

What is a Transfer Switch?

- o A transfer switch is a device, either electro-mechanical or solid state, that allows a user to select any of multiple sources of power to feed maintained loads.
- o This switching of sources can be done either:
 - λ Manually (MTS) or
 - λ Automatically (ATS)
- o Variables
 - λ Switch construction
 - λ Operating speed
 - λ Features
 - λ Controls
 - λ Quality Switch?

What a
Transfer
Switch
is not:
**IT IS NOT
A UPS**

What is a Transfer Switch?

(cont.)

- o An Automatic Transfer Switch (ATS) is a device which responds to an **under-voltage** or **under-frequency** condition
- o Compare this to a circuit breaker (CB or MCCB) which responds to an **over-current** condition

An Automatic Transfer Switch (ATS) is designed to **WITHSTAND** the current

A Circuit Breaker is designed to **INTERRUPT** the current

Typical Transfer Switch

Manual

- λ No logic or controls
- λ No indications
- λ No phase monitoring
- λ No automatic response
- λ No predefined sequence of operation
- λ No start signal for generator
- λ No load transfer
- λ No retransfer back to Normal
- λ No cool down of generator
- λ No shut down of generator

Automatic

- λ Inherent logic; responds automatically to loss of power
- λ Sequenced operation
- λ Start generator
- λ Transfer loads
- λ Monitor return to Normal
- λ Retransfer back to Normal
- λ Cool down generator
- λ Shut down generator
- λ Wait for next occurrence

The controls make a big difference in your system package!

Beware: Not all control packages offer the same features and adjustments as discussed here