

## Reliable frequency transformation

3, 6 kVA/kW



### FEATURES

- IGBT 3-level topology
- Output Power Factor 1.0, + Critical Loads
- State-of-the-art DSP Digital Signal Processor
- Active Power Factor Corrector (APFC), input P.F. up to 0.99
- Output with Isolation Transformer
- Wide input range (110 ~ 295V)
- Optional battery backup
- Smart fans, lower noise and longer life
- User-friendly interface LCD display and UPS status LEDs
- Communications RS232, USB, smart slot (SNMP, dry contacts, modbus)

### Complete protection



Blackouts



Spikes



Harmonics



Transient



Frequency variation



Sags/swells



Surges



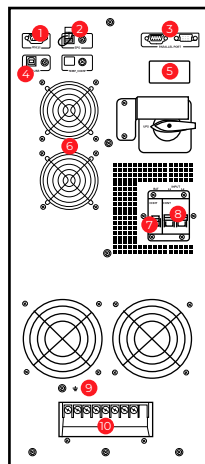
Under-Voltage



Noise

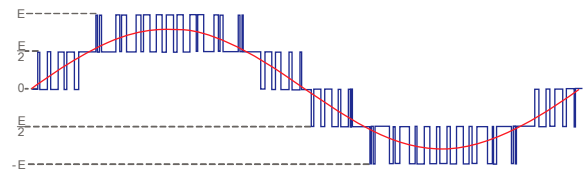
## Converter Rear Panel

- 1 RS232 communication port
- 2 Emergency Power Off switch (EPO)
- 3 Parallel ports
- 4 USB communication port
- 5 Intelligent slot (SNMP, dry contact, Modbus)
- 6 Fans
- 7 Battery breaker
- 8 Input breaker
- 9 Ground terminal
- 10 Input/Output/battery terminal block



## 3-level topology

Frequency converters include a 3-level IGBT topology, increasing their operating efficiency.



## Applications

Recommended for equipment with 50 Hz frequencies, such as PLCs, power supplies, variable speed drives, control equipment and more.

## Frequency Converter

| MODEL                                                        | FC3K                                                                           | FC6K                  |
|--------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------|
| Power capacity                                               | 3 kVA / 3kW                                                                    | 6 kVA / 6 kW          |
| Topology (Online)                                            | Double conversion                                                              |                       |
| INPUT                                                        |                                                                                |                       |
| Nominal voltage                                              | (L1, L2 + GND)<br>208/220/230/240 VAC                                          |                       |
| Voltage range                                                | (110 ~ 295) VAC                                                                |                       |
| Frequency                                                    | (40 - 70) Hz<br>50/60 Hz (auto-sensing)                                        |                       |
| Power factor                                                 | ≥ 0.99 typical                                                                 |                       |
| Total Harmonic Distortion (THDi)                             | ≤ 3%                                                                           |                       |
| Input connection type                                        | Hardwire terminal block (L1, L2 + GND)                                         |                       |
| OUTPUT                                                       |                                                                                |                       |
| Output voltage 240/120V default<br>(180° phase displacement) | *208/220/230/240 VAC @ L1-L2<br>110/115/120 VAC @ L1-N1, L2-N2                 |                       |
| Voltage regulation                                           | ±1%                                                                            |                       |
| Frequency (Battery mode)                                     | 50 Hz ±0.1 Hz                                                                  |                       |
| Power factor                                                 | 1.0                                                                            |                       |
| Waveform                                                     | Pure sine wave                                                                 |                       |
| Total Harmonic Distortion (THDv)                             | ≤ 1%                                                                           |                       |
| Overload capacity                                            | 105% ~110% @ 10min, 110% ~ 125% @ 1min, 126% ~ 150% @ 30 sec                   |                       |
| Output type connection                                       | Iso Transformer;<br>Hardwire terminal block (L1, N1, L2, N2,+GND)              |                       |
| Efficiency                                                   | 90% typical                                                                    |                       |
| BACKUP TIME (Optional)                                       |                                                                                |                       |
| Battery type                                                 | Lead Acid Batteries (VRLA), maintenance free                                   |                       |
| Backup time 50% load                                         | 40 min                                                                         | 18 min                |
| Internal battery                                             | (9Ah12V x 20)                                                                  | (9Ah12V x 20)         |
| Backup time 100% load                                        | 18 min                                                                         | 7 min                 |
| Internal battery                                             | (9Ah12V x 20)                                                                  | (9Ah12V x 20)         |
| External battery Bank connector                              | Hardwire terminals                                                             |                       |
| SYSTEM                                                       |                                                                                |                       |
| Parallel redundancy                                          | 4 units max.                                                                   |                       |
| Display & LED Indicators                                     | LCD + LED Indicators integrated + Audible alarms                               |                       |
| ENVIRONMENT                                                  |                                                                                |                       |
| Noise                                                        | ≤ 55dB @ 3.8 ft (1 m)                                                          | ≤ 58dB @ 3.8 ft (1 m) |
| Humidity                                                     | 0 - 95% (non-condensing)                                                       |                       |
| Operation Temp.                                              | (32 ~ 104)°F ; (0 ~ 40) °C                                                     |                       |
| IP Level                                                     | IP 20                                                                          |                       |
| PHYSICAL                                                     |                                                                                |                       |
| Dimensions<br>(Width x Depth x Height)                       | (10.31 x 28.03 x 28.81) in<br>(262 x 712 x 732) mm                             |                       |
| Weight (with batteries)                                      | 249.12 lb. /113 Kg                                                             | 282.19 lb. / 128 Kg   |
| MANAGEMENT                                                   |                                                                                |                       |
| Communication ports                                          | RS232, USB, EPO, parallel ports, Intelligent slot (SNMP, dry contacts, Modbus) |                       |
| SNMP card                                                    | Optional accessory                                                             |                       |
| CONFORMITY & STANDARDS                                       |                                                                                |                       |
| Safety Certification                                         | IEC, CE                                                                        |                       |

\*\*Product specifications are subject to change without further notice  
 \*USA-V2508-REV1.00