Double Break Switch Product Specification

Double break disconnect switches are electrical devices used to isolate circuits in power transmission and distribution systems. These switches are designed with two sets of contacts, which create two separate breaks in the electrical path when the switch is operated, providing a higher level of reliability and safety compared to single break switches. When the switch is opened, both contact sets are physically separated, ensuring complete disconnection of the circuit. This design helps reduce electrical arcing, improves contact durability, and enhances the overall performance of the switch.

Double break disconnect switches are commonly used in high-voltage applications such as substations, power plants, and industrial electrical systems, where the ability to safely isolate circuits is critical for maintenance, fault isolation, or system reconfiguration. The design of the double break switch offers better load distribution and can handle higher electrical loads, making it ideal for demanding environments. These switches are often equipped with visible indicators to show whether the switch is in the open or closed position, ensuring that operators can safely manage the system.

Key features of double break disconnect switches include:

1. **Dual Contact Separation**: Two sets of contacts provide two breaks in the circuit for added reliability and safety.
2. **High-Voltage Capability**: Designed for use in high-voltage systems, such as substations and power transmission lines.
3. **Improved Durability**: The dual separation reduces electrical arcing and wear, increasing the lifespan of the switch.
4. **Safety**: Clear, visible indicators show whether the switch is open or closed, ensuring safe operation for personnel.
5. **Efficient Load Handling**: The dual contact design helps distribute electrical load more effectively, improving overall performance.

Double break disconnect switches are essential for ensuring the safe and reliable operation of electrical systems, providing robust isolation and protection for both equipment and personnel.

Double break disconnect switches are crucial components in power transmission and distribution systems, particularly in substations, power plants, and industrial electrical networks. These switches are designed to safely isolate high-voltage circuits for maintenance, fault isolation, or system reconfiguration. The dual contact separation of double break switches provides enhanced reliability and safety, ensuring that both contact sets are fully separated when the switch is opened. This helps reduce electrical arcing, improves contact longevity, and ensures complete disconnection of the circuit. Double break disconnect switches are particularly valuable in high-

demand environments where equipment is subjected to significant electrical loads, as they offer superior load handling and durability. They are commonly equipped with visible position indicators to ensure operators can clearly verify the open or closed status of the switch, enhancing safety during operation. By providing robust isolation, these switches help maintain the stability and reliability of electrical systems, enabling safe maintenance and minimizing the risk of system failures. Double break disconnect switches play a vital role in safeguarding electrical infrastructure and ensuring uninterrupted power delivery.

Double break disconnect switches are constructed with a robust and durable design to ensure reliable operation in high-voltage applications. These switches feature two sets of contacts, which are designed to separate simultaneously when the switch is operated, creating two distinct breaks in the electrical circuit. The frame of the switch is typically made from heavy-duty, corrosion-resistant materials such as galvanized steel or stainless steel, ensuring longevity and durability in outdoor and harsh environments. The contacts are typically made from high-conductivity materials like copper or silver alloys, which help minimize electrical resistance and wear during operation.

The insulating components, such as porcelain or composite materials, are used to prevent electrical arcing and ensure safe contact separation, especially when dealing with high-voltage circuits. The switch's mechanical operation is often facilitated by a gear mechanism, pulleys, or levers that provide smooth and reliable contact movement, ensuring that both sets of contacts open and close simultaneously. To further enhance safety, double break disconnect switches are designed with visible indicators that show the open or closed position of the switch, allowing operators to easily verify the status of the circuit. The switch is also sealed against moisture, dust, and other environmental factors, protecting the internal components and ensuring reliable performance under a variety of operating conditions. The overall construction of double break disconnect switches prioritizes safety, durability, and minimal maintenance, making them ideal for high-voltage power systems.

kV	BIL kV	AMP cont	Mom kA
15	110	2000	100
		3000	120
23	150	2000	100
		3000	120
34	200	2000	100
		3000	120
46	250	2000	100
		3000	120
69	350	2000	100
		3000	120
115	550	2000	100
		3000	120
138	650	2000	100
		3000	120
161	750	2000	100

		3000	120
230	900	2000	100
		3000	120
500	1050	2000	100
		3000	120
800	1200	2000	100
		300	120