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On Santa Clara University's Testing Results for EnergyWise Technologies' EW-1000 Power Conditioning Unit.

SCU evaluated the effectiveness of the EW-1000 power conditioning unit on a 1/4 hp, 120 V, 4.6 A single phase inductive motor. Power impact was evaluated in the lab under various load conditions. Measurement performed include Voltage (V), Current (A), Power (W), Reactive Power (VAR), Power Factor, Motor Temperature (°C), Peak Inrush Current (A), Peak Current Surge (A), and Peak Voltage Sag (V). The results of these measurement evaluations are described below.

Measurements: The following was obtained under all conditions of testing:

- Voltage (V) impact was minimal [- 0.68% to 0.38%]
- Current (A) was reduced [21% to 51%]
- Power (W) was reduced [2% to 6.71%]
- Reactive power (VAR) was reduced [23% to 75%]
- Power Factor was improved [19.49% to 100%]
- Motor Temperature (°C) decreased [4°C to 6°C]
- Peak Inrush Current (A) was reduced [5% to 15.78%]
- Peak Current Surge (A) was reduced [2.1% - 5%]
- Peak Voltage Sag (V) was reduced [0.19% - 0.83%]

Conclusions:

Based on our testing and analysis, the EW-1000 Power Conditioning Unit shows significant benefits in the areas of reduced power usage, decreased motor temperature, improved power factor, reduced inrush current and suppression of current surges and voltage sags.

Details of this testing are under preparation.

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