## The "Greenest" Energy is the Energy you never consume...

The Internationally Certified and Proven:





# HELP System

(High Efficiency Local Processor)

The ONLY HVAC Retrofit System Available!

DEMAND-CONTROL

IS BETTER THAN

**DEMAND-RESPONSE** 

COMBINES TWO PROVEN TECHNOLOGIES TO DRAMATICALLY REDUCE YOUR HVAC COSTS!

### Turns "On-Off" HVAC into demand-based, precision variable speed!

- Operate your HVAC System based on demand, not on-off cycling
- Retrofit controls equipment starts saving you money immediately
- Turn-key installation; No modifications or changes to existing equipment
- Enhance motor operation & reduce power consumption
- ◆ Reduced maintenance & operational costs with an ROI of ~24 months
- Enhanced efficiency, decreased wear, & extended equipment life
- Algorithm driven Smart Microprocessor requires No Programming
- Optimal efficiency and energy savings exceeds DoE & DoD objectives

### The HELP System:

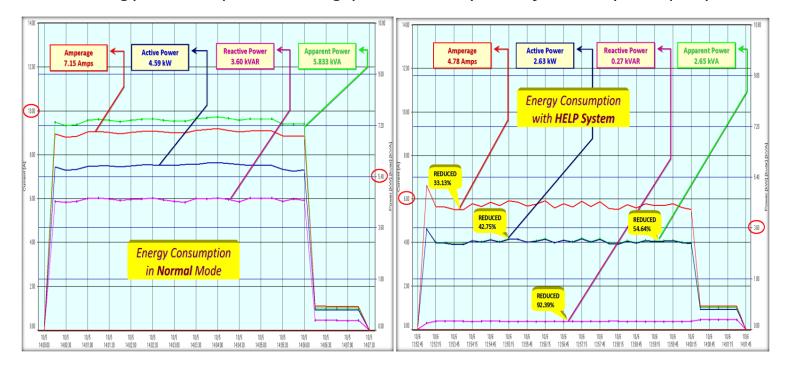
- Qualifies for the Smart\$aver® and other Incentive programs
- Validated, Certified, & Accredited by SGS Group Worldwide Testing
- WINNER of 2010 InnoVision Award for Technology & Innovation

Smart Microprocessor Technology is used by major HVAC manufacturers in their premium systems; *HELP* gives you all of these advantages...

Without Replacing Your Existing HVAC Equipment!

### SINGLE-CYCLE (DETAILED) TESTING OF HVAC ENERGY CONSUMPTION

Actual HVAC Energy test data recorded at a major manufacturing facility Energy consumption testing performed by a major utility company



Single Run Cycle Analysis of Normal vs. HELP System HVAC Savings



### Data Analysis resulted in:

- ↓ Amperage (A) Reduced by 33.13%
- ↓ Active Power (kW) Reduced by 42.75%
- ↓ Reactive Power (kVAR) Reduced by 92.39%
- ↓ Apparent Power (kVA) Reduced by 54.64%
- ↑ Power Factor Improved from .793 to .991

### Ideal HELP System Applications are:

- All Existing HVAC & HVAC-R Systems
- Cooling Tower Pumps and Fans
- Chiller, and Similar Pump Applications
- Air-Handler Fans (VAV)
- Boiler Feed-Water Pumps
- Any 3-phase Motor with a Varying Load



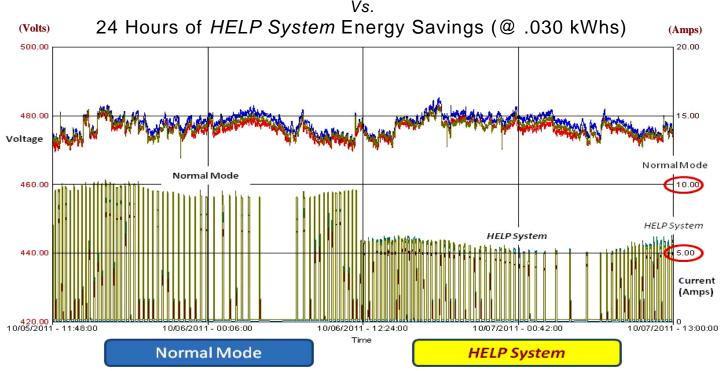
# VARIABLE FREQUENCY DRIVES (VFDs) HAVE BEEN PROVEN TO REDUCE ENERGY COSTS WHILE INCREASING EQUIPMENT LIFE!

### The HELP System Redefines HVAC Energy Savings:

- Patented Smart Microprocessor-Algorithm optimizes HVAC operation
- Fuzzy-logic and Stepless Control provides precise reaction to demand and maximizes HVAC efficiency
- Bypass feature assures uninterrupted HVAC operation
- Balanced and conditioned energy protects compressor from damage
- Retrofit equipment does not replace any existing HVAC components
- Reduced humidity & a more stable temperature in HVAC installations
- Decreased drive component wear, reduced maintenance, increased motor life, and improved performance
- Significantly lowers facility operation and maintenance costs!

#### Actual Energy Comparison of HVAC Normal Operation vs. HELP System

# 48 hours of energy consumption testing on a standard HVAC unit 24 Hours of Normal Operation (@ .046 kWhs)



HVAC Testing Verifies a Total 30% kWh (Cost) Reduction

### Don't Assume, Contact us for the Facts...

## HELP is the ONLY Retrofit HVAC Control System Available!



### We Manufacture Solutions...

We are proud to be a Tier One Supplier to:





Please visit our website at: <a href="http://www.TheTechnologyConsortium.com">http://www.TheTechnologyConsortium.com</a> for additional information on the HELP System and SPEED Series technologies!















For immediate action please contact The Technology Consortium at: <u>Engineering@TheTechnologyConsortium.com</u>