

MFC

SERIES

10-1000 kVA **3:3**

PHASE

FREQUENCY CONVERTER



DATA CENTER



MEDICAL



TRANSPORT



INDUSTRY



EMERGENCY



TOWER



POWER FACTOR



SERVICE



FEATURES

- True Three Level Rectifier & Inverter Technology
- Output Power Factor 0.9 (1 Optional)
- IGBT PWM Rectifier & Inverter Technology
- DSP Control
- Ultra High Efficiency up to 96%
- Low Input Current THD (<3%)
- High Input Power Factor (>0.99)
- Wide Input Voltage Range (Optional)
- Advanced Battery Management
- Short Circuit and Overload Protection
- Parallellable Modules up to 8 units
- 500 Real Time Event Log with Detailed Parameters
- Static&Manual Bypass Operation
- Overload and Short Circuit Protection
- Small Footprint and Easy Maintenance
- Advanced Communication Capabilities
- Perfect Generator Compatibility
- EPO (Emergency Power Off)
- Capacitive Kit Option
- Auto Restart

CERTIFICATES



The LevelUps Series is certified by TÜV SÜD with regard to product safety (EN 62040-1)



The LevelUps Series is attested by Bureau Veritas with regard to performance (EN 62040-3)



| MODEL | | 10kVA | 15kVA | 20kVA | 30kVA | 40kVA | 60kVA | 80kVA | 100kVA | 120kVA | 160kVA | 200kVA | 250kVA | 300kVA | 400kVA | 500kVA | 600kVA | 800kVA | 1000kVA | | |
|--------------------------------|--------|---|---------|---------|---------|---------|---------|---------|--------|--------|------------------|--------|--------|--------|--------|--------|--------|--------|---------|--|--|
| Capacity | | 10kVA | 15kVA | 20kVA | 30kVA | 40kVA | 60kVA | 80kVA | 100kVA | 120kVA | 160kVA | 200kVA | 250kVA | 300kVA | 400kVA | 500kVA | 600kVA | 800kVA | 1000kVA | | |
| Power Watt | | 9kW | 13.5kW | 18kW | 27kW | 36kW | 54kW | 72kW | 90kW | 108kW | 144kW | 180kW | 225kW | 270kW | 360kW | 450kW | 540kW | 720kW | 900kW | | |
| INPUT | | | | | | | | | | | | | | | | | | | | | |
| Nominal Voltage | | 400 VAC 3 Phase +N | | | | | | | | | | | | | | | | | | | |
| Voltage Tolerance | | -20% +15% | | | | | | | | | | | | | | | | | | | |
| Frequency Tolerance | | 50 / 60 Hz ±10% (Selectable) | | | | | | | | | | | | | | | | | | | |
| Power Factor | | >0,99 | | | | | | | | | | | | | | | | | | | |
| Total Harmonic Distortion | | THDi <3% | | | | | | | | | | | | | | | | | | | |
| OUTPUT | | | | | | | | | | | | | | | | | | | | | |
| Power Factor | | 1.0 | | | | | | | | | 0.9 (1 Optional) | | | | | | | | | | |
| Nominal Voltage | | 380/400/415 VAC 3 Phase + N | | | | | | | | | | | | | | | | | | | |
| Voltage Tolerance | | Static ±1, Dynamic ±3 | | | | | | | | | | | | | | | | | | | |
| Frequency Tolerance | | 50Hz / 60Hz ±0,01% (Battery Mode) | | | | | | | | | | | | | | | | | | | |
| Output THD | | Linear Load <1% / Non-Linear Load <3% | | | | | | | | | | | | | | | | | | | |
| Crest Factor | | 3:1 | | | | | | | | | | | | | | | | | | | |
| Overload Capacity* | | At 125% Load 10min, at 150% Load 1min | | | | | | | | | | | | | | | | | | | |
| Efficiency (Online Mode) | | 96% | | | | | | | | | | | | | | | | | | | |
| Efficiency (Eco Mode) | | Up to 99% | | | | | | | | | | | | | | | | | | | |
| BYPASS | | | | | | | | | | | | | | | | | | | | | |
| Nominal Voltage | | 380/400/415 VAC 3 Phase + N | | | | | | | | | | | | | | | | | | | |
| Voltage Tolerance | | 15% (Configurable from 10% to 30%) | | | | | | | | | | | | | | | | | | | |
| Frequency Tolerance | | ±5 (Selectable) | | | | | | | | | | | | | | | | | | | |
| ENVIRONMENT | | | | | | | | | | | | | | | | | | | | | |
| Running Temperature | | For UPS 0°C/+40°C For Battery +15°C/+25°C | | | | | | | | | | | | | | | | | | | |
| Storage Temperature | | For UPS -15°C/+45°C For Battery 0°C/+30°C | | | | | | | | | | | | | | | | | | | |
| Protection Class | | IP20 | | | | | | | | | | | | | | | | | | | |
| Humidity | | 0-95% Without Condensation | | | | | | | | | | | | | | | | | | | |
| Altitude | | <1000m, Correction Factor 1. <2000m, Correction Factor >0.92, <3000m; Correction Factor >0.84 | | | | | | | | | | | | | | | | | | | |
| Noise Level | | <53 dBA | <55 dBA | <60 dBA | <65 dBA | <72 dBA | <74 dBA | <75 dBA | | | | | | | | | | | | | |
| COMMUNICATION | | | | | | | | | | | | | | | | | | | | | |
| Communication Port | | RS232 (Standart), RS485, MOD-Bus, J-Bus, Web, Tel-Net, GPRS, CAN-Bus, SNMP (Option) | | | | | | | | | | | | | | | | | | | |
| STANDARDS | | | | | | | | | | | | | | | | | | | | | |
| Quality | | ISO 9001, ISO 14001, ISO 18001, TSE-HYB | | | | | | | | | | | | | | | | | | | |
| Performance | | EN62040-3 (VFI-SS-111, Bureau Veritas Certified) | | | | | | | | | | | | | | | | | | | |
| EMC/LVD | | EN62040-2, EN62040-1, EN60950, (TÜV SÜD Certified) | | | | | | | | | | | | | | | | | | | |
| DIMENSIONS & WEIGHT | | | | | | | | | | | | | | | | | | | | | |
| Cabinet Dimensions (mm) | Width | 490 | | | | | 763 | | | 810 | | | 830 | | | 1250 | | | 2345 | | |
| | Depth | 805 | | | | | 771 | | | 820 | | | 870 | | | 845 | | | 485 | | |
| | Height | 1190 | | | | | 1555 | | | 1705 | | | 1800 | | | 2102 | | | 2003 | | |
| Net Weight (kg) | 100 | 100 | 107 | 118 | 125 | 260 | 270 | 350 | 355 | 450 | 460 | 470 | 850 | 850 | 850 | 1740 | 1740 | 1990 | | | |
| Packaging Dimensions (mm) | Width | 600 | | | | | 600 | | | 900 | | | 900 | | | 1370 | | | 2445 | | |
| | Depth | 900 | | | | | 900 | | | 970 | | | 970 | | | 870 | | | 585 | | |
| | Height | 1400 | | | | | 1400 | | | 2040 | | | 2040 | | | 2120 | | | 2250 | | |
| Gross Weight (kg) | 140 | 141 | 145 | 164 | 185 | 353 | 361 | 376 | 387 | 398 | 491 | 500 | 890 | 890 | 890 | 1820 | 1820 | 2070 | | | |

* under certain conditions.

3 Phase in / 1 Phase Out Version is Available. (10 to 30kVA)

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