The DB-C follows the Cleveland/Price tradition of designing simple, dependable switches without the use of castings. Knowledge gained from maintaining switches in the field for over 60 years has played a major part in refining the DB-C. Significant design features include:

- **Total non-cast copper and steel construction resulting in superior dependability of parts**
- **Live parts constructed from hard-drawn, high conductivity copper producing stronger, more conductive components than parts made of cast material**
- **Wiping action at the jaw contacts keep the contacts clean for years of reliable service**
- **Parallel blade construction allows free flow of air over the blade surfaces for effective cooling**
- **Built-in closed position blade stop on the live parts prevents over-travel of the blade.**

### Operators / Accessories

Maximum mounting height with standard operator is 23 feet. An extended operator to increase the mounting height is available. Switches may also be mounted in the vertical or underhung positions.

#### Standard Operator Features

- Swing handle operator
- Radial projection on both the open and closed positions
- Ground stop for vertical operating pipe
- Adjustable stops
- Clamp-on open/closed indicators
- Self-lubricating, maintenance-free outboard bearing
- 1½" IPS galvanized steel vertical operating pipe

### Ordering Information

- **Furnish:**
  - Switch type
  - Voltage
  - Ampere<br>
  - Momentary rating
  - Mounting position
  - Operator type<br>
  - Accessories required

#### Available Accessories

- Adjustable base mounting side clips<br>
- Arc horns<br>
- Auxiliary switch<br>
- Braidless ground<br>
- Electrical interlock<br>
- Extended operator<br>
- Closed blades<br>
- Ground blades<br>
- Insulated vertical pipe<br>
- Key interlock<br>
- Mounting hardware<br>
- Operator grounding platform<br>
- Outriggers<br>
- Quick break whip<br>
- Rail pipe<br>
- Rotating insulator bearing<br>
- Universal joint assembly for direct drive

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

Cleaveland/Price reserves the right to make changes or improvements to the products shown in this brochure without notice or obligation.
The DB-C is a disconnect switch that characterizes Cleveland/Price's philosophy of simplicity and taking advantage of magnetic forces. There are few parts above the insulators, and current transfer points are kept to a minimum.

### Long-term Contact Integrity

**Problem:** Disconnect switches may have long over times due to lineage tolerances and increase in contact friction. Reduced travel may prevent the switch from attaining maximum contact pressure reaching in timed and burned contacts. Some side break switches also depend on critical adjustments during installation.

**Solution:** Long wipe contacts that allow generous contact engagement range. Variations in blade travel do not affect switch performance. Because there are no critical adjustments necessary when installing the DB-C, installation time is reduced.

### Short Circuit Dependability

Cleveland/Price locates the contact springs in a position that takes advantage of electromagnetic forces.

Under short circuit conditions, the blades attract due to the parallel path of current. As the blades attract, the break jaw acts as a fulcrum that causes the contact springs to compress rather than relax. This double squeeze action enables the DB-C to endure high fault currents.

### Blade Over-travel Protection

In addition to the adjustable stops at the operating handles, the DB-C features a blade stop in the break jaw assembly to prevent over-travel of the blade in the contact making position.

The blade is secured in the break jaw by means of its position despite live pull and insulator movement during high fault current and seismic conditions.
The Cleveland/Price DB-C is a three pole, group operated, copper double break switch, suitable for use in a variety of applications including line disconnecting, circuit breaker bypass and isolation, and transformer isolation. The double break switch is commonly used in installations where overhead clearances will not permit use of a vertical break switch. The double side break switch can be installed on the same phase spacing as a vertical/break switch.

The DB-C can be mounted in the horizontal upright, vertical, or horizontal underhung position. The switch may be manually operated by use of a cranking handle or worm gear mechanism or electrically operated by a type TP-C2 motor operator. Accessories are available as a part of the standard equipment package. 

The location of the contact springs in relation to the break-jaw enhances the contact position that takes advantage of electromagnetic forces. There are few parts above the insulators, and current transfer points are kept to a minimum.

The DB-C is a disconnect switch that characterizes Cleveland/Price's philosophy of simplicity and taking advantage of magnetic forces. There are few parts above the insulators, and current transfer points are kept to a minimum. The simple direct entry engagement eliminates the need for a rotating or pivot mechanism on either the blade or the break-jaws.

