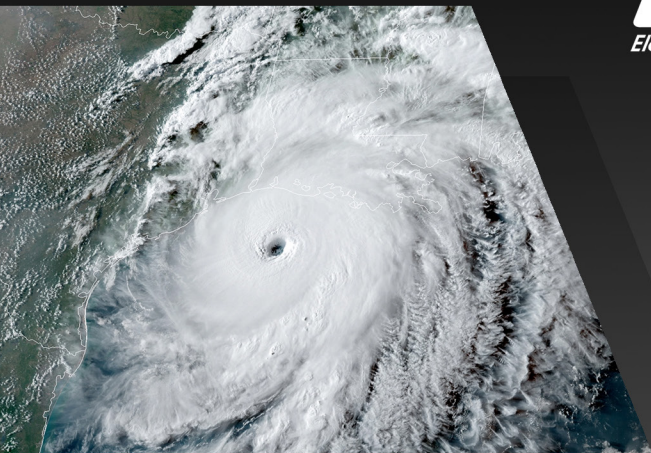
The StormSwitch is a Type 3R enclosure. This means it is suitable for outdoors, and will protect components from rain. To ensure that insects, debris, and small animals do not enter the enclosure, ESL provides a hinged cover over the cam openings in the bottom of the enclosure that is locked “closed” when the door is shut.

What is the TripleSwitch®?

The TripleSwitch is designed to simplify and reduce the cost of load bank testing procedures. In addition, this unique 3-way manual transfer switch system provides a quick and completely safe way to supply power to the facility from a portable emergency standby generator if the permanent generator is offline.

Is it difficult to make the generator connection to the StormSwitch, TripleSwitch or TempTap™ product line?

No, each of these products utilize the industry standard 400A series 16 cam-style connectors. The cams on ESL's StormSwitch, TripleSwitch and TempTap are color-coded to the voltage, e.g. 480/277 are green, white, brown, orange and yellow.



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