

HARMONICS LIMITED

SystemMax™

Suppress 3rd Harmonic Currents

The patented SystemMax Harmonic Suppression System™ (HSS) suppresses troublesome 3rd harmonic current in electrical distribution systems. Since harmonic currents are not produced, there is no need to oversize transformers or switchgear, and double neutrals are not required. Reduction of harmonic currents in the transformer results in much lower operating temperatures. More useful power is available to power more devices. And transformers can be loaded to rated capacities with no danger of overheating.

SystemMax requires no expensive or time-consuming reconstruction. The unit mounts on the wall or floor near the transformer and conduit is run for neutral wires. Power shut off occurs only for the time it takes to connect the wires. Total installation time is usually under four hours; actual downtime can be as low as 15 minutes.



Save Energy

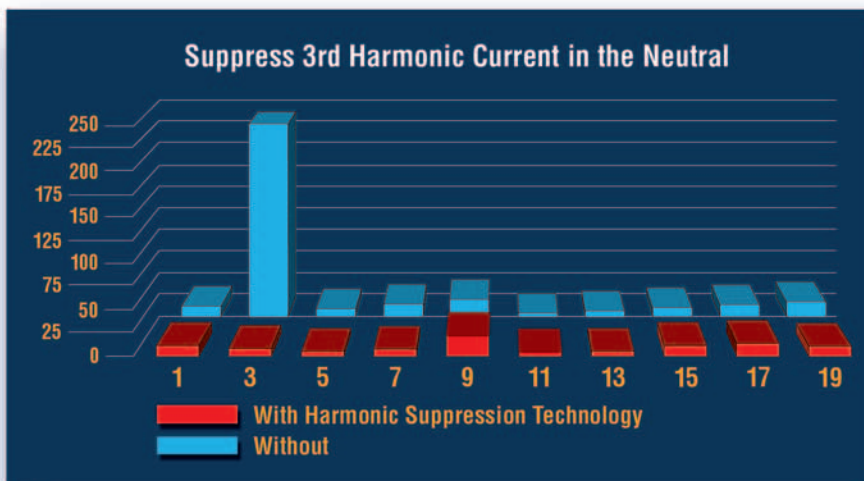
Suppressing harmonic currents in a distribution system helps increase both electrical system capacity and power factor. This translates into meaningful energy savings and more usable current to power more devices. Any facility that contains a large number of non-linear loads, such as computers and servers, connected to phase-to-neutral is susceptible to problems caused by high harmonic

current. SystemMax represents the best and most cost-effective solution for these types of applications.

Solution for Older Buildings

In older buildings, the neutral wire was downsized since it was not considered a current-carrying conductor. (After 1991, the National Electrical Code was changed to forbid downsized neutrals where computers are powered.) However, many facility electrical systems were never designed for present computer loads.

Retrofitting a building electrical system with appropriate transformer, switchgear, wiring and conduit can be prohibitively expensive. Fortunately, SystemMax presents an easy and affordable solution to this problem as well.



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Benefits of Reducing Harmonics and Harmonic-Related Heat

- **Energy Savings up to 8%:** Suppressing harmonics minimizes losses and reduces excess heat thus saving wasted energy and lowering air conditioning costs.
- **Increased System Capacity:** Suppressing harmonic currents increases the amount of usable capacity without increasing the size of the electrical system.
- **Enhanced Life Safety:** Removing the source of the heat lowers operating temperatures and leads to cooler wires, transformers, switchgear and panels. The likelihood of premature or intermittent tripping of the system circuit breakers is also dramatically reduced.
- **Increased Reliability:** Reducing the heat increases both the life and reliability of the distribution system and the associated system components.

Select the proper SystemMax for your transformer

Model Number	Full-load kVA	Amp Rating	Dimensions H x W x D	Approximate Weight (lbs)
HLSM030	30	83	20 x 16 x 13	120
HLSM045	45	125	20 x 16 x 13	130
HLSM075	75	208	24 x 20 x 13	215
HLSM112	112	311	30 x 24 x 13	300
HLSM150	150	416	30 x 24 x 13	325
HLSM225	225	625	48 x 30 x 21*	600
HLSM300	300	833	48 x 30 x 21*	615
HLSM500	500	1388	60 x 48 x 25*	1350
HLSM750	750	2080	72 x 60 x 25*	1960
HLSM1000	1000	2778	72 x 60 x 25*	2900

Model numbers are for UL/NEMA 1 enclosure. For UL/NEMA 3-R add -3R to the model number. (e.g. HLSM075-3R)*with 12" legs

Specifications

Item	SystemMax
Enclosure	Steel with ANSI-61 Grey Paint
Enclosure Type	UL / NEMA 1
Electrical System	3-phase, 4-wire Wye
Ambient Range	-20°C - 40°C

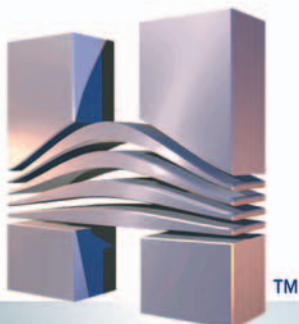
Specifications subject to change as product improvements occur.

Our Guarantee

Harmonics Limited products are warranted to be free from defects in materials and workmanship under normal use and service for a period of five years from the date of purchase.

Our products are UL certified (UL)

We are proud members of the U.S. Green Building Council.
(www.usgbc.org)



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