Specifications

Input Connection	
Input Voltage (U1, V1, W1)	208/220/230/240Vac 1-phase or 3-phase +/-10% 380/400/415/440/460/480Vac 3-phase +/-10%
Input Frequency	48 to 63 Hz, maximum rate of change 17%/second
Line Imbalance	Max +/-3% of nominal phase to phase input voltage
Fundamental Power Factor	0.98 (at nominal load)
Connection	Terminals U1, V1, W1 (1-phase L, N)
Output Connection	
Output Voltage	0 to U1, 3-phase symmetrical
Output Frequency	0 to 500 Hz
Frequency Resolution	0.01 Hz
Continuous Current	Rated I_{2N} for f_S=4 kHz
Short Term Overload Capacity	1.5 * I_{2N} (at least 1 min / 10 min)
Field Weakening Point	30 to 500 Hz
Switching Frequency	4, 8 or 12 kHz (derate I_{2N} to 80% for 8 kHz, derate ambient temp to 30ºC and I_{2N} to 65% for 12 kHz), (16 kHz, v1.31b+)
Acceleration & Deceleration Time	0.1 to 1800 s
Efficiency	98% at nominal power level
Short circuit withstand rating	100,000 AIC
Connection	Terminals U2, V2, W2
Ambient Conditions, Operation	
Air Temperature	-10° (14°F) to 40°C (104°F), no frost allowed, above 40°C the maximum output current is de-rated 1% for every additional 1°C (up to 50°C (122°F) maximum limit)
Relative Humidity	5 to 95%, no condensation allowed, maximum relative humidity is 60% in the presence of corrosive gasses
Contamination Levels	
IEC	60721-3 (-1, -2, -3)
Chemical Gasses	3C2 (operation)
Solid Particles	3S2 (operation)
Installation Site Altitude	0 to 1000 m (3300 ft) above sea level. At sites from 1000 m to 2000 m (3300 ft to 6600 ft) above sea level, the maximum power is de-rated 1% for every additional 100 m (330 ft).
Sinusoidal Vibration	IEC 60721-3-3 (consult manual)
Shock	IEC 60068-2-27, ISTA 1A (consult manual)
EMC Directive	IEC/EN 61800-3, 61800-5-1, 60204-1 (consult manual)

Specifications (continued)

Ambient Conditions, Storage & Transportation (in Protective Shipping Package)

Air Temperature	-40° to 70°C (-40° to 158°F)
Relative Humidity	Less than 95%, no condensation allowed
Atmospheric Pressure	70 to 106 kPa (10.2 to 15.4 PSI)

Cooling Information

Cooling Method	Internal Fan except for Frame R0
Power Loss	Approximately 3% of rated power

Analog Inputs

One (1) Programmable Analog Input	
Current Reference	0 (4) to 20 mA, R_{in} = 100 ohm
Voltage Reference	0 (2) to 10 V, R_{in} > 312 kohm
Resolution	0.1%
Accuracy	±2% (1% - adjust parameter 13)

Reference Power Supply (available Q2, 2007)

Voltage	+10 VDC, ±1% at 25°C (77° F)
Maximum Load	10 mA
Applicable Potentiometer	1 kohm to 10 kohm

Digital Inputs

Five (5) Programmable Digital Inputs	
Signal Level	12-24 VDC, (10 V Logic 0)
Input Current	15 mA at 24VDC
Input Updating Time	8 ms ±1ms
Internal 24 VDC Supply for Digital Inputs	
Voltage	24 VDC, ±10%
Maximum Current	200 mA

Relay Outputs

One (1) Programmable Relay Output	
Type	NO + NC
Switching Voltage	12-250VAC/30VDC
Maximum Switching Current	0.5A / 30VDC; 5A / 230VAC
Maximum Continuous Current	I_C = 2 Amps RMS