



"The Right Control  
for Your Application"



## KBE2 Series Inverters

<b>1/4 Thru 1/2 HP</b>	<b>110 - 120 VAC</b>	<b>1 Phase - 50/60 HZ</b>
<b>1/4 Thru 3 HP</b>	<b>200 – 240 VAC</b>	<b>1 or 3 Phase - 50/60 HZ</b>
<b>1 Thru 3 HP</b>	<b>380 – 460 VAC</b>	<b>3 Phase - 50/60 HZ</b>

**Applications:** Variable torque, constant torque or constant horsepower applications.  
 Original equipment manufacturers (OEM), new installations and replacements.

### Design Specifications

- Microprocessor controlled PWM output
- Panel Mount or NEMA 4 enclosure
- 4-16kHz carrier frequency (rated at 12kHz)
- 0-200Hz output frequency
- Dynamic braking
- 0.1Hz frequency resolution (digital)
- Free run or ramp stop
- DC injection braking
- Torque compensation
- Analog meter output

### Operating Conditions

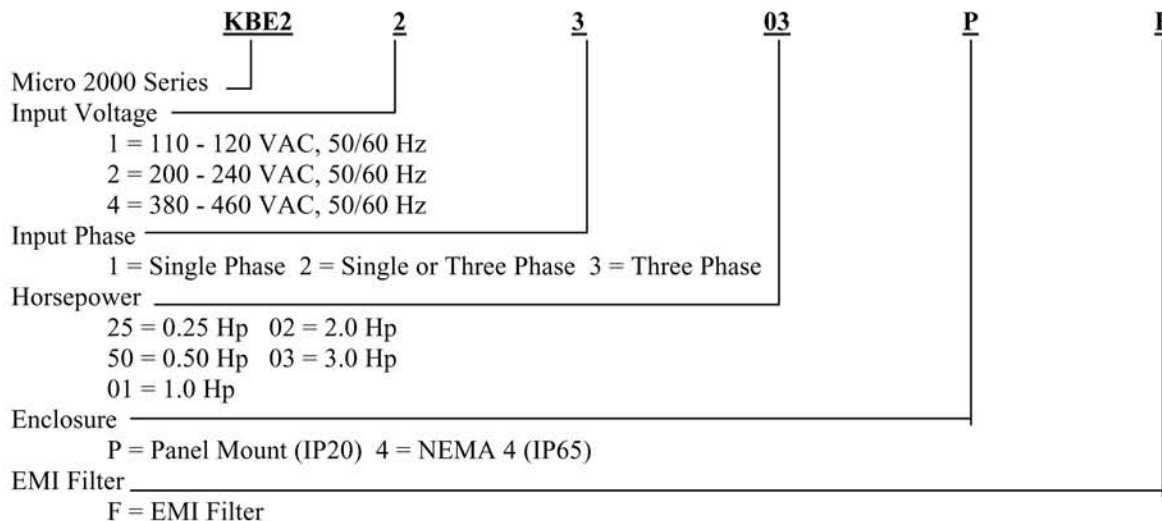
- Continuous duty
- Humidity - 95% max RH
- Vibration - Under 1.0G
- 50/60Hz input frequency
- -10° C to +50° C ambient temperature

### Protection Features

- Instantaneous over current
- 150% overload for 1 minute
- Electronic thermal overload
- Over voltage
- Under voltage
- Ground fault
- Current limit
- Output short circuit
- Stall prevention
- Momentary power loss
- Heat sink overheat

### Operator Keypad

- Digital speed control and programming
- 7 Segment, LED display
- Start / stop control
- Parameter setting
- Fault tracking