The DB-C has total non-cast construction. All current carrying parts are fabricated from hard-drawn, high conductivity copper, which is stronger and more conductive than relax. This double squeeze action enables the DB-C to endure high fault current.

The DB-C can be mounted in the horizontal upright, vertical, or horizontal underhung position. The switch may be manually operated by use of a swing handle or wormgear mechanism or electrically operated by a type TP-C2 motor operator. Accessories are available as a part of the standard equipment package. 

The location of the contact springs in relation to the break-jaw enhances the contact position that takes advantage of electromagnetic forces. There are few parts above the insulators, and current transfer points are kept to a minimum. The simple direct entry engagement eliminates the need for a rotating or pivot mechanism on either the blade or the break-jaws.

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The DB-C has total non-cast construction. All current carrying parts are fabricated from hard-drawn, high conductivity copper, which is stronger and more conductive than relax. This double squeeze action enables the DB-C to endure high fault current.
Standards

Bearings

The rotating insulator utilizes a simple, non-metallic sleeve type bearing that is permanently lubricated and maintenance-free.

Contacts

The DB-C uses high-pressure, line-type contacts to establish efficient current engagement. Both the blade and the break-jaw contact areas are silver-plated, eliminating the build-up of non-conducting copper oxides on the contact surfaces. The contact design has a proven wiping action that cleans the contact area of contamination that could accumulate.

Design

The DB-C is a disconnect switch that characterizes Cleveland/Price’s philosophy of simplicity and taking advantage of magnetic forces. There are few components above the insulators, and current transfer points are kept to a minimum.

Application

The Cleveland/Price DB-C is a three pole, group operated, copper double break switch, suitable for use in a variety of applications including (no disconnecting, circuit breaker bypass and isolation, and transformer isolation. The double break switch is commonly used in installations where overhead clearances will not permit use of a vertical break switch. The double side break switch can be installed on the same pole spacing as a vertical break switch.

The DB-C can be mounted in the horizontal, upright, or horizontal underhung position. The switch may be manually operated by use of a pole handle or wormgear mechanism or electrically operated by a type TP-C2 motor operator. Accessories are available. Act horns can be supplied when small amounts of magnetizing current are required.

Construction

The DB-C double side break switch is a three insulator disconnect switch. The switch blades are bolted to the center rotating insulator. The switch blade engages the break jaws mounted on the stationary insulators through direct entry. The simple direct entry engagement eliminates the need for a rotating or pivot mechanism on either the blade or the break jaws.

The DB-C has total non-cast construction. All current carrying parts are fabricated from hardened, high conductivity copper, which is stronger and more conductive than cast materials. Ferrous parts are fabricated from cold-rolled and hot-rolled steels. Bases, spacers, and other ferrous parts are galvanized after fabrication.

Type DB-C Double Side Break Switch

Engineered for Performance

Cleveland/Price locates the contact springs in a parallel path of current. As the blades attract, the break-jaw acts as a fulcrum that exerts force. There are few parts above the break jaws.

The location of the contact springs in relation to the break-jaw enhances the contact engagement range. Variations in blade movement due to linkage tolerances and increased travel do not affect switch performance. Because there are no critical adjustments necessary when installing the DB-C, installation time is reduced.

Problem: Disconnect switches may have long travel over time due to linkage tolerances and increase in contact friction. Reduced travel may prevent the switch from attaining maximum contact pressure resulting in gated and burned contacts. Some side break switches also depend on critical adjustments during installation.

Solution: Long-throw contacts that allow generous contact engagement range. Variations in blade travel do not affect switch performance. Because there are no critical adjustments necessary when installing the DB-C, installation time is reduced.

Long-term Contact Integrity

Cleveland/Price incorporates an adjustable stop mechanism in the contact design to provide proper contact pressure even after long-term usage. Some side break switches also depend on critical adjustments during installation.

Solution: Cleveland/Price incorporates an adjustable stop mechanism in the contact design to provide proper contact pressure even after long-term usage.

Short-circuit Dependability

Cleveland/Price incorporates an adjustable stop mechanism in the contact design to provide proper contact pressure even after long-term usage. Some side break switches also depend on critical adjustments during installation.

Solution: Cleveland/Price incorporates an adjustable stop mechanism in the contact design to provide proper contact pressure even after long-term usage.

