

# Active Front End Unit



## Applications

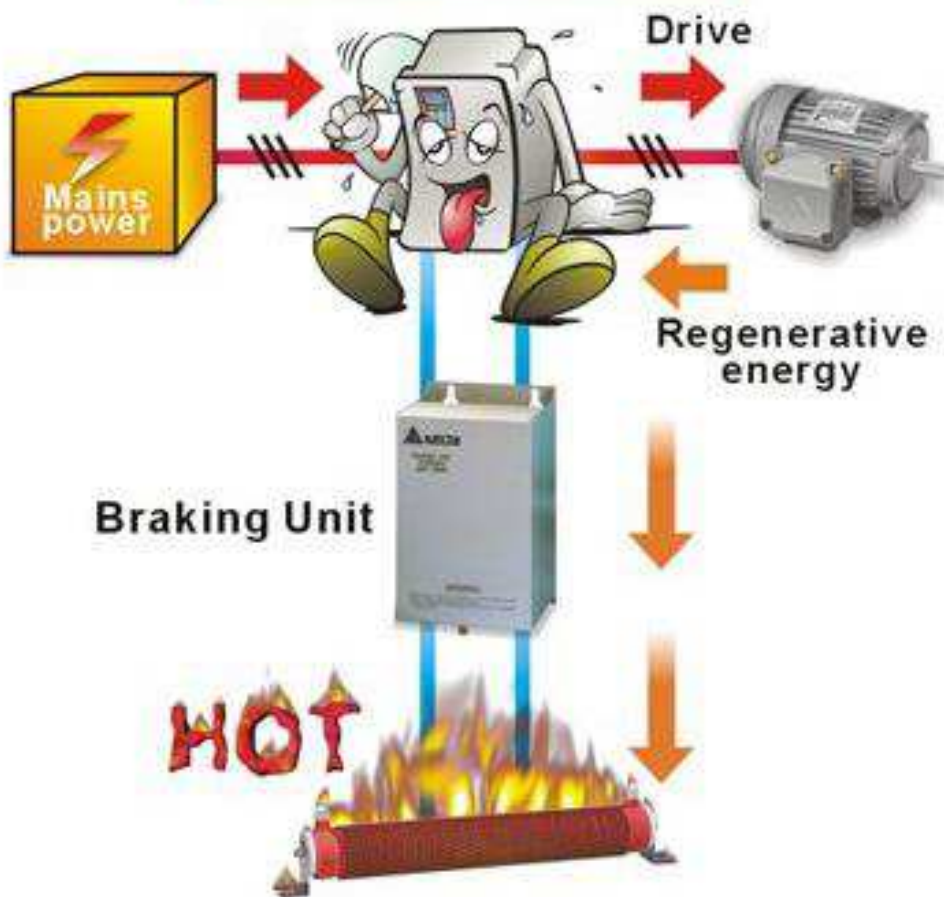
- Large-inertia load applications: roving machines, horizontal spiral centrifuges, drilling machines.
- 4-quadrant load applications: cranes, cargo elevators, passenger elevators, oil production machines.
- Quick brake applications: machine tools, high-speed spindles, bag making machines.
- Long-term feedback energy applications: wind power systems and water power systems.
- DC power supply applications: logistics and storage systems, wind power systems, LED lighting systems.
- Provides excellent power quality for the communication transmission systems of Power Line products.
- Overhead Traveling Crane
- Elevator

## Specifications

- Energy saving with AC/DC dual power flow control and corrects power factor up to 99%.
  - Replaces traditional braking resistor for cost savings, space savings, and energy savings.
  - PWM control substantially reduces peak of harmonic current wave and forms perfect sine wave current.
  - IEEE STD.519-1992 standard for harmonic current distortion of less than 5%.
  - Constant DC bus voltage that is not influenced by mains voltage fluctuation.
  - Supports multiple DC bus intallation:
- Controls harmonic distortion to less than 5% and corrects the power factor up to 99%.

## Traditional Brake Resistor

Dissipate the regenerative energy as heat



Regenerative energy = excess heat