

STIENEN OFFICIAL PARTNER OF



FC-102

# FREQUENCY CONVERTER



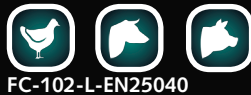
Pre-programmed for rapid and smooth commissioning

- Pre-programmed with the optimum user settings; no unwanted ventilation downtime
- Robust IP55 housing and high-quality 3C3 coating for optimum protection
- High overall and operational reliability
- Maintenance free
- Ensures enormous energy savings
- Worldwide 24/7 service

## STIENEN AGRI AUTOMATION

Stienen is a leading family company (1977) which has its roots in livestock farming. It is in our nature to be very close to our end users. We are a global supplier of innovative automation solutions for poultry and pig houses. Our climate solutions, automation systems, management software and the accompanying peripheral equipment are all developed and produced in-house.

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FC-102-L-EN25040





# FC-102 Frequency converter

- Optimum climate control in the house
- More efficient business operations
- Improved business results



## PRE-PROGRAMMED

The FC-102 is pre-programmed by Stienen BE. All parameters have been pre-set for use with Stienen equipment. This means that it will only take a few minutes to commission this frequency converter. Furthermore, this frequency converter can directly communicate with the new generation of Stienen controls.

## IDEAL CLIMATE

FC-102's continuous control creates an optimum climate in all situations. Continual fan speed adjustment using the FC-102 prevents major temperature differences. This saves energy whilst also reducing noise, wear and maintenance, and thus improving operational reliability.

## OPTIMUM PROTECTION

The IP55 or IP66 versions provide the best protection possible against moisture and dirt. By default, the electronics of the FC-102 are class 3C3-coated. As a result, the FC-102 does not require any maintenance. This does away with the need to prematurely replace capacitors or the actual cooling fan: their lifetime is identical to that of the frequency converter. The integrated DC coils suppress any harmonics disturbances.

## COST SAVING

Reduced energy consumption means immediate cost savings: reducing the speed by 20% lowers the energy consumption by at least 50%. The FC-102 can drive several motors at a time. If a substantial number of fans is used, this enables the number of converters to be reduced and costs to be saved. The FC-102's continuous speed control is its main energy saving feature.

## HIGH RELIABILITY

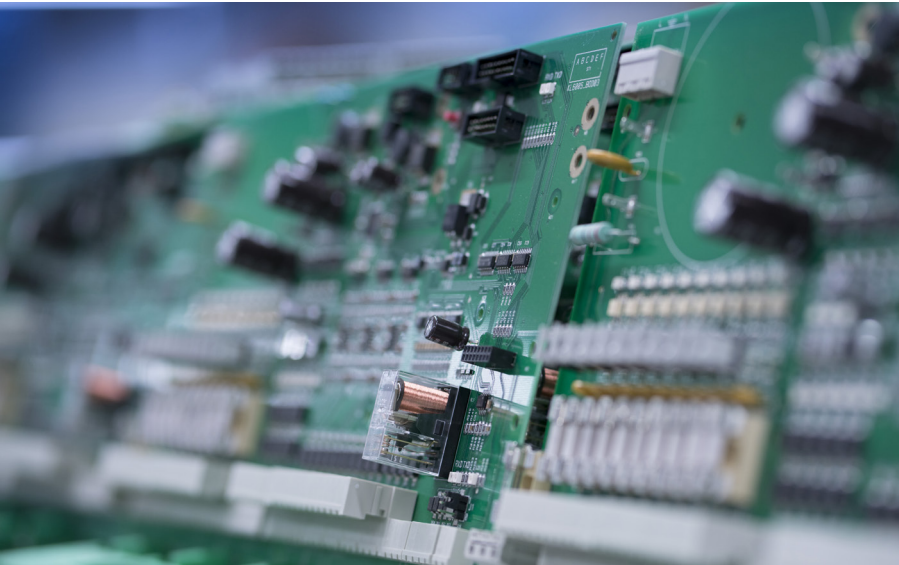
The FC-102 is excellently suited to applications where ventilation failures might cause enormous material loss, especially in the livestock and greenhouse sectors. If any phases are down, this will be detected; likewise, if the maximum temperature in the actual converter is exceeded, this will be compensated for by an adjustment in the drive performance. In this way, problems will be signalled well in time to automatically adjust the fan speed and prevent the ventilation system from failing completely. The FC-102 offers optimum protection against peak voltages, e.g. if lightning strikes.

# SPECIFICATIONS FC-102

### GENERAL

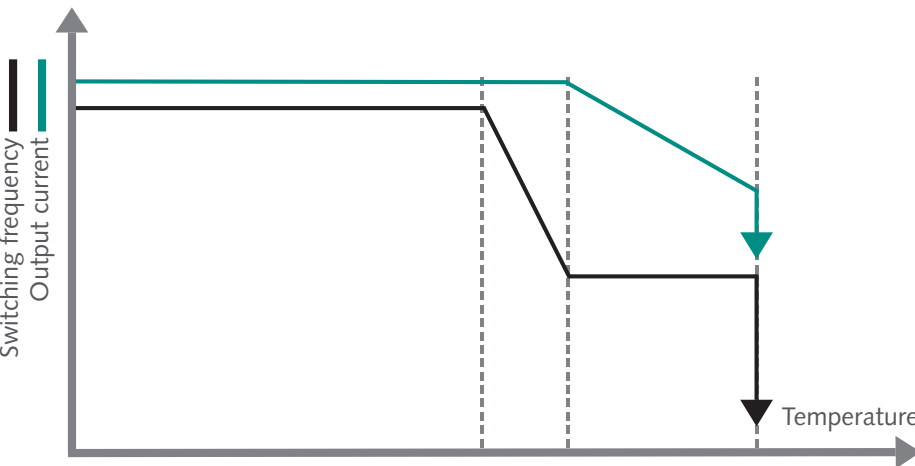
Power range	1,1 kW - 1,2 MW
Supply voltage	3 x 200-240 V of 3 x 380-500 V of 3 x 525-690 V
Output voltage	0-100% of the supply voltage
Analog inputs	2 x -10 to +10 V or 0/4 to 20 mA
Digital inputs	6, two of which can be used as dig.outputs
Analog outputs	1 x 0/4 tot 20 mA
Relay outputs	2 X 240 Vac, 2A én 400 Vac, 2A
Communication	FC protocol, N2 Metasys, FLN Apogee, Modbus RTU
Motor cable length	Max. 150 m
Standard provided with integrated RFI filters and DC coils	

## COATING



Coated electronics for high operational reliability and a longer service life.

## OPERATIONAL RELIABILITY



A VLT® converter compensates for over-temperature for a short period by changing the switching frequency and reducing the output current to thus keep the fan drive, i.e. ventilation, running.