

StormSwitch™

MANUAL TRANSFER SWITCH FOR PORTABLE GENERATOR CONNECTION

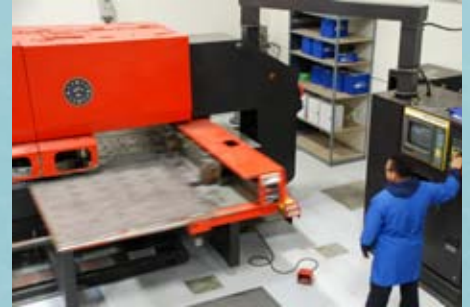


GAS STATIONS • COMMERCIAL BUILDINGS • WATER/WASTEWATER • CELL SITES • PORT TERMINALS



ESL Power Systems, Inc.

ESL is an innovative leader in the design and manufacturing of safety-interlocks, including manual transfer switches for emergency power backup systems for commercial and industrial applications. ESL sets itself apart with a continuous commitment to Safety, Innovation, Quality, Value, and Customer Service.



StormSwitch™

U.S. Patent No. 7462792

ESL's StormSwitch™ is the ideal solution for portable generator connection to grid-tied facilities. StormSwitch™ provides pluggable connectors and a manual transfer switch allowing a quick, safe generator hook-up and operation for any building.

Once installed by a licensed electrician, the StormSwitch™ is so easy and safe to operate that only basic training is required for use. Safety features include an interlocked door and dead-front panel.



With ESL's patented interlocking mechanism, circuit breakers (or molded case switches) prevent cross-connecting power sources since backfeeding the utility grid is unsafe.

The StormSwitch™ is available in various models covering the most common power requirements of commercial and industrial facilities. ESL's StormSwitch™ is the safe, economical and flexible solution to ensure your business is ready for any situation requiring portable generator power.

STORMSWITCH™ PRODUCT SELECTION:

StormSwitch™ - Manual Transfer Switch Product Selection Information

SSD2 - 200 C - 200 C - 208 - 311 - S - C

Series
 SSD2=3020
 SSD4=3040
 SSD6=3060
 SSD8=3080

Utility Disconnect
 C=Molded Case
 Circuit Breaker
 S=Molded Case
 Switch

Generator Disconnect
 C=Molded Case
 Circuit Breaker
 S=Molded Case
 Switch

System (Male Connector)
 1=1Ø, 2W
 2=1Ø, 3W
 3=3Ø, 4W and 3Ø, 3W

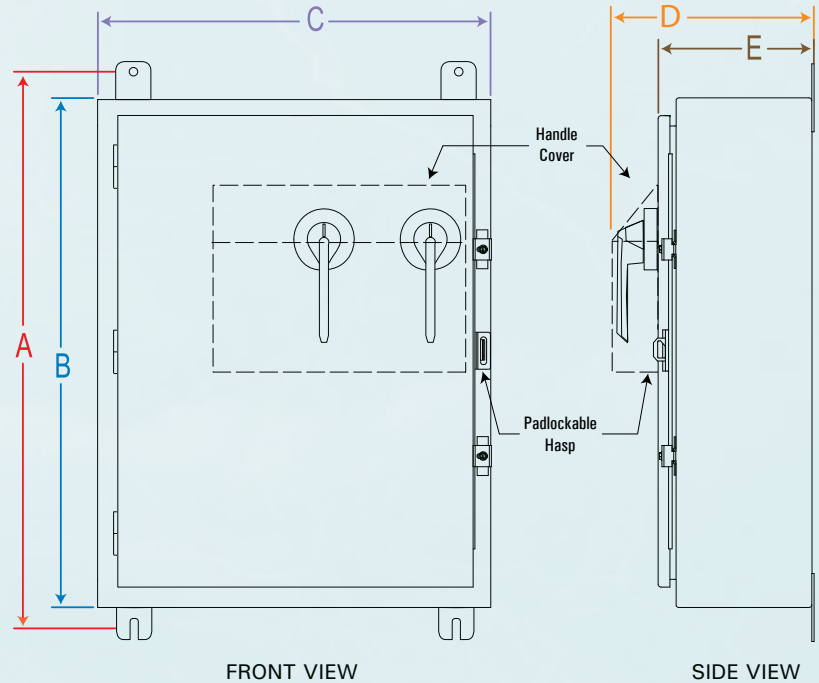
Inlets (Male)
 D=Direct Wire
 G=Pigtail
 P=Posi-Lok™
 S=400A Cam-style
 X=Other

Contact ESL for additional options, dimensions, and specifications.

