



**EXTERNAL SPEED REGULATORS FOR INDUSTRIAL
AND PROFESSIONAL ASPIRATION SYSTEMS**



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Designed to the most stringent quality standards, the analog and digital speed controllers realized by Fasar Elettronica for the control of single-phase induction motors are the optimum solution for the management of professional and industrial aspiration systems. They can be used in different applications: vacuums odors, fumes, vapors, aspiring hoods, aspiring ceilings, ventilation systems, systems for air pollution control and treatment.

Reliability, efficiency, compactness, ease of installation and ease of use are the distinguishing features of this devices family, specially developed for large professional kitchens, but equally indispensable in any closed environment, where they help to ensure the necessary exchange of air optimizing comfort and safety of the occupants.

We propose 3 models of analog speed regulators: p/n **FE229** (4,5 A motor), p/n **FE263** (8 A motor) and p/n **FE282** (10 A motor).

We propose 5 versions of the digital regulator:

- ◆ **FE230**: basic version (without sensors, without receiver for remote control, without serial communication port RS-485);
- ◆ **FE230/T**: regulator provided with NTC probe to allow automatic motor's control (change of speed as a function of the detected temperature);
- ◆ **FE230/R**: regulator equipped with radio receiver for the management of FE1004 (optional 433.92 MHz 5-button remote control);
- ◆ **FE230/S**: regulator provided with serial communication bidirectional port RS-485 to allow the use of the regulator itself within a local network managed by the control unit FE1011;
- ◆ **FE230/C**: regulator equipped with NTC probe, radio receiver for the management of FE1004 (optional 433.92 MHz 5-button remote control), serial communication bidirectional port RS-485.

**We guarantee Quality of the Product and
Made in Italy.**

ANALOG SPEED REGULATOR FOR SINGLE-PHASE INDUCTION MOTORS P/N FE229



Reliable, compact and economical, **FE229** is a speed regulator designed to control **4,5 A** analog single-phase induction motors with the technique of **phase step**. The FE229 controller is characterized by a front panel that integrates two switches and a rotary knob to vary continuously the speed of the motor, whose excursion can be set by means of **two internal trimmers**.

FE229 is also available in a version kit for those who prefer wish the integration of the controller inside of the suction system.

ANALOG SPEED REGULATOR FOR SINGLE-PHASE INDUCTION MOTORS P/N FE263



FE263 is an analog speed regulator capable of controlling, by the technique of **phase step**, up to **two** single-phase induction **motors**, for a maximum current of **8 A**.

Thanks to the two switches and to a practice knob, FE263 allows the user to intuitively manage the on/off motors and external solenoid valve switching, the activation and deactivation of the lights, as well as the variation of the speed of the motors.

Two internal trimmers are dedicated to set the minimum and the maximum speed value.

ANALOG SPEED REGULATOR FOR SINGLE-PHASE INDUCTION MOTORS P/N FE282

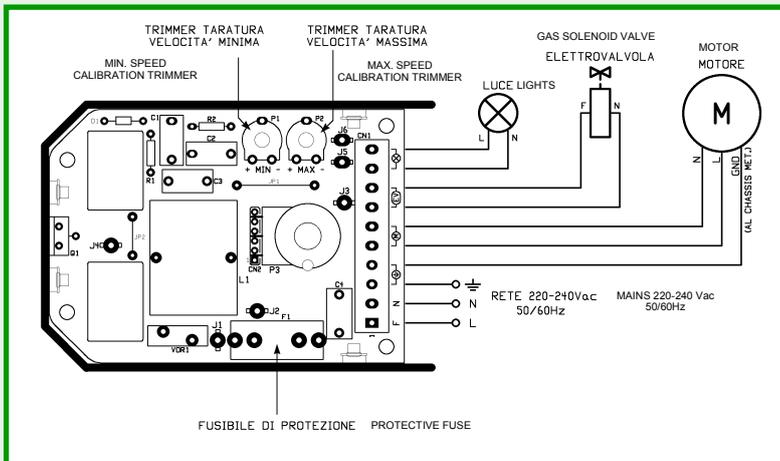


Characterized by the presence of an external heatsink to ensure maximum reliability even under particularly heavy load, the **FE282** analog speed regulator can manage up to **two** single-phase induction **motors** for a total absorption of **10 A**.

