

# Hookstick Operated Bypass and Transfer Switches

- Regulator Bypass
- Tandem Transfer
- Double Throw



 **CLEVELAND/PRICE INC.**

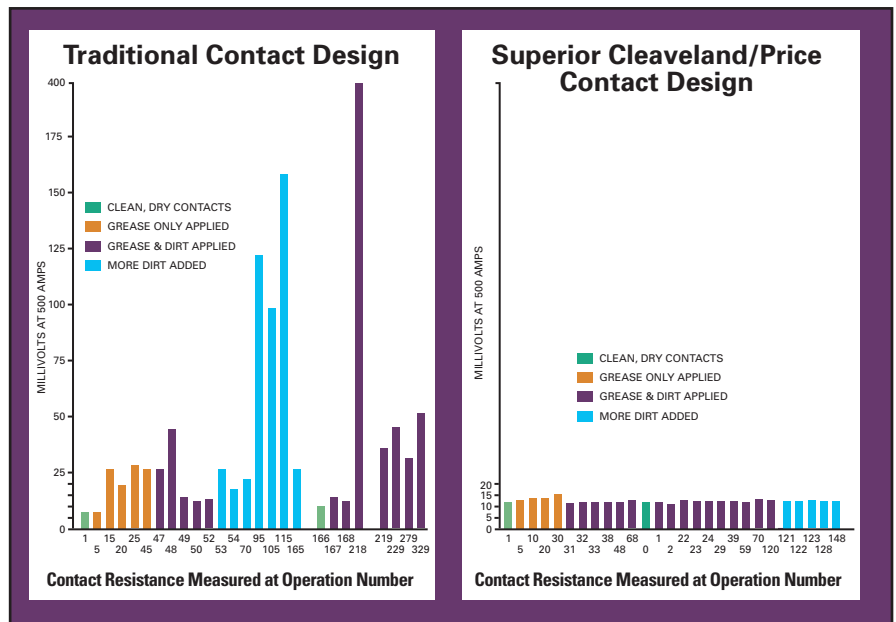
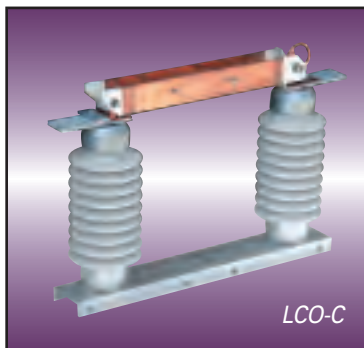
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# Designed for Simplicity Engineered for Performance

Cleveland/Price's hookstick operated bypass and transfer switches are based upon the field proven LCO-C switch. The switches feature many advantages over other designs and benefit from the extensive contact design testing that has been performed on the LCO-C



The graphs above show the contact resistance of a traditionally designed contact compared to the improved Cleveland/Price design during the contamination test.\*

\*Copies of the Cleveland/Price research paper "New Discoveries in Electric Switch Contact Design" are available upon request.

## THE CLEVELAND/PRICE ADVANTAGE

### In Design

- Total non-cast construction results in superior dependability of parts.
- Line contacts work with electromagnetic forces during short circuit resulting in superior performance.
- High-pressure line contacts at the hinge and jaw establish effective continuous current transfer while reducing operating force and extending contact life.
- True wiping action at the break-jaw keeps contacts clean for years of reliable service.
- Blade guide on the break-jaw allows closing of the switch despite lateral push on the blade.
- Location of the contact springs in relation to the break-jaw results in increased spring force during short circuit conditions.
- Blade pryout action facilitates easy ice breaking.
- Location of the blade latch in relation to the catch results in increased latch engagement force during short circuit and when wind and ice loads increase conductor pull.

### In Material

- Hard-drawn, high conductivity copper produces stronger, more conductive live components than parts made of cast materials.
- Silver-plated contacts on both the stationary and moving parts give efficient current transfer for the life of the switch.
- Hard-drawn copper hookeye will not crack or break, eliminating the need to stock hookeyes and reducing costly downtime.
- Stainless steel contact springs and latch spring are made from highly corrosion resistant type 316 stainless steel.
- Heavy-duty latch spring delivers substantial return force for the life of the switch.
- The steel base is hot-dip galvanized after fabrication.

## Switch Type: RBO-C

### Substation Class Bypass Switch

**Ratings: 7.2 kV - 34.5 kV  
600 A. - 2000 A.**

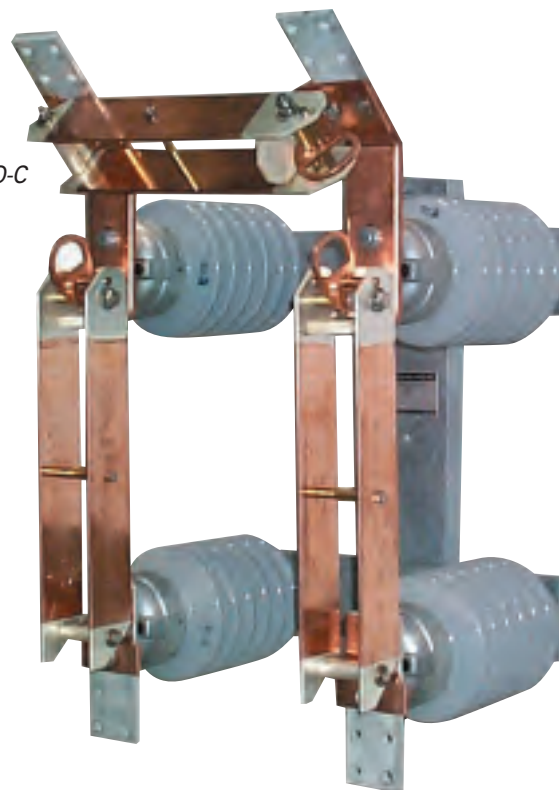
The RBO-C is a non-sequencing bypass switch that can be used as a regulator bypass switch or recloser bypass switch if line protection is not required.