Dim	3020	3040	3060	3080
A	33"	48"	55"	57"
B	30"	45"	53"	55"
C	24"	34"	43"	46"
D	14"	15"	16"	17"
E	11"	12"	13"	14"

- Dimensions are subject to change. Please verify with factory.

- Suitable for Use as Service Equipment (SUSE)
- Type 3R Enclosure
- UL 1008 Listed Assembly



STORMSWITCH™ STANDARD PRODUCT OFFERING:

Series	Current Rating (Amps)	Max Voltage Rating Available (VAC)	Line Terminals	Load / Neutral Terminals	Ground Lug (AWG, kcmil)	Qty. & Rating Phase & Neutral Single Stab Receptacle (Amps)	Qty. & Rating Ground Single Stab Receptacle (Amps)	Enclosure Gauge (Cold Rolled Steel Powder Coated Gray)
3020	70, 100, 125, 150, 175	480V	(1) #4 - 3/0	#6 - 4/0	(2) #6 - 250	(1) 400	(1) 400	14GA
	200, 225	480V	(1) 2/0 - 350kcmil	#6 - 4/0	(2) #6 - 250	(1) 400	(1) 400	14GA
3040*	160-400	600V	(1) #2 - 500kcmil	(3) #4 - 600kcmil	(2) #6 - 250	(1) 400	(1) 400	12GA
3060	300, 350, 400, 450, 500, 600	600V	(3) 3/0 - 500kcmil	(3) #2 - 600kcmil	(2) #6 - 300	(2) 400	(1) 400	12GA
3080	300, 350, 400, 450, 500, 600, 700, 800	600V	(2) 3/0 - 600kcmil	(3) 1/0 - 750kcmil	(2) #6 - 300	(2) 400	(1) 400	12GA

Contact ESL for additional options, dimensions, and specifications.

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

Commercial Applications



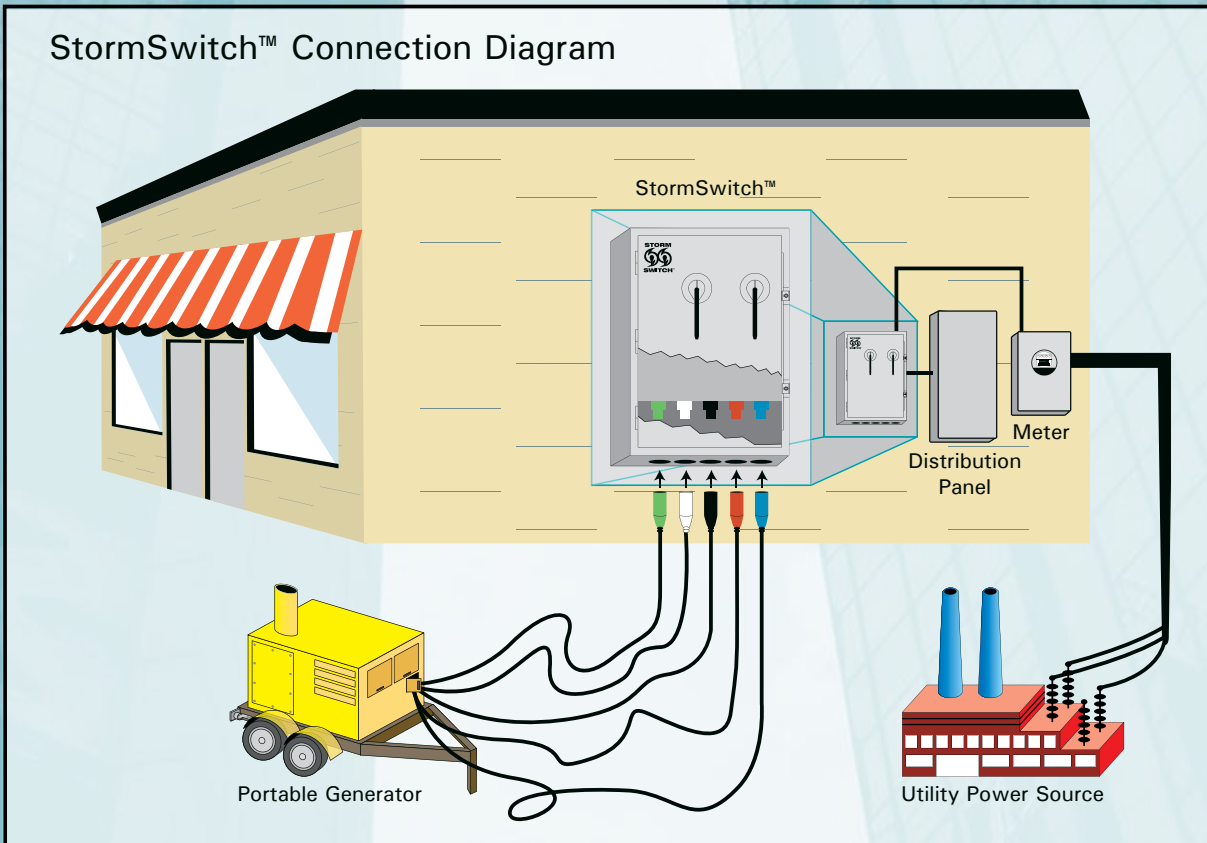
ESL offers unique manual transfer switch solutions for commercial and industrial applications including:

