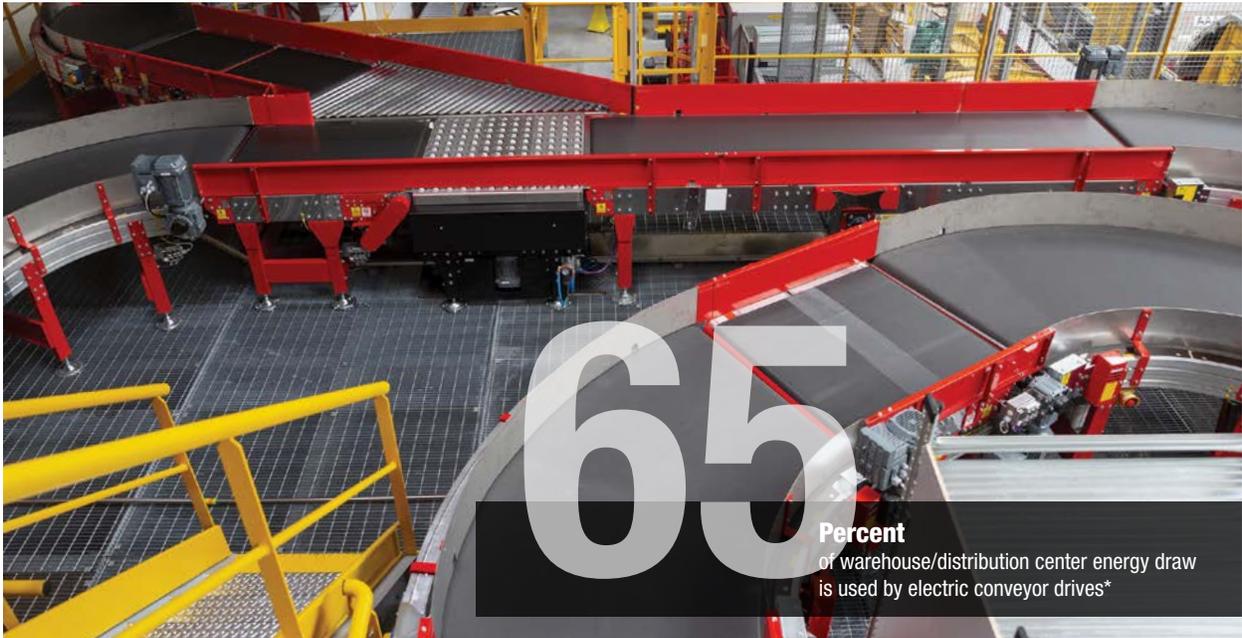


INNOVATION

SPOTLIGHT from the brands of Altra Industrial Motion Corp.



WARNER ELECTRIC'S ADVANCED PULSE™ BRAKING TECHNOLOGY PROVIDES ENHANCED ENERGY EFFICIENCY

Large distribution centers (DCs) and warehouse facilities are always looking for ways to reduce energy consumption. While climate control and lighting can account for a significant portion of operating costs, the large number of electric conveyor drives are, by far, the major source of energy usage in these facilities as well as many other types of automated manufacturing and packaging plants.

The relatively recent introduction of newer, high-efficient electric motors has provided the largest energy cost savings for these facilities. Unfortunately, the potential energy saving related to the conveyor's motor brakes is often overlooked. While the motor-mounted brakes offer some dynamic braking capability, they primarily provide parking (holding) functionality.

Traditional spring set, electrically released brakes typically installed on conveyor motors automatically engage when power is cut off. However, a constant power draw is required to hold the brake in the disengaged (open) mode. Also, the constant energy draw of typical spring set, electrically released brakes can cause excessive heat build up within the motor housing causing diminished motor performance.

INNOVATIVE LOW POWER CONSUMPTION BRAKING TECHNOLOGY

Warner Electric engineers have recently developed the revolutionary Pulse™ (patent pending) electromagnetic spring-set brake. The new brake requires no electrical power to hold it in either the engaged or released mode. The brake is engaged and released using a short electrical pulse of approximately 1 second. The power is immediately turned off after each electrical pulse.



www.warnerelectric.com

Warner Electric®
Altra Industrial Motion

INNOVATION

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99% ENERGY SAVINGS COMBINED WITH REDUCED HEAT GENERATION

The unique Pulse brake remains locked (on) or released (off) WITHOUT power consumption.

The brakes create very little heat since they operate by using only short electrical pulses versus a constant energy draw. Instead of adding heat to the system as a normal spring-set brake can, the slight heat created from the power to the brake's coil allows the brake to act as a "heat sink" for the motor within the housing.

ENGINEERED FOR LONG-TERM RELIABLE PERFORMANCE

Pulse brakes utilize a smooth friction lining that provides longer wear life. A replaceable friction component extends the life of the brake. Mechanical springs clamp the brake disc as conventional spring-set brakes.

The brake uses common DC voltage; a DC pulse is applied to release the brake, then a reverse DC pulse is sent to engage the brake.

The brakes feature a lower release drag that allows operation at high speeds. Controlled soft stops make the brake ideal for sensitive applications.

Units can be fully software-controlled and/or controlled manually.

STANDARD MODELS OR CUSTOM-DESIGNED UNITS AVAILABLE TO MEET SPECIFIC APPLICATION REQUIREMENTS

Pulse brakes are initially offered in two standard NEMA C-Face 56C models for use on 1/4 to 2 HP motors. Units can be motor- or base-mounted.

Custom, free-standing Pulse brakes can be manufactured by easily converting existing catalog spring-set brake configurations.



Pulse brakes are offered as free-standing units for servomotor installations or mounted within C-Face housings (as shown).

Energy saving Pulse brakes are an excellent choice for battery-operated products as they extend running time between re-charges on scooters, wheelchairs and mowers.

Other applications, include electric motors used on material handling/warehouse conveyors, surgical robots, winches, lifts, door openers, amusement rides and packaging machines.

* Source: manufacturingtomorrow.com