



Frequency converters type FIS-13

Frequency converter

Application

- The **FIS-13** is a variable frequency inverter for controlling low power three-phase motors. It is designed to be cost-effective, combines good looks with robustness, reliability and is easy to use.
- The **FIS-13** provides solutions to fulfill nearly any inverter requirement in the power range between 0.37 and 4.0 kW. It has only fourteen standard parameters to adjust in its basic form. For the more advanced user the extended parameter set gives access to powerful additional functionality.
- **FIS-13** is supplied with an internal EMC filter.

Composition

- Single phase input/ three phase output (1x230V / 3x230V)
- Frequency output: 0 - 500 Hz
- Frequency input: 48 - 62 Hz
- Voltage input: 200-240 ± 10% 1 phase (0.37 - 4kW)
- Small mechanical IP20 and IP66 housing
- Rugged industrial operation 0...50°C ambient rating; max. storage -40...+60°C
- High pressure wash down duty IP66/NEMA4X for indoor use *
- Specially coated heat sinks to protect against corrosion *
- Dust tight seals to prevent water, oil and dust entering the enclosure *
- No external fans to replace
- Simple mechanical and electrical installation
- Simple operation, powerful features and easy to use
- Fast setup, factory default settings OK for most applications, only fourteen basic parameters
- Variable or constant torque
- Unique programmable boost feature to achieve intelligent starting
- Motor current and rpm indication
- 150 % overload for 60 sec (175 % for 2 sec)
- Keypad control
- Integral RFI filter option
- Modbus RTU serial communications
- PI control for feedback applications

* Only for IP66 model

Text for tender

- The frequency inverter will have: single phase input/ three phase output (1x230V / 3x230V), small mechanical IP20 or IP66 housing, rugged industrial operation 50°C ambient rating, no external fans to replace, simple mechanical and electrical installation, simple operation, powerful features and easy to use, fast setup, factory default settings OK for most applications, only fourteen basic parameters, variable or constant torque, unique programmable boost feature to achieve intelligent starting, motor current and rpm indication, 150 % overload for 60 sec (175 % for 2 sec), keypad control, integral RFI filter option, modbus RTU serial communications, PI control for feedback applications
- **Cairox type FIS-13**

Order example

- **FIS-1320E-0.37**

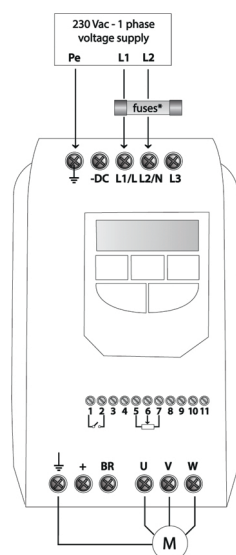
Explication

FIS-13 - frequency inverter type

20 - IP protection degree

E - EMC filter

0.37 - motor power

Wiring diagram

Notes
INPUTS

- Pe: earth connections
- L1/L: single phase power supply 230 Vac– 50/60 Hz - line
- L2/N: single phase power supply 230 Vac– 50/60 Hz - neutral
- L3: not used
- fuses *fuses dependent from drive rating

OUTPUTS

- U: three phase motor connection
- V: three phase motor connection
- W: three phase motor connection

CONTROL TERMINALS 1-11 (based on default setting out of box)

- 1. Connect a start/stop switch from terminal 1 to 2; close the contact - START (enable) the drive; open the contact - STOP the drive
- 2. Connect a 10 kOhm potentiometer on terminals 5, 6 and 7 to vary the speed from 35 to 50 Hz (60 Hz for HP drives)