- Gas Stations
- Cell Sites
- Call Centers
- Convenience Stores
- Financial Centers
- Grocery Stores
- Pharmacies

ESL's StormSwitch™ brings a new, economical level of readiness for commercial buildings. During an extended power outage, StormSwitch™ makes it safe and simple to connect a commercial building to a portable generator. Some states recognize the impact of key businesses, such as gas stations and cell sites, that become inoperable during times of power outages and have implemented legislature to prevent such an occurrence.

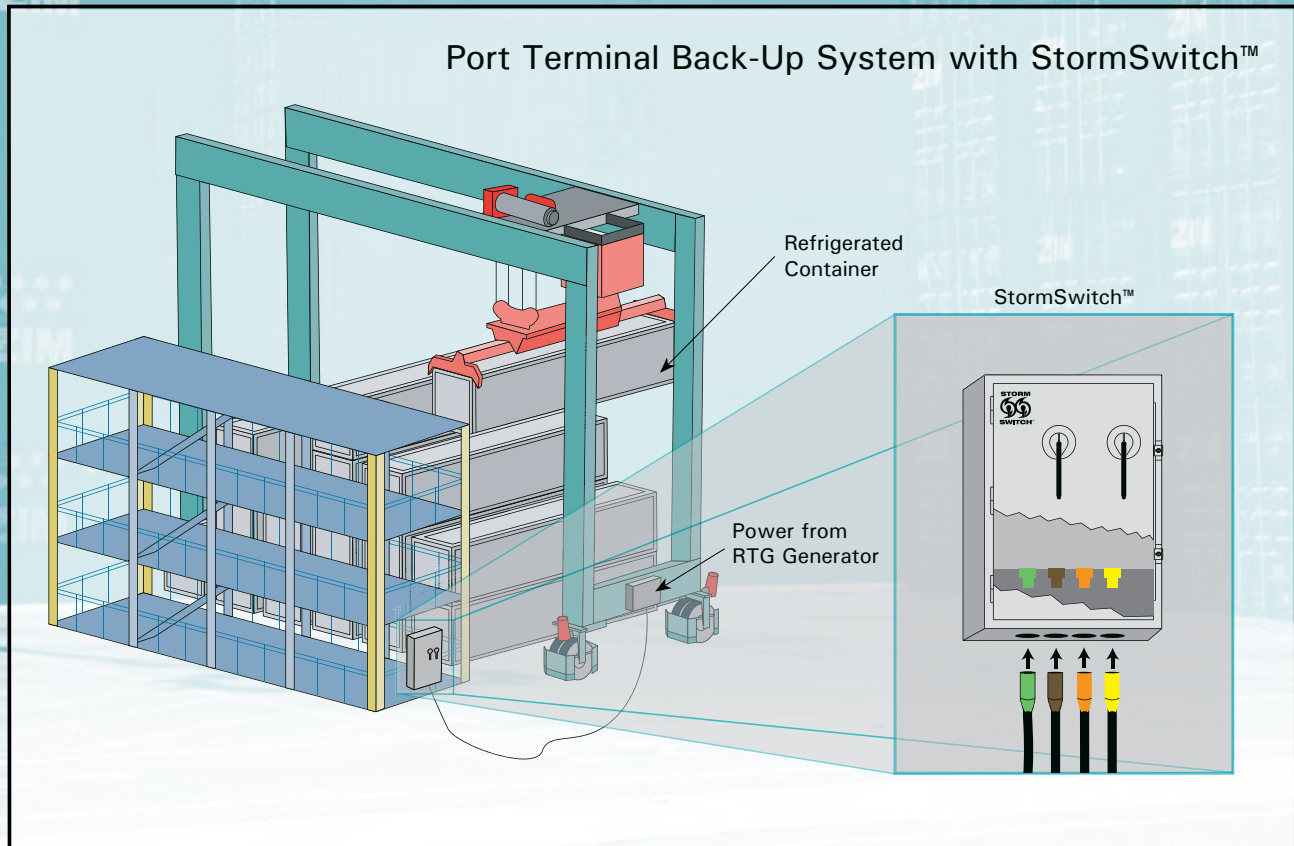


