

All-in-One Regenerative Solution

Matrix Drives redirect energy back onto the line to be saved when it would normally be wasted using braking resistors.



U1000 Industrial Matrix Drive

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.

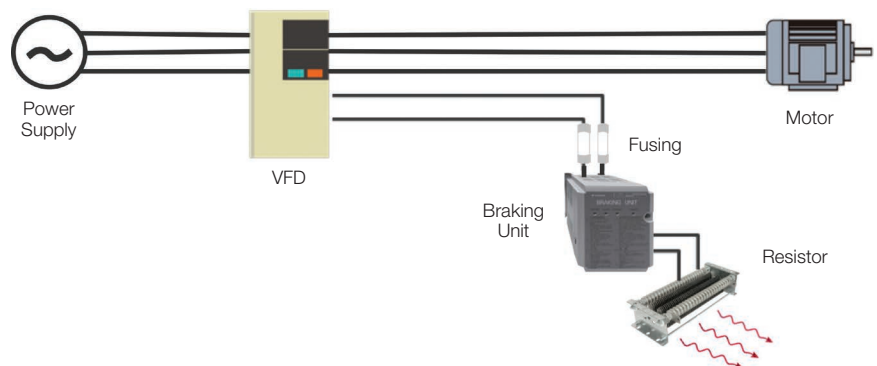
Eliminate Components:

- Extra Braking Units
- Braking Resistors
- Additional Fusing

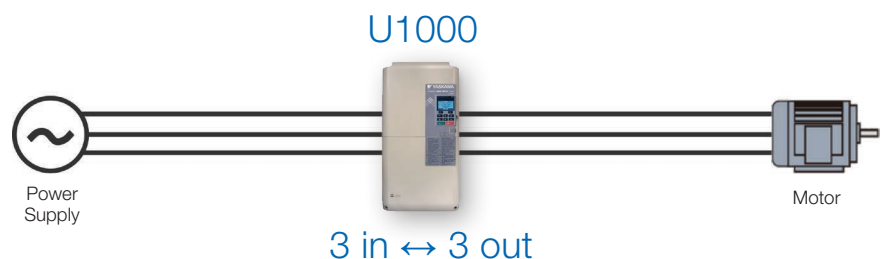
Reduce wiring by: 50%	Reduce size by: 70%
Reduce weight by: 50%	Save 100% wasted energy

Example: 480V 40HP

VFD With Dynamic Braking

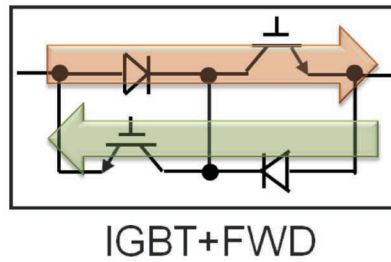


U1000 Matrix Drive



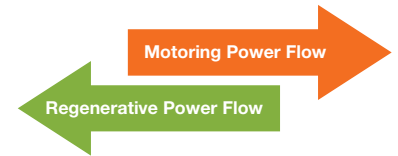
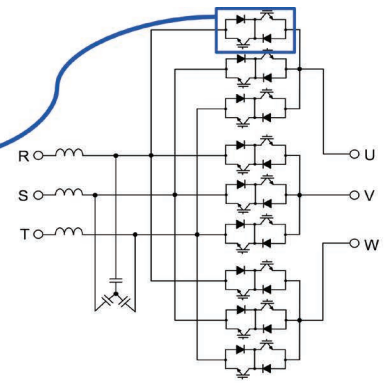
Bi-Directional Power Flow

The U1000 has three sets of switches per phase. Each set of switches allows for instantaneous monitoring and regenerative power flow. That means all nine bi-directional switches can provide monitoring and regenerative power, continuously and instantaneously, which allows us to provide 100% full, continuous motoring power to the motor or regenerative power from the motor.

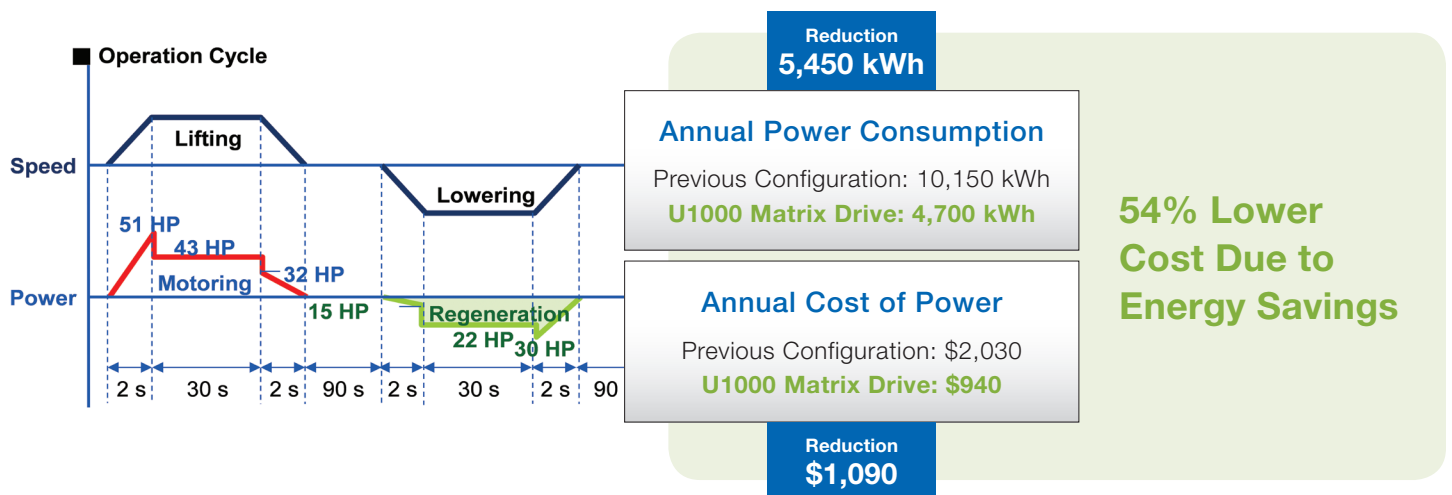


IGBT+FWD

Instantaneous Motoring & Regeneration
9 Bi-directional circuits for a total of 18 IGBTs



Energy Savings Example



Regeneration on a Fan – How can that help?

Forced Deceleration

- Fast and easy startup and installation for high inertia loads.
- Slowing or stopping the drive is made easy with integrated regeneration.
- If you can start it, you can stop it.
- No fine tuning needed for regeneration.

Eliminates OV Faults

- Overshooting commanded speed during test and balance.
- Overhauling by another fan up or down stream.