SINESFC STATIC FREQUENCY CONVERTER 90-120kVA 50H7 or 60H7







- State of the art semiconductor technology (IGBT) Rectifier
- Power Factor Correction (PF=1)
- 95% efficiency
- 4 Quadrant Operation (better response of the system and safer operation for NBPT)
- Low input harmonics (<1.5% THDi), to comply with the strictest regulations.



- 4 Quadrant Operation (better response of the system and safer operation for NBPT)
- Vector control Inverter for better response and higher efficiency.



- Up to 94%
- No load losses: <2% of full Load.



- Enclosure Protection class up to IP54
- Over/under voltage at output
- Overload protections set at:
 - 120% for 600 seconds
 - 150% for 60 seconds
- 200% for 5 seconds
- Variable fan speed for internal temperature control
- Over temperature protection
- Short circuit proof by electric current limiting and shutdown.





- Communications MODBUS over RS232/RS485
- Remote control box



NORMS AND STANDARDS

- EMC EN61000-6-4 Electromagnectic compatibility -Generic emission standard
 - EN61000-6-2 Generic immunity standard
- SAFETY IEC 60529 Degrees of protection provided by enclosures (IP Code)
 - IEC 62477-1 Safety requirements for power electronic converter systems and equipment

ENVIRONMENTAL • Dry heat test (steady state) IEC 60068-2-2

- subclause 5.3
- Damp heat test IEC 60068-2-78 subclause 6 • Vibration test IEC 60068-2-6 subclause 6
- Salt mist test IEC 60068-2-52 subclause 6
- Dust and sand test Test Lc1 of IEC 60068-2-68

SPECIFICATIONS

INPUT

- 3 phase 380V400V/415V AC* | +10 -15%
- 50Hz / 65Hz | +10%
- Input current harmonics | <2% @ Full Load

OUTPUT

- 3 phase 200VAC / 400VAC / 480VAC | $\pm 1\%$
- 50/60Hz | ±1%*
- Overall Efficiency | up to 94%
- Max. Crest Factor | 3:1

RECTIFIER

- 4 Quadrant Operation
- AC Voltage Range | -10% +15%
- Efficiency | up to 97%
- Inrush Current | None
- Overall current limit | 150% 60 seconds

* Other voltages and frequencies available on request

* Other Electronic Overload limits available on request

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INVERTER

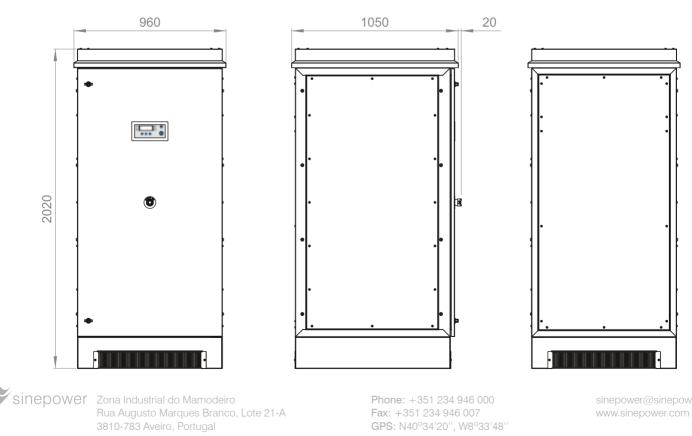
- Static Regulation 0 100% load | ± 1%
- Dynamic regulation 100% | 5%, recovering to 1% within 40ms
- Total harmonic distortion | < 3% (Linear Load)
- Electronic Limit Overload | 120%@600s; 150%@60s; 200%@5s*
- Frequency stability | ±0.01% Crystal Controlled
- Load power factor 0-1
- · Short circuit proof by electric current limiting and shutdown

ENVIRONMENTAL CONDITIONS

- **Cooling** | Forced air up to 40°C
- Ambient temperature (min/max) | -40°C to +40°C
- Relative humidity (min/max) | 0% to 90% without condensation
- Pollution degree 2
- OVC (Overvoltage Category) | 3
- Altitude | Up to 2000m
- Sound power level | Lw <= 65dba according to ISO 3747:2010



TECHNICAL DRAWING



Environments and decorative details in this catalogue have an informative purpose only. Result of Sinepower investment in research and development, the range can be subject of improvements. Therefore we reserve the right to change features and equipment in this catalogue without notice.

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