StormSwitch™ Connection Diagram



Industrial Applications

- Port Terminals
- Water/Wastewater
- Manufacturing
- Petrochemical
- Cold Storage Facilities
- Distribution Centers
- Pipelines



TripleSwitch™

ESL's TripleSwitch™ is designed to service critical operations facilities with an automatic transfer switch and dedicated generator such as:

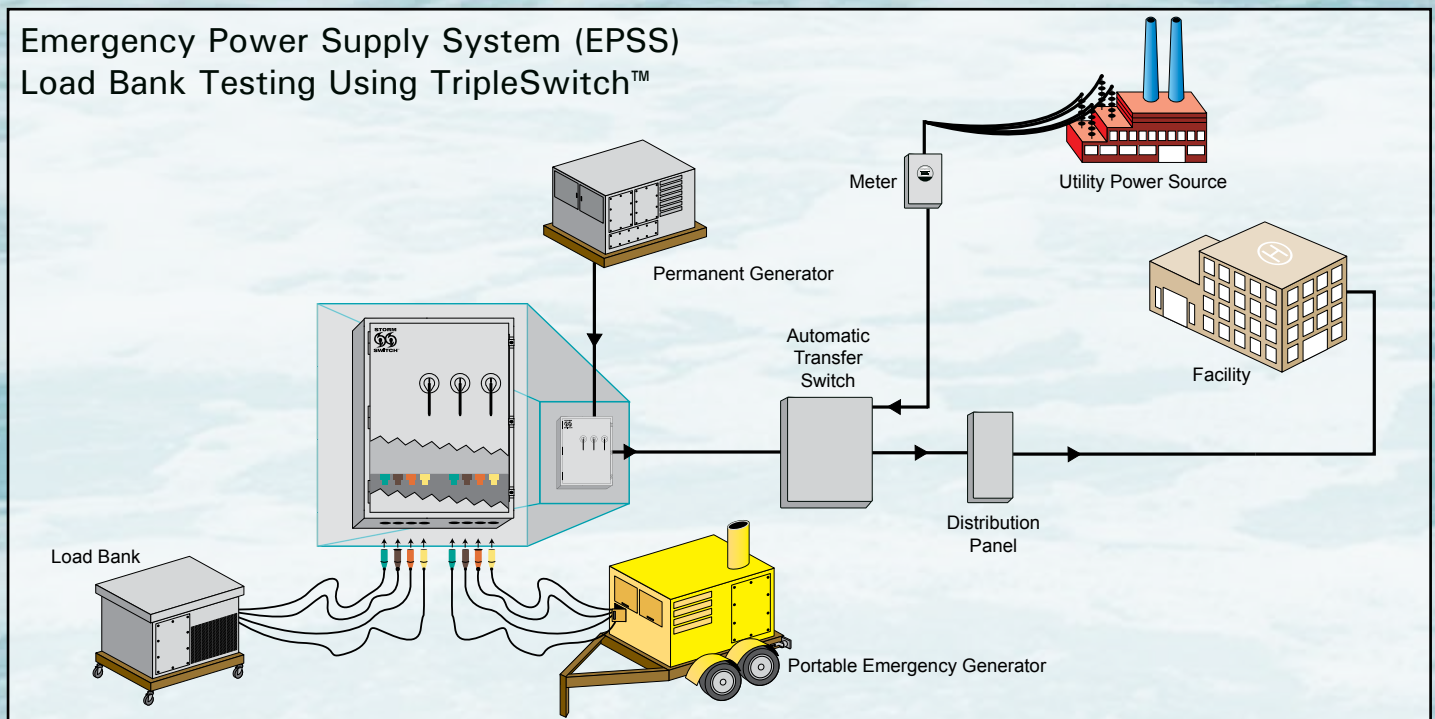
- Healthcare Facilities
- Wastewater Lift Stations
- Financial Centers
- Emergency Operations Centers
- Airports
- Tunnels & Bridges
- Data Centers



