



## 60Hz STATIC FREQUENCY CONVERTERS



### PRINCIPLES OF WORKING

This rugged, AC/AC frequency converter system uses field proven, microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage. The built-in fans provide sufficient airflow for operation without de-rating within the specified temperature range. The high frequency conversion enables a compact construction, low weight and high efficiency. The unit has full electronic protection. The input and output are filtered for low noise. The use of components with established reliability results in high MTBF (110.000 hours @ 45°C).

### FEATURES

- Inputs: universal (95-264Vac), 115Vac, 230Vac or custom;
- PFC available on certain AC-input designs;
- Outputs: 115Vac or 230Vac (1-Phase); 208V, 380V or 400V (3-Phase);
- Custom outputs available;
- Single or three-phase designs;
- EMI filtering to meet any standard;
- Wide operating temperature ranges available;
- Full electronic protection;
- Remote shut down on certain units;
- Adjustment for output voltage and frequency;
- RoHS compliance.

### VERSIONS

- MODULAR SYSTEM - MS  
Light indicators: None  
Control Input: ON/OFF switch  
Alarm Output: Not installed
- RACK SYSTEM - RS  
Light indicators: Line ON, Output ready  
Output measurements: V, A, Hz  
Control Input: switch isolator  
Control Output: switch isolator





CATALOGO PRODOTTI  
SINGLE PHASE 60Hz  
STATIC FREQUENCY CONVERTER

Rev. 1 1 ÷ 3kVA MMFC60

Model	1000 MMFC60	2000 MMFC60	3000 MMFC60
Rated power	1000VA	2000VA	3000VA
<b>INPUT</b>			
Nominal voltage	230V (197-264Vac) 1Ph+N, 47÷63Hz (95-264Vac extended voltage operating range as option) (47-420Hz extended frequency operating range as option)		
Power factor	0.98		
Current	14 A	28 A	41 A
Protection	Inrush current, varistor, internal safety fuse		
<b>OUTPUT</b>			
Voltage	115V 1Ph+N, 60Hz (230V or custom as option)		
Current	8.7 A	17 A	26 A
Waveform	Sinusoidal		
THD	< 5% at full load		
Crest factor	2 at 90%		
Overload protection	Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient cooling.		
Overvoltage protection	140Vac by internal supply voltage limiting		
Static stability	±1%		
Dynamic stability	±6%		
<b>MISCELLANEOUS</b>			
Dimensions - MS version	407x187x132mm	407x244x132mm	407x305x132mm
Weight	6kgs	8.1kgs	11kgs
Connection input/output	terminal block		
Operating temperature	from 0°C to +50°C		
Relative humidity	5 - 95% without condensing		
Shock / vibration	IEC 61373 Cat 1 A&B		
Cooling	Forced air		
Efficiency	82% at full load		
<b>STANDARDS</b>			
EN 60950-1	Information technology equipment – Safety		
EN 62368-1	Information and communication technology equipment. Safety requirements		
EN 61010-1	Safety requirements for electrical equip. for measurement, control, and laboratory use		
EN 61000-6-4	EMC: Generic standards - Emission standard for industrial environments		
EN 61000-6-2	EMC: Generic standards - Immunity for industrial environments		
EN 61000-4-2	EMC: Testing and measurement techniques - Electrostatic discharge immunity test		
EN 61000-4-3	EMC: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test		
EN 61000-4-4	EMC: Testing and measurement techniques - Electrical fast transient/burst immunity test		
EN 61000-4-5	EMC: Testing and measurement techniques. Surge immunity test		
EN 61000-4-6	EMC: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields		

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