

RUGGED GALAXY™ SERIES SOLID-STATE FREQUENCY CONVERTERS SINGLE PHASE OUTPUT 1 - 30 KVA



APPLICATIONS

Utilizing field proven technology, this family of rugged solid-state sinewave frequency converters is suitable for harsh environments and can be customized for unique applications including:

- Shelters
- Tactical Systems
- Shipboard Power
- MIL-STD-810
- MIL-STD-901
- HMMWVs
- Mobile Systems
- Ground support
- MIL-STD-461
- MIL-STD-167

Powertek



ISO 9001

A Leader in Frequency Converter Technology since 1966 - 500VA to 500+KVA

MADE IN USA

RUGGED SINGLE-PHASE SINEWAVE FREQUENCY CONVERTER

CAN MEET MIL-STD-810, MIL-STD-1399, MIL-STD-901, MIL-STD-704, & MIL-STD-461 OPTIONALLY

APPLICATIONS

The rugged Galaxy Series Frequency Converter is designed to provide years of reliable service in harsh shock, vibration, humidity, and EMI environments. Military applications include HMMVW, UAV, Shipboard, Submarine, Shelter, Mobile Power Units, and Aircraft.

OPTIONS

- Ruggedization against shock, vibration and humidity to MIL-STD-810
- MS Connector or outlets
- Chassis Slides (rack mount models only)
- Frequency Meters
- Elapsed Time Meter
- Custom NEMA Wall-Mount or Floor-Mount Enclosure
- Output Circuit Breaker
- Rail Frequency Hz - 83, 91.66, 100, 200, or 250 Hz.

SPECIFICATIONS

ELECTRICAL

AC Input: Most standard 1Ø or 3Ø (specify)
 AC Output: Most standard 1Ø or 3Ø (specify)
 Frequency: 50, 60, or 400Hz (specify)
 Voltage Regulation: $\pm 1.5\%$ NL to FL
 Frequency Regulation: $\pm 0.5\%$ NL to FL
 Harmonic Distortion: 3% Typical, 5% Max
 Power Factor: 0.7 lead to 0.7 lag
 Efficiency at full load: 85-95% (depending on model)
 Overload: 120% typical

PROTECTIVE FEATURES

Current Limit, Short Circuit Protection, Thermal Protection, and Semi-Conductor Protection

ENVIRONMENTAL

Operating Temp.: -20° to $+50^{\circ}\text{C}$
 Storage Temp. Range: -40° to $+71^{\circ}\text{C}$
 Humidity: to 95% non-condensing
 Elevation: 10,000 ft. typical
 Shock: 20g/11ms
 Audible Noise: 65 dBA at 5 ft. typical
 Cooling: Forced Air by internal DC brushless fan
 Vibration: Normal shipping and handling
 EMI: Designed to meet FCC Part 15, Class A.
 Designed to meet MIL-STD-461 with optional additional filtering.

HIGH-RELIABILITY

MTBF: 30,000 Hours per MIL-HDBK-217
 MTBR: Less than 30 minutes

MODEL SELECTION

Partial Model Number	KVA	Output Voltage	Output Frequency Hz	Weight (Lbs.)	Inch Dimensions (H x W x D)
GHFC1K50 GHFC1K60 GHFC1K400	1	220 117 115	50 60 400	140 150 135	24.0" x 20.0" x 6.0"
GHFC2K50 GHFC2K60 GHFC2K400	2	220 117 115	50 60 400	165 160 155	30.0" x 24.0" x 8.50"
GHFC3K50 GHFC3K60 GHFC3K400	3	220 117 115	50 60 400	225 220 210	30.0" x 24.0" x 8.50"
GHFC5K50 GHFC5K60 GHFC5K400	5	220 117 115	50 60 400	410 380 350	30.0" x 26.0" x 11.0"
GHFC7.5K50 GHFC7.5K60 GHFC7.5K400	7.5	220 117 115	50 60 400	445 425 400	30.0" x 36.0" x 17.0"
GHFC10K50 GHFC10K60 GHFC10K400	10	220 117 115	50 60 400	470 450 425	36.0" x 36.0" x 17.0"
GHFC15K50 GHFC15K60 GHFC15K400	15	220 117 115	50 60 400	550 525 400	36.0" x 36.0" x 17.0"
GHFC20K50 GHFC20K60 GHFC20K400	20	220 117 115	50 60 400	C/F C/F C/F	C/F C/F C/F
GHFC25K50 GHFC25K60 GHFC25K400	25	220 117 115	50 60 400	C/F C/F C/F	C/F C/F C/F
GHFC30K50 GHFC30K60 GHFC30K400	30	220 117 115	50 60 400	C/F C/F C/F	C/F C/F C/F

