

**FN 3000**

**Series**

**Frequency Converters Technical Specifications**

10-300 kVA 3 Phase Input - 3 Phase Output (HF) 400 Hz



MODEL	3010	3015	3020	3030	3040	3060	3080	3100	3120	3160	3200	3250	3300
Apparent Power(kVA)	10	15	20	30	40	60	80	100	120	160	200	250	300
Active Power (kW)	8	12	16	24	32	48	64	80	96	128	160	200	240

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 Hz (On request 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	400 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)
Altide (without derating)	<1000 m
Cooling	Forced Air Cooling
Protection Level	IP20 (Others on request)
Acoustic Noise	<55 dBA <60 dBA <65 dBA <70 dBA

PHYSICAL	
Dimensions (WxDxH) mm.	350x795x1110 500x806x1213 550x800x1335 680x1007x1747 780x1250x1900 1600x862x1800
Weight (kg)	112 115 119 160 165 172 290 315 490 540 870 1300

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, EN 55011, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-2-2, MIL-STD-461, MIL-STD-1310G

**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
- CE Certificate



**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. FN3000 Series converts 50/60 Hz Input Frequency to 400 Hz Output Frequency at desired voltage and are used for mostly military systems.