

Company switch and Generator switch solutions



Eaton proudly introduces two additions to its Quick-Connect product family: the Company switch and the Generator switch. Both single-throw devices, the Company switch allows users to quickly and safely connect and disconnect portable loads to utility power, while the Generator switch safely and reliably connects a portable generator to a load. Both switches offer essential market solutions and further emphasize Eaton's commitment to high standards for safety and reliability.

Power-in or power-out

When connecting large portable equipment to an electrical system, many users opt for unsafe installations that can potentially damage equipment. Eaton's Quick-Connect safety switch product line eliminates this problem by providing a factory-installed receptacle compartment tailored to the specific application. The resulting interlocked switch provides users with a simple and safe way to plug a generator or a portable load into the system.

Company switch

Suitable for busy applications such as theaters, stadiums and fairgrounds where lighting, sound and amusement equipment is moved around frequently and quickly by a diverse number of people, the enclosed Eaton Quick-Connect single-throw (QCST) Company switch features:

- Receptacles that allow for the connection of lighting, sound and other portable loads found in various settings
- Factory wiring that ensures reliable connection and simple setup and plug-in in heavily populated and fast-paced environments
- The ability to be locked in the OFF position to prevent access by unauthorized personnel
- Satisfaction of the requirements of NEC® Section 520.5(B) for theaters and Section 525.21(A) for carnivals, while also including a safety interlock and a UL® listing. Fusible configurations also meet the requirements of NEC Section 525.22 for termination boxes. Eaton's Company switches are available in NEMA® Type 1 or 3R enclosures for indoor or outdoor applications. For additional safety information, see **page 3**

Generator switch

The Generator switch enables customers to safely connect and disconnect a power source when utilities are unavailable. Generator switches:

- Contain one vertically oriented switch in an interlocked enclosure with receptacles for connecting the portable source, allowing the user to attach with simple cable connections rather than terminating the wires at mechanical lugs
- Meet the requirement of NEC 708.20; the UL Listed switch is available in NEMA Type 1 or 3R enclosures for indoor or outdoor applications
- Improve safety with a lock-off provision that enables the handle to be padlocked in the OFF position to safeguard the switch from unauthorized users
- To avoid back-fed generator power onto the grid, ensure the necessary code requirements are followed (for example, key interlocking, double-throw switch, tie interlocking). For additional safety information, see **page 3**

EATON

Powering Business Worldwide

Features

Ratings

- 100–1200 A main switch ratings
 - 240 or 600 V
 - Fusible ❶ or non-fusible
 - UL Listed—File No. E5239
 - CSA Listed®—File No. 69743
 - Suitable for use as service entrance equipment (fusible and non-fusible, UL; fusible only, CSA)
 - Field or factory-installed accessories ❷
 - NEMA Type 1 or 3R enclosures (stainless steel available)
- ❶ 100–600 A fusible units have Class H fuse provisions; 800–1200 A units have Class L provisions. For other fuse class options, please consult factory.
- ❷ For custom modifications or configurations, such as auxiliary contacts, key interlocks, stainless steel enclosures, cord/cable sets and so on, contact the Flex Center at 1-888-329-9272.

Available receptacles

- Eaton Crouse Hinds® Posi-Lok® receptacles
- Eaton Crouse Hinds Cam-Lok® receptacles

Designed for all customers

Eaton's revolutionary QCST brings Eaton's leadership in switch design to a new level of usability. The QCST switch family includes thoughtful design elements for the customer, whether novice operators or electrical experts.

- Receptacle compartment interlock
- Color-coordinated receptacles (see the table on **page 3** for specific color combinations)
- Trap door, cable exit design
- Simple operation

Connection cables

Customers should know who will provide the cable set to connect the generator or other equipment. If renting the equipment, customers need to know if the rental company will be providing the cable sets, and if so, what type of connectors are on the cables. Customers also can purchase the cable sets from Eaton and keep them on-site, guaranteeing the proper plugs are available when needed.



