The Frequency Converter is designed in PWM (Pulse Width Modulation) technique. An unregulated rectifier with transformer and multi-pulse rectification generates the DC-link voltage. This specially designed and high reliable rectifier not only generates a sinusoidal input current, but also generates a nearly unity power factor. The three phase Inverter stage is today either built up by IGBT’s or MOS-FET’s as power switches. High switching frequencies require only small L/C output filtering and enable quick regulation behavior. An output transformer is used for galvanic separation and voltage adaptation.
**Electrical Specifications**

**Input**
- Voltage: 440 V, 3-ph
- Frequency: 60 Hz
- Quality of Mains: Acc. to BV 30, Annex f, STANAG 1008 Edition 8 and acc. to MIL-STD 1399, Section 300 A, Type I

**Output**
- Voltage: 115 V, 3-ph (Other Voltage on request)
- Quality of Output: ± 0.5% at voltage sensing point and unsymmetrical load of 50%, or ± 3% at voltage sensing point and unsymmetrical load of 100% (one phase interrupted)
- Static Tolerance: ± 0.5% at voltage sensing point and unsymmetrical load of 50%, or ± 3% at voltage sensing point and unsymmetrical load of 100% (one phase interrupted)
- Voltage Unbalance: ≤ 1% at voltage sensing point and unsymmetrical load of 50%, or ≤ 3% at voltage sensing point and unsymmetrical load of 100% (one phase interrupted)

- Frequency: 400 Hz
- Frequency Tolerance: < 0.01%
- Power: 15 kVA
- Power Factor: 0.8 lagging to 1.0 to 0.8 leading
- Efficiency: > 92% at 100% load
- Short-Circuit Current: 2 x Inom for 10 seconds

**Environmental Specification**
- Temperature Range: -5°C to +45°C (operation), -25°C to +70°C (storage)
- Humidity: ≤ 98%, non condensing
- Airborne Noise: Approx. 58 dB (A)
- Shock: Acc. to BV 043 (85)
- Vibration: Acc. to BV 044 (87)
- EMC: Acc. to MIL-STD 461 E, CE 101, CE 102, RE 102
- Protection: IP 23 acc. to DIN 40050

**Physical Characteristics**
- Dimensions: 1200 x 610 x 525 (HxWxD) mm without shock mounts
- Weight: 250 kg, ± 5%

**Design Characteristics**
- Indicators: Converter stand-by/online, Input voltage out of range, Output over current, Air inlet temperature, Air flow (fan supervision), 7-segment fault display
- Controls: Start/Stop, Lamp test, Remote control
- Monitoring: Time counter, Output Voltage and Current
- Cooling: Self-cooling by fans