Type DB-C

The DB-C conforms to NEMA and ANSI Standards and meets the rating requirements of ICC Standards.

Blade Over-travel Protection

In addition to the adjustable stops at the operating handles, the DB-C features a blade stop in the break jaw assembly to prevent over-travel of the blade in the contact making position.

The blade is secured in the break jaw assembly in its position despite line pull and insulator movement during high fault current and seismic conditions.
The DB-C follows the Cleveland/Price tradition of designing simple, dependable switches without the use of castings. Knowledge gained from maintaining switches in the field for over 60 years has played a major part in refining the DB-C. Significant design features include:

- Total non-cast copper and steel construction resulting in superior dependability of parts
- Live parts constructed from hard-drawn, high conductivity copper producing stronger, more conductive components than parts made of cast material
- Wiping action at the jaw contacts keep the contacts clean for years of reliable service.
- Parallel blade construction allows free flow of air over the blade surfaces for effective cooling
- Built-in closed position blade stop on the live parts prevents over-travel of the blade.

Maximum mounting height with standard operator is 23 feet. An extended operator to increase the mounting height is available. Switches may also be mounted in the vertical or underhung positions.

**Operators / Accessories**

- **Swing handle operator**
- **Rear lock provision in both the open and closed positions**
- **Ground strap for vertical-operating pipe**
- **Adjustable stops**
- **Clamp-on open/closed indicators**
- **Self-lubricating, maintenance-free outboard bearing**
- **1½” IPS galvanized steel vertical-operating pipe**

**Available Accessories**

- Adjustable base mounting side clips
- Arc horns
- Auxiliary switch
- Braided ground
- Electrical interlock
- Extended operator
- Ground blades
- Insulated interphase pipe
- Insulated vertical pipe
- Key interlock
- Mounting hardware
- Operator grounding platform
- Outriggers
- Quick break whip
- Skill pipe
- Universal joint assembly for direct drive
- Universal joint assembly for indirect drive

**Ordering Information**

- **Switch type**
- **Voltage**
- ** Ampereage**
- **Momentary rating**
- **Mounting position**
- **Operator type**
- **Accessories required**

**Bulletin DB-104DB09**

**Type DB-C**

Copper Double Break Switch

72 kV - 69 kV

600 A - 2000 A.
**Designed for Simplicity**

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- **Parallel blade construction allows free flow of air over the blade surfaces for effective cooling**
- **Built-in closed position blade stop on the live parts prevents over-travel of the blade.**

**Operators / Accessories**

- **Swing handle operator**
- **Adjustable base mounting side clips**
- **Arc horns**
- **Auxiliary switch**
- **Brass feed ground**
- **Electrical interlock**
- **Extended operator**
- **Ground blades**
- **Insulated interphase pipe**
- **Insulated vertical pipe**
- **Outriggers**
- **Quick break whips**
- **Rivet pipe**
- **Universal joint assembly**
- **Universal mount assembly for direct drive**

### Bulletin DB-104DB09

**Type DB-C**

Copper Double Break Switch

- **7.2 kV - 69 kV**
- **600 A. - 2000 A.**

Maximum mounting height with standard operator is 23 feet. An extended operator to increase the mounting height is available. Switches may also be mounted in the vertical or underhung positions.

**Standard Operator Features**

- Swing handle operator
- Drive pipe
- Interphase pipe
- Ground pipe
- Drive handle
- Grounding handle
- Terminal pads with NEMA standard hole pattern
- Stainless steel live parts hardware
- Hard-drawn, high conductivity copper current-carrying parts
- Galvanized steel channel base
- Plain or plated terminal pads
- Unitized, non-cast terminal pads
- Heavy-duty bearing shaft assembly
- Permanent lubricated, maintenance-free sleeve bearing

### Ordering Information

- **Furnish:**
  - Switch type
  - Voltage
  - Momentary rating
  - BIL level
  - Mounting position
  - Operator type
  - Accessories required

**Available Accessories**

- **Adjustable base mounting side clips**
- **Arc horns**
- **Auxiliary switch**
- **Brass feed ground**
- **Electrical interlock**
- **Extended operator**
- **Ground blades**
- **Insulated interphase pipe**
- **Insulated vertical pipe**
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