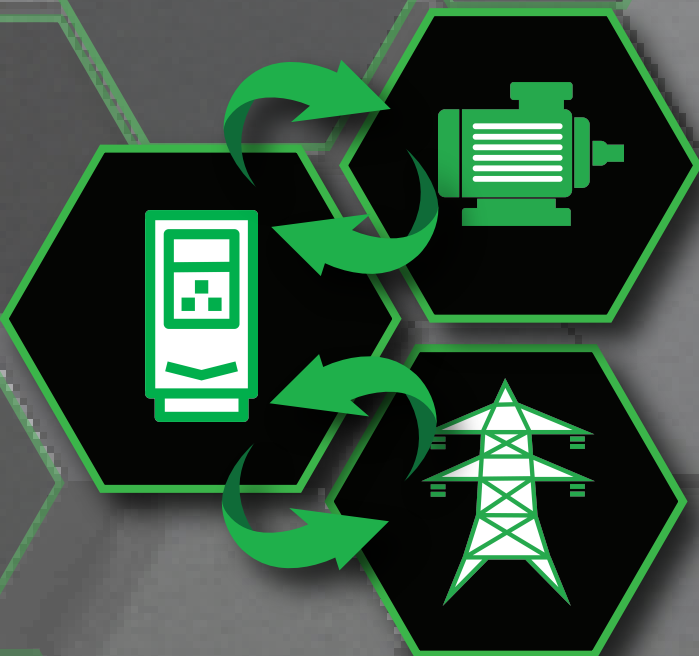


# SMART D

**CLEAN POWER™**  
VARIABLE FREQUENCY DRIVE



## Embedded Active Front End (AFE)

- Ultra low harmonics
- Regenerative capability
- Power factor near unity

## Pure sine wave 3-phase output

- Fully-integrated filters
- Extended motor lifetime
- Increased efficiency

## Set, monitor and control App



# CLEAN POWER™

VARIABLE FREQUENCY DRIVE

*Experience true sine wave output first-hand with the Clean Power VFD with AFE!*

## Embedded Active Front End

The embedded AFE is a bi-directional controlled converter. From the grid, it feeds the VFD internal DC bus without generating harmonics that a standard diodes bridge would. From the VFD, it sends power back to the grid as a pure sine wave while the motor is acting as a generator.

## Displacement Power Factor

Reactive energy requires bigger cables, filter protection, and may mandate a bigger transformer. This can result in fines from the utilities for consuming too much energy. The Clean Power VFD features a Power Factor close to unity and a filter-less, no-extras-needed design.

## Low Harmonics

With the embedded Active Front End (AFE), the Clean Power VFD keeps distortion at lower than 5%. Harmonics are lower than the recommended IEEE519 level.

## Clean Power Output

By combining patented modulation algorithms and Silicon Carbide (SiC), the cutting edge in power electronics, the Clean Power VFD generates a Clean Sine Wave to control AC motors. This eliminates all the drawbacks that users face with an ordinary VFD which generates a motor-harmful pulse width modulated (PWM) squared signal.

## Energy Efficiency

Clean Power means energy savings – there are no harmonics that would normally cause additional losses in the motor and no external filters reducing the system efficiency. Additionally, when braking, the energy can be regenerated to the grid instead of vanishing in a braking resistor.

## Simplified Installation

From purchasing to operations, simplify your deployment and decrease your expenses with a Clean Power VFD: less equipment, less-maintenance, more energy efficiency. Install the Clean Power VFD with just 3 cables in, 3 cables out. Connect to the app and configure Clean Power in the palm of your hand.



Connect with us to learn more!

**SMART D**

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