The RBO-C uses two parallel blades to isolate the regulator or recloser and the perpendicular blade provides the bypass function. The full open gap available from the bypass and isolating blades enables safe downstream maintenance when all three blades are open. The switch can be supplied with an optional quick break whip for interrupting magnetizing current.

The switch may be mounted in a vertical or underhung position. When mounted vertically, the bypass blade is angled away from the mounting surface to provide better access for hotstick operation. In substation applications, the switch is provided with 3" b.c. insulators.

The RBO-C is also available for distribution applications with 2 1/4" b.c. insulators and double crossarm mounting hardware. The pole units can be set up for right hand, left hand, or pole mounting (with pole mounting bracket).

15 kV, 2000 A. RBO-C



## Switch Type: RBI

### Substation Class Bypass Switch

**Ratings: 7.2 kV - 34.5 kV  
600 A. - 2000 A.**

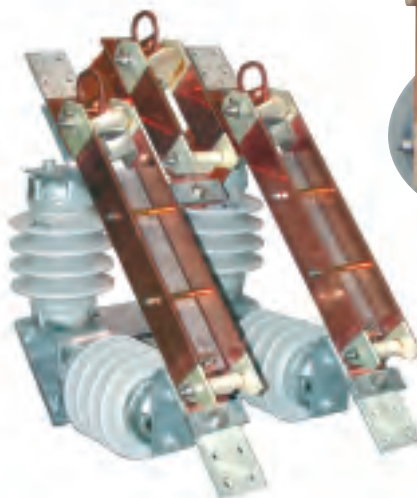
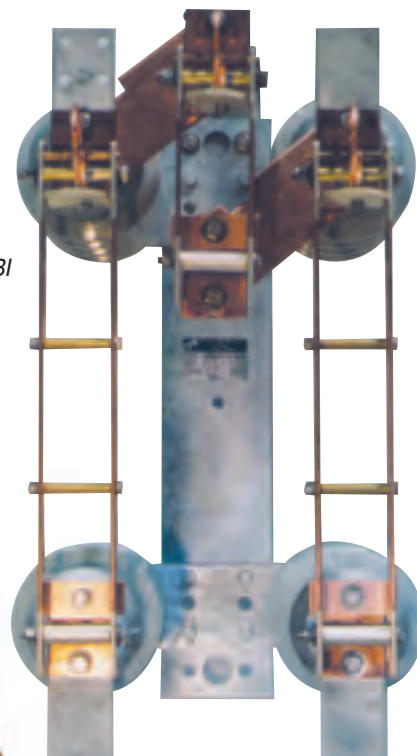
The RBI is a non-sequencing type regulator bypass switch for substation applications.

The RBI uses the two outer blades to isolate the regulator and the center blade provides the bypass function. The switch can be supplied with an optional quick break whip for interrupting magnetizing current.

A variation of the RBI is the "V" configuration RBI-V. The RBI-V switch is ideal for low profile structures.

The switch has a flat galvanized steel base plate designed to attach to a structural member. The base can be bolted directly to the structure or clamped to a tubular structural beam when supplied with clamping hardware.

15 kV, 1200A. RBI



15 kV, 1200 A. RBI-V  
with quick break whips

## Switch Type: LCO-CT Tandem Transfer Switch

Ratings: 7.2 kV - 34.5 kV  
600 A. - 2000 A.

The LCO-CT is a tandem transfer switch that enables the user to transfer load to alternate circuits. It is available in various configurations, standard hinge-to-jaw, hinge-to-hinge, and jaw-to-jaw. The center terminal can be positioned on the right or left side of the switch.

The switch may be mounted in the vertical or underhung position. Hinge-to-hinge and jaw-to-jaw configurations are available for underhung mounting only.

Special bases are available.

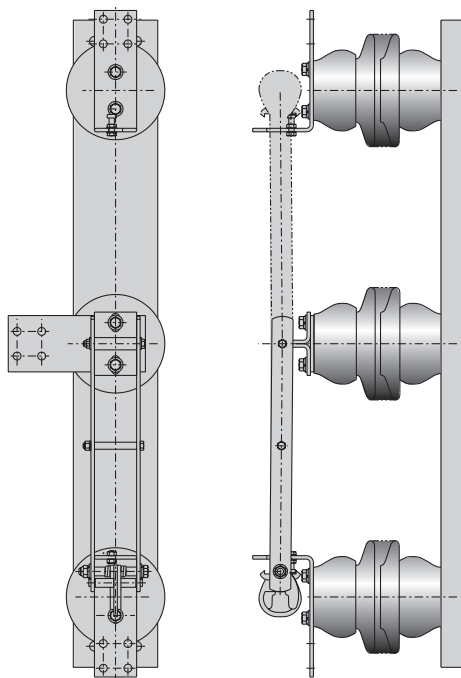
15 kV, 600A. LCO-CT



## Switch Type: LCO-CD Double Throw Switch

Ratings: 7.2 kV - 34.5 kV  
600 A. - 2000 A.

The LCO-CD is a double throw selector switch that enables the user to select between alternate sources or loads. The switch may be mounted in a vertical or underhung position. Special bases are available.



*This brochure describes our standard product and does not show variations in design that may be available. Contact the factory for additional details.*

*Cleveland/Price reserves the right to make changes or improvements to the product shown in this brochure without notice or obligation.*

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