Receptacle compartment with generator plugs connected

The interlocked receptacle compartment has a hinged trap door for the cables to exit. The switch cannot be closed while the cable compartment door is open.



Safety interlock

The receptacle compartment is interlocked with the Generator switch to prevent access to the receptacles when the Generator switch is closed.



400–1200 A (400 A shown)

The 400 A Quick-Connect switches have a single row of receptacles, while the 600–1200 A switches have parallel receptacles.



Posi-Lok receptacles

These receptacles have an added safety feature that requires the cables to be connected and disconnected in the proper sequence (ground–neutral–phase, phase–phase).



Cam-Lok receptacles and plugs

Cam-Loks are the better option when the connection of the portable generator will always be made by a licensed electrician. Eaton also offers cable sets that match the receptacles. Call the Flex Center at 1-888-329-9272 for more information.



Posi-Lok plugs

In addition to requiring connection in the proper sequence, the Posi-Lok plugs are also keyed to prevent the insertion of a plug into the wrong receptacle.

Safety

Many potential hazards are created when temporarily connecting high-ampacity portable equipment. Eaton Flex Center engineers seek to reduce or eliminate these hazards with the Quick-Connect product line. The Company switch and the Generator switch are no exceptions, incorporating Eaton's unique, patented interlock mechanism and Quick-Connect compartment with a total UL/CSA product listing.

UL listing

The Quick-Connect Generator switch and Company switch are UL Listed (File No. 5239, Vol. 6, Section 19) and meet the requirements of the NEC, including the requirements of 110.3 (B) that the product is listed and found suitable for a specified purpose. Installing products that are field-modified to add receptacles but have not been evaluated and tested by a third-party agency would be a clear violation of 110.3 (B). Eaton's interlocked mechanism is vital for personnel protection, as high-ampacity receptacles are not load-break rated. Many companies and individuals are producing products with Quick-Connect receptacles similar to the Company switch and the Generator switch, but many of these products are not UL Listed and do not have the safety interlocks required by UL. Moreover, if the switch was originally a UL Listed product that has been modified, the switch may still bear the UL label even though the assembly is not listed. Users must know and understand the origin of the products being installed.

Interlocked mechanism

Both the Company switch and the Generator switch employ a door interlock mechanism, preventing the user from closing the switch when the receptacle compartment is open. Additionally, if the switch is closed, the user cannot open the receptacle compartment without first opening the switch. This safety feature is available only on Eaton products and limits a user's access to live parts.

Connection compartment

The connection receptacles are located in a separate, isolated compartment of the switch. This compartment has a bottom-hinged trap door to allow the connection cables to exit, and a front door to access the receptacles. The compartment is critical to the compatibility with portable equipment, giving users a quick way to plug in instead of having to terminate cables.

