



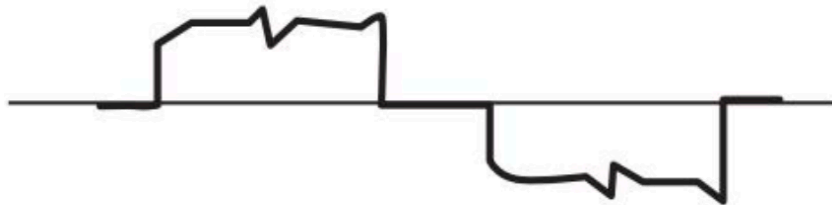
SINE-WAVE DRIVER MOMOTARO SERIES

CORELESS MOTOR CO.,LTD

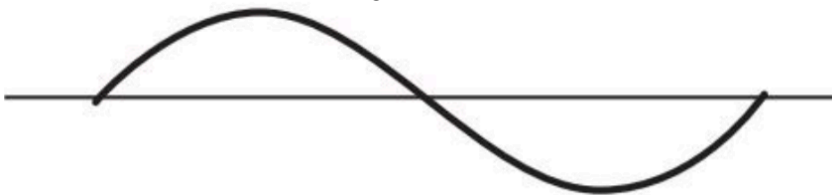
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Coreless Motor Co.,Ltd: www.cls-motor.com
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120° square wave energization



Sine wave energization



SUPERIORITY OF SINE WAVE

- Make motor more efficiency
- Low noise, low vibration

MAKE MOTOR MORE EFFICIENCY



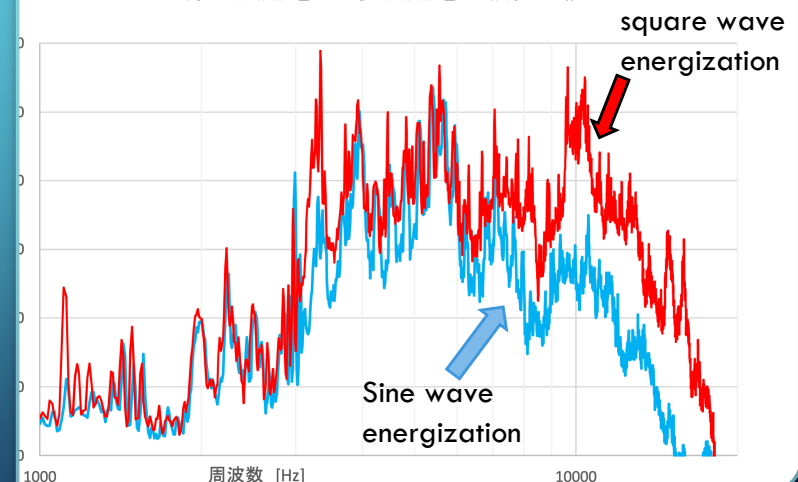
The motor efficiency increases as the energization angle to the motor (electrical half cycle) approaches 180 degrees. 180 degree conduction drive is described as "sine wave conduction drive" or "sine wave conduction drive". Noise, vibration, and torque ripple improve as the conduction angle approaches 180 degrees.

LOW NOISE, LOW VIBRATION

While the motor current waveform of sine wave energization drive is smooth, the current waveform is distorted in rectangular wave energization drive. It is a relative comparison of noise levels, but sine wave energization drive does not have noise level spikes like rectangular wave energization drive, resulting in lower noise and lower vibration.

Quiet

矩形波通電と正弦波通電の騒音比較



SENSORLESS VECTOR CONTROL IS POSSIBLE

- This is an advanced technology that can efficiently control the motor rotation from low speed to high speed. In particular, it is said that smooth motor control at low speed cannot be realized without vector control at this time.
- Wiring for the sensor is unnecessary (parts cost and construction cost can be suppressed)

Efficiency

- Rectangular wave < Sine wave with sensor < Sensorless sine wave

VECTOR CONTROL IS CURRENTLY THE STRONGEST CONTROL METHOD



TARGET CUSTOMER

For those who want to

- ✓ improve efficiency as much as possible
- ✓ be a little quieter
- ✓ make it smaller
- ✓ make it lighter

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