

Matrix Drives vs. 18-Pulse Systems

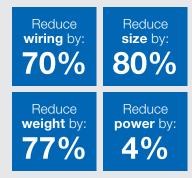
Making the complicated simple.



U1000 Industrial Matrix Drive

Eliminate Components:

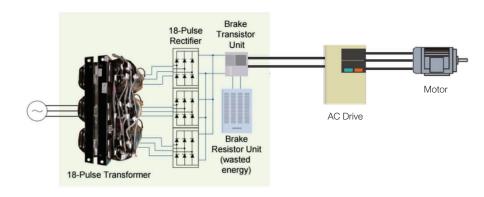
- 18-Pulse Transformer
- Diode Rectifiers
- Phase Circuits
- Reactors
- Fusing



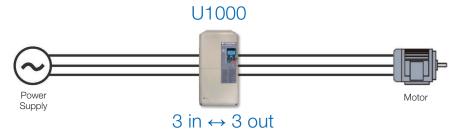
Example: 480V 250HP

The U1000 is a compact, total all-in-one solution for low harmonics and/or full regeneration. It is the ultimate choice for power quality and energy savings. Additionally, the U1000 delivers high flexibility and motor control performance to meet a wide variety of application requirements.

18-Pulse Drive

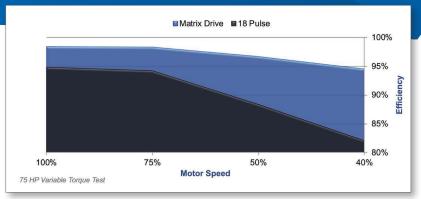






More Efficient

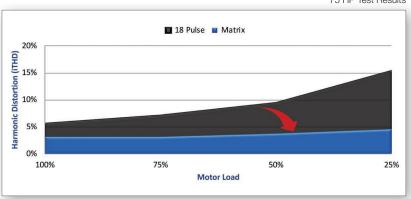
The U1000 Industrial Matrix Drive is considerably more efficient at rated power than an 18-pulse configuration in the typical operating range of a motor (50%-75% Speed).



75 HP Test Results

Lower Harmonics

The U1000 Industrial Matrix Drive offers low input current harmonics that facilitate IEEE 519 compliance. Not only does the U1000 have low harmonics at rated load, but it's an overall green solution. The U1000's harmonics remain low throughout the entire load range of the motor.



U1000: Input Voltage U1000: Output Voltage Output Current Output Current

Matrix Drive Rated Power Operation



Eco-Mode (Bypass Through Drive Operation)

Eco-Mode

Across the line operation through the drive.

Benefits

- Eliminates high frequency harmonics
- Eliminates electrical noise
- Easier on motor and drive
- Reduced maintenance to belts, pulleys, & gearboxes
- Maintain drive protection (overcurrent, motor overload)
- Eliminates audible noise

Simplify Your Wiring Needs

- Less components
- Less connections
- Less wiring
- Easy installation
- Smaller package

