Nidec

All for dreams

Active Front End (AFE)
Advanced Harmonic Reduction Technology

Designed to meet the HVAC industry's demand for clean power, Control Techniques offers the latest in both microprocessor and power semiconductor technology delivering the industry with economical, compact and highly flexible active front end drive packages.

The packages incorporate Control Techniques dedicated HVAC drive H300 active front end controller and EMC filtering providing extremely low harmonic distortion.

75 hp HVAC Drive H300 AFE system

KEY BENEFITS:

Low Harmonic Distortion
- IEEE519-2014 compliant
- Will not interfere with sensitive equipment
- Not sensitive to line imbalances
- Superior to 12- and 18-pulse solutions
- Maintains Unity Power Factor

Easy Installation
- Available 30-600 hp at 460 V
- Single package design – no need for external filters or transformers
- UL508A approved
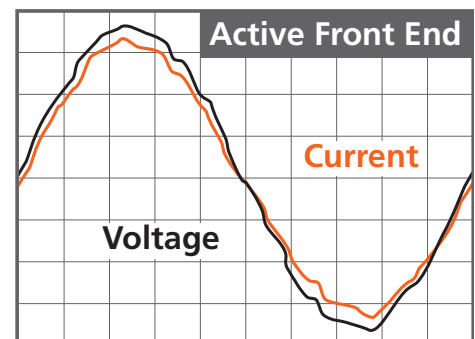- 100 KAIC rated with circuit breaker option

Flexible Solutions
- Integrated network connectivity – BACnet, Metasys N2 and Modbus
- Wide range of I/O and communications option modules
- Electronic and soft start bypass options

UL 508A Approved c(UL)us

6-pulse
Current
Voltage

Typical current distortion 35%
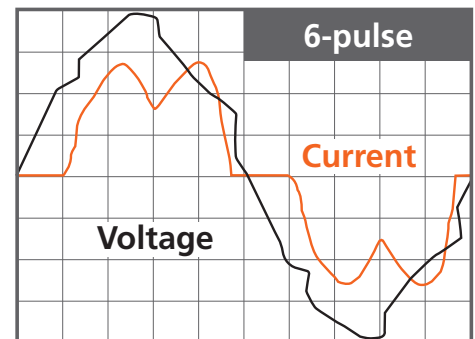
Active Front End
Current
Voltage

Typical current distortion 3%

Active Front End packages for Harmonic Reduction

HVAC Drive H300 Key Features

- Static and rotational auto tune
- 8 preset speeds; 8 sets of accel / decel rates
- Catch spinning motor function
- Built-in dual PID
- Energy savings mode
- Power metering
- Network connectivity
- Easy to use plain text LCD keypad with on board help
- Fire Mode for building occupant safety
- 3 option slots for other communication options and/or for I/O expansion
- SmartCard and SD card for parameter cloning
- Free software tools for estimating energy savings and drive set-up
- Integral Active Front End Controller and EMC filter
- 100 KAIC rated with circuit breaker option
- Optional easy-to-use electronic bypass control, touchpad shown below


The easy-to-use keypad comes in two options drive mount or remote and can be customized to display parameters using your terminology, and set to display in one of five different languages.

100 hp HVAC Drive H300 AFE system

The SmartCard-64 and SD SmartCard Adaptor (uses standard SD cards) allow you to easily store and copy parameters. Several preset parameter macros makes drive setup quick and easy.
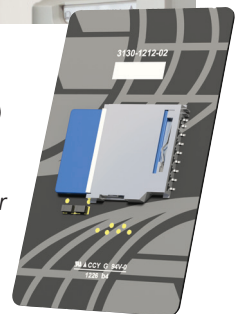
For more information visit our website: **www.hvacr-drives.com** or call **+1 952 995-8111**