

# DISCONNECTING CIRCUIT BREAKERS

With the ever increasing trend of advancements in technology, **disconnecting circuit** breakers have been recently introduced in the industry due to their immense advantages and compactness. In the same small package they provide more functions with the same board but more on board circuitry.

They were introduced in the market in the start of 2000's. Development in this technology of circuit breakers has led to significant decrease of maintenance and an increase in the reliability of the product.

When we talk about the maintenance, it usually includes the energizing and de energizing of the primary circuit.

## Definition

So now the question is that what is basically a disconnection **circuit breaker**? A disconnecting **circuit breaker** can be described as a **circuit breaker** with an integrated disconnecting function. This means that the interlocking of unintentional operation and the blocking of its closing function is also integrated in it.

The symbol of a disconnecting circuit breaker is shown in the figure below:



## Advantages of Disconnecting Circuit Breakers

These circuit breakers were modeled after the SF6 circuit breakers which we have discussed earlier in the article of types of circuit breakers.

- This integrated disconnecting feature offers us a better compactness, since the manually disconnecting problem has been eliminated and the DCB operates automatically with the complete package packed inside.
- The maintenance issues have been resolved due to which the losses in power supplies have been reduced along with an additional benefit of lesser risks for system disturbances.

One thing to be noted here is that when the system is being repaired or any other maintenance activity is going on, then the disturbance in the output of the system has more probability of occurring, as compared to when the system is running in its normal state.

- Along with these advantages, economic issues have also been greatly reduced, leading to lesser costs and more economical products. In short, the disconnecting circuit breakers have led the world of technology to a more reliable path.
- Since the separate disconnectors have been eliminated in the package of disconnecting circuit breakers, so the value of manual operation has also been solved, leading to even lesser mechanical interrupts in the system.
- The internal on board disconnectors operate more safely and reliably with a better speed giving a better output.



In short, the disconnecting circuit breakers have led to a huge betterment in the world of circuit breakers, offering better services at a lower cost. Researches are still going on the DCB's, with people trying to discover their working and functionality in more details.

We have tried here to discuss the best possible details available so that you can know more about them and keep yourself updated with the modern trends in the world of technology. No doubt they offer a better solution, but your requirements must be kept in mind while buying a circuit breaker, so that the cost and functionality can be adjusted as this is usually a trade-off.

Source : <http://engineering.electrical-equipment.org/electrical-distribution/disconnecting-circuit-breakers.html>