NEC Article 708 and NFPA 110 mandate that designated critical operations areas (DCOA) test their emergency power systems (i.e. generators) regularly. Generator testing procedures often require the temporary hook-up of a load bank, which can be difficult and leaves critical operations systems (COPS) susceptible to power loss while testing.

The TripleSwitch™ provides cam-style connections for load bank testing and a quick portable backup generator. The Triple Switch's three interlocked disconnects give users the ability to isolate standby generator circuits from the load bank testing and prevent backfeeding of the utility grid. Additionally, the TripleSwitch™ can also be used to provide redundant backup power by enabling a portable generator to be quickly and safely connected to the COPS circuit while the permanent generator is being repaired, tested, or fails to power up.

Emergency Power Supply System (EPSS) Load Bank Testing Using TripleSwitch™



TRIPLE SWITCH™ PRODUCT SELECTION:

TripleSwitch™ - Load Bank Testing and Portable Generator Connection Product Selection Information

S3D4 - 400 C - 400 C - 400 C - 480 - 301 - S - C

Series
S3D2=3120
S3D4=3140
S3D6=3160
S3D8=3180

Load Bank
Amps
(Maximum
Test Current)

Permanent
Generator
Amps

Backup
Generator
(Maximum
Input Amps)

System (Male Connector)
1=1Ø, 2W
2=1Ø, 3W
3=3Ø, 4W and 3Ø, 3W

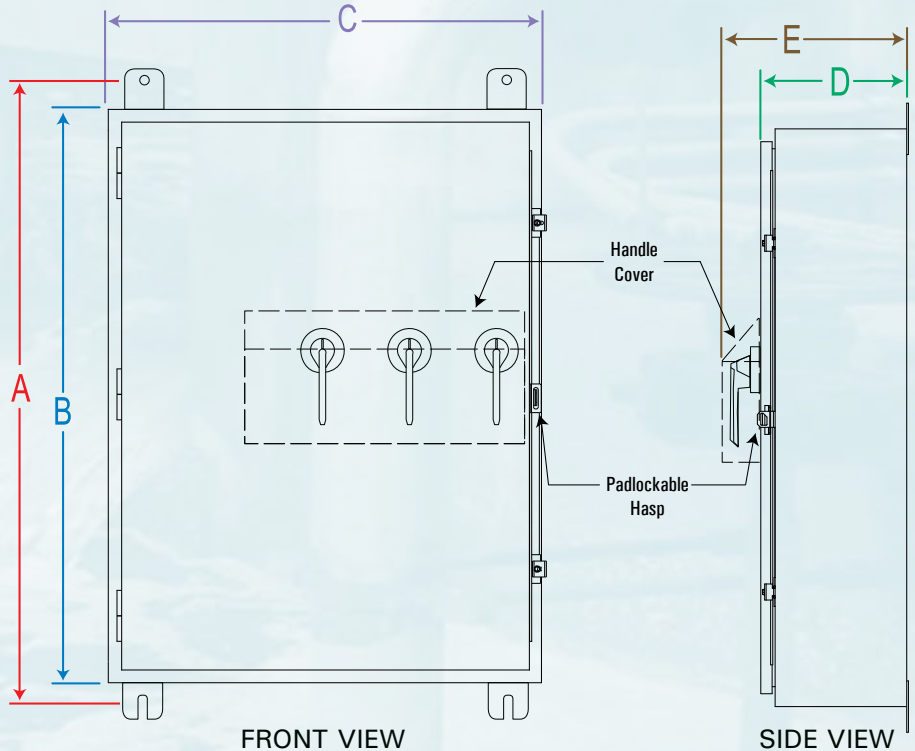
Inlets (Male),
Outlets (Female)
G=Pigtail
P=Posi-Lok™
S=400A Cam-style
X=Other

