# SAVE ENERGY. LOWER HARMONICS.

WHAT IS THE BEST SOLUTION FOR YOU?

#### PRODUCT SELECTION CHART Start Yes Yes Looking for an all-in-one Are low input current **U1000** low harmonic and/or No Industrial Matrix Drive harmonics required? regenerative solution? (Integrated drive) No Does the application Is there more than one Yes require a dynamic D1000 drive? Are you looking to Yes braking resistor? Power Regenerative common bus? Does it regenerate? Converter (Requires drive) No No No **R1000** Are you looking to save **Power Regenerative** space (reduce panel size)? Unit (Requires drive) Yaskawa AC Drives Yes

#### **APPLICATION BENEFITS**

| What would you like to do?                      | U1000        | D1000        | R1000        |
|---|--------------|--------------|--------------|
| Facilitates IEEE 519 Compliance                 | $\checkmark$ | $\checkmark$ | -            |
| Save Energy                                     | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Integrated Drive (Runs a motor)                 | $\checkmark$ | -            | -            |
| Improve Power Factor                            | $\checkmark$ | $\checkmark$ | -            |
| Reduce Burden on Power Supply                   | $\checkmark$ | -            | -            |
| Downsize Control Panels                         | $\checkmark$ | -            | -            |
| Simplify Power Wiring (3 wires in, 3 wires out) | $\checkmark$ | -            | -            |
| Common Bus (More than one drive)                | -            | $\checkmark$ | -            |
| Easily Replace Braking Resistors                | -            | -            | $\checkmark$ |



### U1000 Industrial Matrix Drive

200 V Class, 10 HP to 100 HP 400 V Class, 7.5 HP to 800 HP



# NEAR UNITY POWER FACTOR AND LOW HARMONIC PERFORMANCE

Eliminates problems caused by high harmonic currents, such as excessive heating of power grid devices and malfunctioning peripheral devices.

#### **GREATER EFFICIENCY WITH REGENERATIVE CAPABILITY**

Inherent full continuous regenerative capability allows for immediate energy savings without the need for bulky, expensive, and potentially hazardous external peripheral components present in other regenerative systems like braking resistor packages.

#### COMPACT

Innovative Matrix Drive technology goes beyond conventional drives by providing outstanding harmonic performance and full four quadrant regeneration, all in a compact standalone drive solution. The all-in-one, three wires in, three wires out design reduces wiring and saves space.

## D1000 Power Regenerative Converter

200 V Class, 5 HP to 150 HP 400 V Class, 5 HP to 750 HP



#### **CONNECT MULTIPLE UNITS**

Provides a low harmonic, fully regenerative system solution by generating a stable DC power supply that can be used for multi-drive or single drive systems.

# NEAR UNITY POWER FACTOR AND LOW HARMONIC PERFORMANCE

Near Unity Power Factor and low harmonic currents allows for effective and efficient use of the utility power supply.

#### THE EVERY DRIVE SOLUTION

Compatible with all conventional drives having full power access to their DC bus.

## R1000 Power Regenerative Unit

200 V Class, 5 HP to 150 HP 400 V Class, 5 HP to 500 HP



#### RETROFIT EXISTING MACHINES

Convert existing applications using resistor packages to begin immediate energy savings.

#### LOW REGENERATIVE DUTY CYCLE SOLUTION

Reduced duty cycle capability allows for a cost effective solution where continuous regeneration is not required.

#### **ELIMINATES RESISTOR HEATING**

Regenerative converter eliminates the safety concerns with using braking resistors to burn off regenerative energy.