# Specifications

	Model: E2-□□□□ -x-x	1125	1150	2125	2150	2201	2202	2203	4301	4302	4303	
<b>General Specifications</b>	Rated Motor HP (CT)	1/4	1/2	1/4	1/2	1	2	3	1	2	3	
	Rated Motor Power (KW)	0.2	0.4	0.2	0.4	0.8	1.5	2.2	0.8	1.5	2.2	
	Rated Output Current ( A )	1.4	2.3	1.4	2.3	4.2	7.5	10.5	2.3	3.8	5.2	
	Rated Capacity ( KVA )	0.5	0.9	0.5	0.9	1.6	2.9	4.0	1.7	2.9	4.0	
	Weight ( lbs. )	1.54	1.59	1.68	1.70	1.76	3.70	3.88	3.70	3.88	4.13	
	Input Voltage	1Ø 110 ~ 120V (-15% ~ +10%)		1Ø 200 ~ 240V (-15% ~ +10%)			1/3Ø 200 ~ 240V (-15% ~ +10%)		3Ø 380 ~ 460V (-15% ~ +10%)			
	50/60Hz (± 5%)		50/60Hz (± 5%)			50/60Hz (± 5%)		50/60Hz (± 5%)				
Output Voltage	3 Phase, Proportional to Output frequency											
Control Method	PWM Sinusoidal Wave Control											
Input Signal Type	PNP (Source) Input (External 24VDC Allowed)											
Carrier Frequency	4 ~ 16KHz / Rated at 12 kHz											
Frequency Control Range	0.1 ~ 200 Hz											
Frequency Setting	Keypad: Up and Down Arrow Keys											
Frequency Resolution	Digital: 0.1Hz (1~99Hz), 1Hz (100~200Hz) / Analog: 1Hz/60Hz											
Frequency Setting Signal	( 0 - 10 VDC ) ( 4 - 20mA ) ( 0 - 20mA )											
Accel./ Decel. Time	0.1 - 999 Sec.											
Braking Torque	20%					20%~100% (Built-in Braking Transistor )						
V/Hz Pattern	6 Patterns											
<b>Control Characteristics</b>	Instantaneous Over Current	200% Rated Current (Approx.)										
	Overload	150% / 1 Min.										
	Motor Overload	Electronic Thermal Overload Relay										
	Over Voltage	DC Bus > 410V							DC Bus > 800V			
	Under Voltage	DC Bus < 200V							DC Bus < 400V			
	Ground Fault	Electronic Protection										
	Current Limit	Electronic Protection										
	Output Short Circuit	Electronic Protection										
	Stall Prevention	Accelerate / Decelerate / Constant Speed										
	Momentary Power Loss	0 - 2 Seconds: Inverter Can Be Restarted Using The Speed Search Feature										
Heat Sink Fin Overheat	Protected by Thermostat											
<b>Protection Functions</b>	Operation Signals	Start/Stop, Fwd/Rev Operation by Keypad or Hardwire Contact										
	Emergency Stop	Interrupts Inverter Output										
	Multifunction Inputs	3 Preset Speeds, Jog, Emergency Stop, External Base Block, Reset										
	Multifunction Output	Run Mode, At Target Speed, Fault										
	Torque Control	Manual Torque Boost										
	Fault Output	250VAC 1A, 30VDC 1A or Less										
	Built-in Function	Frequency Upper / Lower Limit; DC Injection Braking; Manual Torque Boost; Auto Restart; Reverse Lockout; Stop Method Select; Fault Logging, Torque Compensation, Carrier Frequency Adjust. ( 4 ~ 16KHz )										
	Digital Operator Keypad	3 Digit, 7-Segment LED Display (Frequency / Parameters / Data / Fault Record / Program Version)										
Analog Output Monitor	Analog Output ( 0 - 10V ), Output Frequency											
Location	Indoor ( Protected from Corrosive Gas and Dust )											
Ambient Temperature	-10° C ~ 50° C ( 14° F ~ 122° F )											
Humidity	0 - 95% ( Non Condensing )											
Vibration	Under 1.0G ( 9.8m/s <sup>2</sup> )											
EMI Specification	W/O Filter					(Class A Filter Built-in)						
Enclosure	Panel Mount or NEMA 4											
Installation	Mounting Screws or Optional DIN Rail											
Certification	UL / cUL / CE											



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