NFOOP220

NFO Sinus Optimal, frequency converter

Very energy-efficient AC frequency converter for speed control of electric motors for machines, fans and pumps. Choose NFO Sinus Optimal® and save up to 70% energy.



PRODUCT BENEFITS

- Simple
- Low-sound
- Safe

Principles of operation

Function, NFO Sine Optimal®
The NFO Sinus Optimal® frequency converter is based on Swedish patented technology that makes it possible to control the speed of electric motors without electromagnetic interference, which provides a number of special benefits.

The sinus-formed voltage makes the converter Intrinsic EMC, i.e. interference-free in itself.

SIMPLE
The installation is simple and inexpensive because you do not need screened cables, EMC filters or other EMC-classified installation accessories. For energy efficiency improvement (ROT projects), you can use existing cables even if they are unshielded, making installation work quick and easy.

The distance between the motor and the drive can be long, as the only border on the cable length is its resistance and voltage drop. Therefore, the converter can be placed wherever you want it, even if the distance to the motor is several hundred metres. This opens up new flexible solutions in challenging environments.

LOW-NOISE
The NFO Sinus Optimal® is interference-free and therefore does not create electromagnetic interference in technical equipment in the surroundings. The converter meets the strictest requirements of the EMC directive and can be used in all environments – from homes, industry to medical equipment.

With the NFO Sinus Optimal® you also avoid disturbing noise coming from the motor thanks to the switching frequencies, resulting in a low-noise environment. SAFE NFO Sinus® creates no bearing current. This gives the motor a longer service life and NFO Drives gives a five-year warranty on the bearings in new motors. No earth currents are generated and therefore residual current devices can be used for residential homes (30mA), as the leakage current is max. 2mA. This provides a high level of electrical safety.

HIGH PRECISION
The motor's RPM can be controlled with high precision and full torque, right from the start as well as at low RPM. The drive also has an energy-saving function that makes it possible to be extra energy-efficient at low motor load, such as in fans that sometimes run at low RPM. The NFO Sinus Optimal® frequency drive is the optimum choice when you want to save energy, quietly and safely.

Product description

With the NFO Sinus Optimal® frequency converter, you can speed control electric motors for machines, fans and pumps, saving up to 70% energy. An investment often pays for itself in a year.

The NFO Sinus Optimal® frequency converter is unique in that it controls the motor with a patented technology that makes it interference-free, providing a wide range of benefits.

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Main characteristics

SIMPLE

- No shielded cables
- No complicated installation requirements
- No restrictions on the distance between motor and drive

LOW-NOISE

- No electromagnetic interference
- No annoying shifting noises

SAFE

- No EMC conditions
- No bearing current
- No earth current

Dimensional data

H (mm)	390
L (mm)	190
P (mm)	160
Empty weight (kg)	7

Electrical datas

Max. power	2,2
Protection rating	IP55
Continuous output current	1,0 - 4,9
Maximum output current	5,8

Regulatory data

EMC emission	EN 55011:2016, EN 55011/ A1:2017, EN 61000-3-3:2013
EMC Immunity	EN 61000-6-2:2005, EN 61000-4-2, -3, -4, -5, -6, -11
Low Voltage Directive (LVD)	EN 61800-5-1:2017, EN 61800-5-1/A1:2017