Contact ESL for additional options, dimensions, and specifications.

Dim	3120	3140	3160	3180
A	34"	47"	70"	70"
B	30"	45"	68"	68"
C	24"	34"	46"	46"
D	11"	12"	16"	16"
E	14"	15"	19"	19"

- Dimensions are subject to change. Please verify with factory.

- Type 3R Enclosure



TRIPLE SWITCH™ STANDARD PRODUCT OFFERING:

Series	Current Rating (Amps)	Max Voltage Rating Available (VAC)	Line / Load Terminals	Ground Lug	Qty. & Rating Single Stab Receptacle (Amps)	Enclosure Gauge (Cold Rolled Steel Powder Coated Gray)
3120	70, 100, 125, 150, 175	480V	(1) #4 - 3/0	#6 - 250kcmil	(1) 400	14GA
	200, 225	480V	(1) 2/0 - 350kcmil	#6 - 250kcmil	(1) 400	14GA
3140**	160-400	600V	(1) #2 - 500kcmil	#6 - 250kcmil	(1) 400	12GA
3160	300, 350, 400, 450, 500, 600	600V	(4) 1/0 - 750kcmil	#6 - 300kcmil	(2) 400	12GA
3180	300, 350, 400, 450, 500, 600, 700, 800	600V	(4) 1/0 - 750kcmil	#6 - 300kcmil	(2) 400	12GA

Contact ESL for additional options, dimensions, and specifications.

* If neutral configuration is required, please contact ESL for details.

** 3140 Series with circuit breaker are furnished with adjustable electronic trips.

StormSwitch™



U.S. Patent No. 7462792

- Ideal Solution for Portable Generator Connection to Grid-tied Facilities
- Interlocking Mechanism Prevents Cross-connecting Power Sources since Backfeeding Utility Grid is Unsafe
- Safety-interlocked Door & Dead Front Panel for Safe Generator Connection and Operation
- Utility and Generator Disconnects are Circuit Breakers as Standard (Optional Molded Case Switches Available)
- Color-coded Cam-style Receptacles for Easy Generator Connection
- Type 3R Heavy Gauge Steel Enclosure (Stainless Steel & Colors Optional)
- Hinged Plate Secures Cord Entries when Not in Use
- Optional Handle Cover Provides Security from Unauthorized Use
- UL 1008 Listed Assembly

TripleSwitch™

- Quick Connect Solution for a Backup Portable Generator
- Solution for Permanent Generator Load Bank Testing
- Interlocking Mechanism Prevents Cross-connecting Power Sources since Backfeeding Utility Grid is Unsafe
- Safety-interlocked Door & Dead Front Panel for Safe Generator Connection and Operation
- Utility and Generator Disconnects are Circuit Breakers as Standard (Optional Molded Case Switches Available)
- Color-coded Cam-style Receptacles for Easy Back-up Generator & Load Bank Connection
- Optional Pin & Sleeve Reverse Service Receptacle Inlets
- Type 3R Heavy Gauge Stainless Steel Enclosure (Stainless Steel & Colors Optional)
- Hinged Plate Secures Cord Entries when Not in Use
- Optional Handle Cover Provides Security from Unauthorized Use
- Suitable for Use as Service Equipment (SUSE)



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