Receptacle options

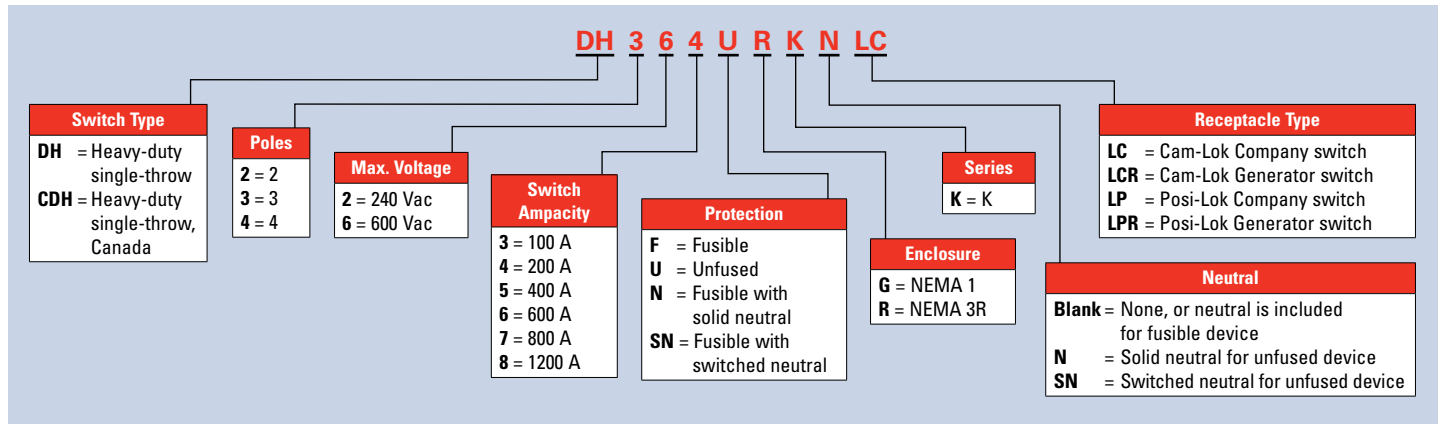
Two receptacle options are available for the Company and Generator switches: Cam-Lok or Posi-Lok. Both provide individual receptacles for each conductor, while the Posi-Lok panel provides additional safety by interlocking the receptacle covers. This feature requires the user to connect the cables in the sequence ground-neutral-phase-phase-phase, and to disconnect in reverse order, improving personnel safety because a low-impedance ground is the first wire connected and the last wire disconnected.

The plugs for these receptacles are not to be interchanged, so the receptacles on the switch must match the cables supplied with the device or the generator. The E1016 Cam-Lok plugs are the most common in the industry, especially for use with heavy-duty generators. However, customers should consider who will be connecting the equipment when they arrive on-site and what level of safety to employ. Receptacle configurations vary based on the switch type and are indicated in the table below.

Receptacle color and gender configurations

Catalog Number Suffix	Market	Ground				Neutral				Phase A				Phase B				Phase C			
		Gender		Color		Gender		Color		Gender		Color		Gender		Color		Gender		Color	
		M	F	240 V	600 V	M	F	240 V	600 V	M	F	240 V	600 V	M	F	240 V	600 V	M	F	240 V	600 V
Cam-Lok/Company Switch																					
LC	U.S.	■		Green	Green	■		White	White	■		Black	Brown	■		Red	Orange	■		Blue	Yellow
	Canada	■		Green	Green	■		White	White	■		Black	Black	■		Red	Red	■		Blue	Blue
Cam-Lok/Generator Switch																					
LCR	U.S.	■		Green	Green	■		White	White	■		Black	Brown	■		Red	Orange	■		Blue	Yellow
	Canada	■		Green	Green	■		White	White	■		Black	Black	■		Red	Red	■		Blue	Blue
Posi-Lok/Company Switch																					
LP	U.S.	■		Green	Green	■		White	White	■		Black	Brown	■		Red	Orange	■		Blue	Yellow
	Canada	■		Green	Green	■		White	White	■		Black	Black	■		Red	Red	■		Blue	Blue
Posi-Lok/Generator Switch																					
LPR	U.S.	■		Green	Green	■		White	White	■		Black	Brown	■		Red	Orange	■		Blue	Yellow
	Canada	■		Green	Green	■		White	White	■		Black	Black	■		Red	Red	■		Blue	Blue

QCST switch catalog numbering system



Note: Switched neutral systems are available only on two- or three-pole switches. For a two-pole switched neutral device, the catalog number will build as a three-pole, such as DH323SNRKL 2P 3W. For a three-pole switched neutral device, the catalog number will build as a four-pole, such as DH423SNRKL 3P 4W. This configurator is intended for use with current catalog numbers only and is not intended to construct new catalog numbers. All options may not be available on all devices.

For custom modifications or configurations,
contact the Flex Center at **1-888-329-9272**

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