

**FN 5000 Series**

**Frequency Converters Technical Specifications**  
10-800 kVA 3 Phase Input - 3 Phase Output (HF)



MODEL	5100	5120	5160	5200	5250	5300	5400	5500	5600	5800
Apparent Power(kVA)	100	120	160	200	250	300	400	500	600	800
Active Power (kW)	80	96	128	160	200	240	320	400	480	640

INPUT	
Voltage	115/200 Vac, 220/380 Vac, 254/440 Vac (3P+N+PE) or Optional Special Design W/O Neutral
Voltage Tolerance	± %5...%20 (Adjustable with %1 step)
Frequency	50 or 60 Hz
Frequency Tolerance	%5
THDi	<5%
Power Factor	0.99

OUTPUT	
Voltage	115/200 Vac, 220/380 Vac, 254/440 Vac (3P+N+PE) or Optional Special Design W/O Neutral
Voltage Regulation	<±1%
Frequency	60 or 50 Hz ±0.5%
Crest Ratio	3:1
Efficiency	>89% >90%
Power Factor	0,8
THDv	<3% Linear Load, <5% Non-Linear Load
Overload	%100<Load<%125 for 10 min., %125<Load<%150 for 1 min.
Short Circuit Protection	Electronic Protection, Fuse

GENERAL FEATURES	
Working Type	Static, Online, DSP Controlled
Topology	High Frequency PWM , IGBT Technology
Display	128x64 Graphic LCD
LED	6 pcs for Line, Charge, Battery, Inverter, Overload, Failure
Event Logs	Up to 500 Logged Event History

ENVIRONMENTAL	
Operating Temperature	0 ~ 40 °C
Storage Temperature	-25 ~ +55 °C
Relative Humidity	% 0-95 (Non-condensing)
Altitude (without derating)	<1000 m
Cooling	Forced Air Cooling
Protection Level	IP20 (Others on request)
Acoustic Noise	<65 dBA <70 dBA <74dBA <75dBA

PHYSICAL	
Dimesions (WxDxH)mm.	550X800X1335 68X1007X1747 780X1260 X1900 1600X868X1800 2190X801 X2029 3216X868X1800
Weight (kg)	290 315 490 540 870 1300 1370 1480 1690 1750

OPTIONS	
Functions	Parallel Operation, EPO Emergency Stop, Heater
Battery	60x12 Vdc Maintenance Free Dry Type
Isolation Transformer	Input and/or Output
Communication	Dry Contacts, SNMP, Modem, RS232, RS485

STANDARDS	
Harmonized Standards	EN 62040-1 (LVD), EN 62040-2 (EMC), EN 62040-3

**GENERAL SPECIFICATIONS**

- IGBT Rectifier and Inverter
- Input Current Harmonic < %5
- Silent Performance
- DSP Controlled
- Up to 0.99 Input Power Factor Correction
- Advanced LCD Panel
- Up to 500 Event History



**FREQUENCY CONVERTER**

Static frequency converters are used with the devices which cannot adapt to line frequency. Static converters are more economic and more technological solution than the conventional motor generator (Dynamic Converter) for these problems. Their efficiency is higher, but operation costs are lower. Frequency converter's dynamic response is very short, because of working with static components. They are DSP controlled and they can be developed according to customer needs. Battery can be added to system and converter can continue to work even in line failures. FN5000 Series converts 50/60 Hz Input Frequency to 60/50 Hz Output Frequency at desired voltage.