



BERTHOLD ELECTRIC SINCE 1925

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# BERTHOLD ELECTRIC GENERATOR CONNECTION CABINET





2014 CONTROL CONDUCTORS IN 1º C.





Berthold Electric Company's Generator Connection Cabinet provides a quick and convenient station to connect a portable generator to a facility's main service entrance equipment. Whether during a long-term utility outage or planned facility maintenance, our cabinet will help you easily establish a connection to back-up power when time is of the utmost importance.







Constructed of rugged, corrosion-resistant Aluminum or Stainless Steel, the Berthold Electric Generator Connection Cabinet can be ordered in either a wall mount or pad mount design. The cabinet is designed to maintain a NEMA 3R rating, even with the portable generator cables connected, with the standard bolted construction. For applications requiring an even higher degree of weather protection and strength, cabinets can be continuously seam welded. Doors are attached with a continuous hinge, incorporate stiffeners, and are held closed with weather resistant latches. On both cabinet designs, the generator cable connection access panel is held in place by the main door so that the connection point can only be accessed if the main door is unlocked and opened by a qualified technician. Wall mount cabinets have external mounting ears for easy installation; Pad mount cabinets are supported on an aluminum channel base, providing a location for anchoring the cabinet to the concrete pad.

The cabinet interior is constructed with silver-plated copper bus, rated at 1000A/square inch current density, with ample cable bending space provided for permanent connections. The bus is mounted on insulators that are securely fastened to the enclosure walls. Generator connections are typically made with factory installed Crouse-Hinds color-coded E1016 series Cam-Lok connectors or mechanical set screw lugs. Permanent connection cables to the facility's service equipment are secured with long barrel crimp lugs or mechanical set screw lugs.

## **ELECTRICAL FEATURES:**

- Sizes from 400 to 3200 Amps.
- Available System Voltage rating up to 600 Volts.
- Mechanical Set Screw Lugs, Long Barrel Compression Lugs, or Punching only available for Permanent Connections.
- Mechanical Set Screw Lugs or Crouse Hinds E1016 Series color coded Cam-Lok Connectors available for Generator Connections.
- Silver-plated copper bus rated at 1000A per square inch current density.

## MECHANICAL FEATURES:

- Wall mount or pad mount design.
- NEMA 3R Aluminum or Stainless Steel Construction.
- Lockable Latch for front door.
- Access Panel for Portable Generator/Load Bank connection held closed by door when not in use.
- Drip Hood.



#### • Convenience outlet provision:

The cabinets can be provided with outlet boxes for wiring in up to four-gang outlets. These outlet boxes would typically be energized by the preferred or utility source to provide a convenient location to plug in drop lights, tools, or the portable engine block heater and battery charger.

#### • Access panel interlocking micro-switches:

When the switch is wired to the shunt trip on the permanent engine breaker or the utility service main breaker, it serves to prevent asynchronous connection of the two sources.

Shunt tripping the preferred source prevents the generator connection cabinet from being back-fed, thus ensuring the cabinet is de-energized when personnel are making connections.

## • Key interlock provision:

Prevents access to portable engine connection compartment unless key is present. Key is held captive when door is open.

Provision Only: Customer to supply and install Kirk Key Interlock Model #KDLO---1E or Superior Interlock Model #B-5003-1.

#### • Phase Sequence and Failure Indication

Phase Sequence and Failure Indication can be provided to ensure that the temporary engine is connected with the same phasing as the utility source.

Indication is provided by a Crompton Phase Sequence and Failure Meter.

#### Cam-Lok Snap Covers

Cam-Lok generator connection points can be covered with a spring-closed metal cover for added safety.

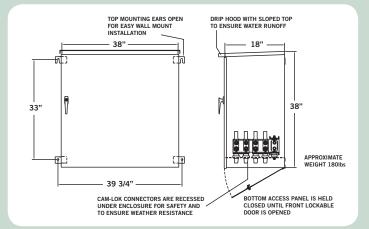
## • Cam-Lok Black Rubber Caps

Cam-Lok generator connection points can be covered with a weather resistant rubber cap for added protection and safety when all connection points are not in use.





## WALL MOUNT



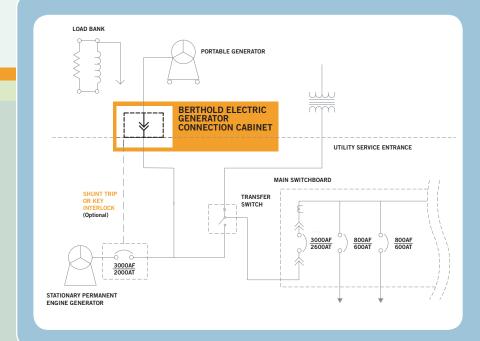
#### • Welded Construction

Either cabinet style can be fabricated using continuously seam welded construction for increased durability and weather resistance. All welds are finished and ground smooth. Choose this option for a NEMA 4X style construction.

## • Cabinet Finish

All cabinets come with standard Bare Aluminum Finish. Optional Finishes include Powder Coated Gray or Stainless Steel for added durability.





# **APPLICATION NOTES**

The Berthold Electric Generator Connection Cabinet can be used in several supply or load power configurations. Highlighted in this diagram is the Generator Connection Cabinet ready to be fed from the portable generator if temporary back-up power is needed while the permanent generator is out of service.

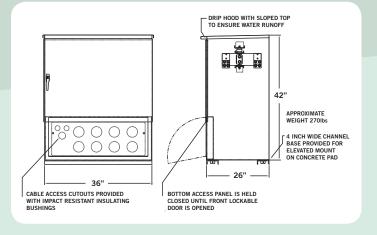
Additional applications can include using a portable generator as the sole auxiliary source connected through our cabinet to feed a transfer switch or back-feed a circuit breaker on service equipment.

The Berthold Electric Generator Connection Cabinet also can act as a convenient point to attach load banks for routine generator runs.

See www.GenConCab.com for application configurations.



## PAD MOUNT

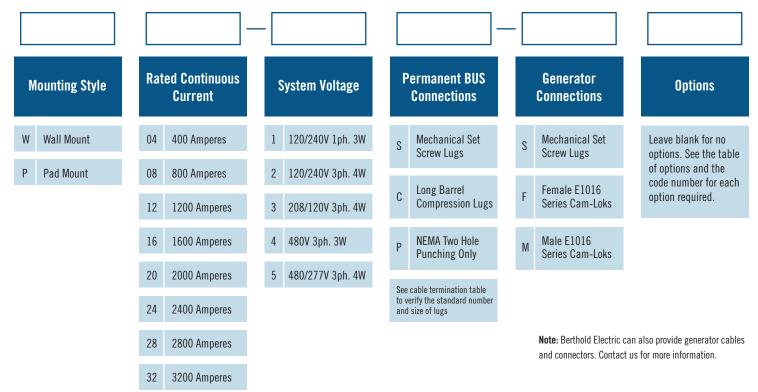


# GENERATOR CONNECTION CABINETS SUGGESTED SPECIFICATIONS

- Enclosure shall be provided with SouthCo lockable latches on front door, and an independent access panel door.
  Access panel shall not open unless main lockable door has been opened.
- Internal bus shall be sized for 1000A/sq. in. ampacity, and bus work shall be supported with UL Recognized Component (QEUY2) insulators.
- Enclosures shall be either stand alone pad mount or wall mount NEMA 3R Aluminum or Stainless Steel construction.
  Pad mount enclosures shall be provided with a channel base, and wall mount enclosures shall have external mounting ears.
- Generator connection cabinets shall be manufactured by Berthold Electric Company of Chicago, Illinois.



TO ORDER A BERTHOLD ELECTRIC GENERATOR CONNECTION CABINET COMPLETE THE FOLLOWING CATALOG NUMBER



## **Cable Termination Table**

	Permanent Feeder Connections – Mechanical Lugs			Available Options
	Current Range	Cable Range		Access panel interlocking micro-sv
	400A-1200A	4-2AWG to 600 MCM set screw lug positions		Key interlock provision-provision o and install Kirk Key Interlock Mode Superior Interlock Model #B-5003- Phase Sequence and Failure Indica
	1600A-2000A	6-2AWG to 600 MCM set screw lug positions		
	2000A-3200A	8-2AWG to 600 MCM set screw lug positions		Convenience Outlet Provision
	Permanent Feeder Connections – Compression Lugs			Cam-Lok Snap Covers
				Cam-Lok Black Rubber Caps
	Creatify symphify and size	of lugo or NEMA 2 hole numering		

Specify quantity and size of lugs or NEMA 2 hole punching.

#### **Generator Connections**

Mechanical Lugs – See table above Cam-Loks – Quantity provided based on 400A per connector. **Table of Options and Option Code Numbers** 

Available Options	Option Code		
Access panel interlocking micro-switches	1		
Key interlock provision–provision only. Customer to supply and install Kirk Key Interlock Model #KDLO – – – 1E or Superior Interlock Model #B-5003-1	2		
Phase Sequence and Failure Indication	3		
Convenience Outlet Provision	5		
Cam-Lok Snap Covers	6		
Cam-Lok Black Rubber Caps	7		
Welded Construction for Wall Mount	8W		
Welded Construction for Pad Mount	8P		
Powder Coat Gray Finish	9		
Stainless Steel Construction	10		
Select the options required and list the option codes in the suffix of the catalog number			

Example: The catalog number for a wall mount 1200A, 480V, 3-phase, 3 wire generator connection cabinet with permanent connections made by long barrel crimp lugs and generator connections made by male cam-Loks with no options is W12-4C-M. Specify quantity and size of lugs. (Example: 2-500 MCM per Phase and Neutral, 1-3/0 Ground.)



## **BERTHOLD ELECTRIC**

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Major credit cards accepted.

Berthold Electric also manufactures a wide variety of custom and madeto-order electrical power distribution equipment. Please visit our website for more information.

www.bertholdelectric.com