By acting on the switches in the front panel, you can actuate the motors and the external solenoid valve and manage the lighting system; the rotary knob allows to continuously vary the speed of the motors within the range specified, defined by appropriately operating on **two internal trimmers** dedicated to setting the minimum and the maximum speed value.

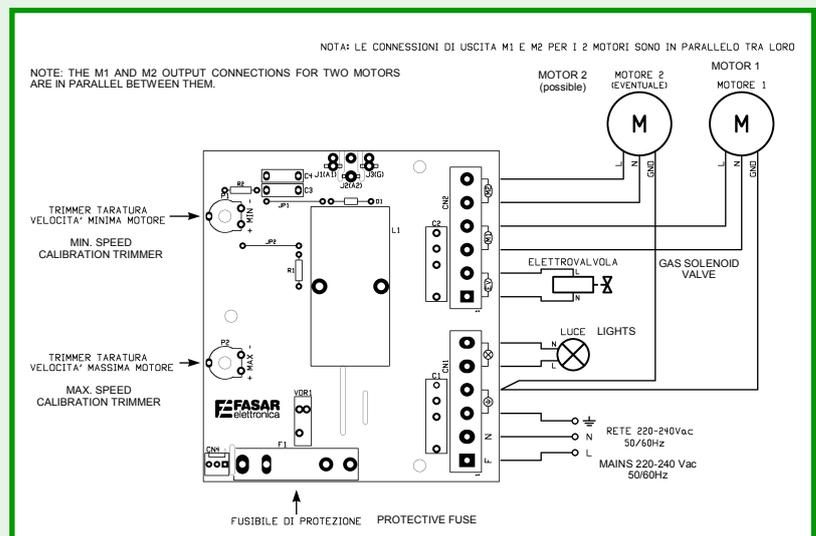
TECHNICAL CHARACTERISTICS

	FE229	FE263	FE282
Supply voltage	220-240Vac -50/60Hz	220-240Vac -50/60Hz	220-240Vac -50/60Hz
MAXIMUM load MOTOR	4,5 A	8 A	10 A
MAXIMUM load LIGHTS	5 A	5 A	5 A
Management of gas solenoid valve	Yes	Yes	Yes
Commands	Bipolar switches and rotary knob	Bipolar switches and rotary knob	Bipolar switches and rotary knob
Size (mm)	128x88x73	158x113x95	158x143x95
Weight (kg)	0,31	0,78	0,82
Protection	IP55	IP50	IP50
Trimmers for adjustment of MIN and MAX speed	Yes	Yes	Yes
Protection fuse	Yes	Yes	Yes



FE229 regulator's external connection scheme.

FE263 (8A) and FE282 (10A) regulators external connection scheme



DIGITAL SPEED REGULATOR FOR SINGLE-PHASE INDUCTION MOTORS P/N FE230



FE230, in the basic version and in its more evolved variants, is an advanced control **system with microprocessor** dedicated to the speed's adjustment of a **4,5 A** single-phase induction motor. Engineered and designed to manage the more sophisticated systems for air quality treatment and control. FE230 is able to guarantee high performance with **minimum consumption**, thanks to the reduced absorption in **stand-by** and the ability to **automatically adjust the speed** of the suction motor in function of the environmental conditions.

It is characterized by a practice keyboard for the control of all the implemented functions, by a display and a led to indicate the status of operation.

It is also available a built-in version.



RADIO REMOTE
CONTROL
P/N FE1004

We propose 5 versions of the digital regulator:

FE230: basic version (without sensors, without receiver for remote control, without serial communication port RS-485);

FE230/T: regulator provided with **NTC probe** to allow automatic motor's control (change of speed as a function of the detected temperature);

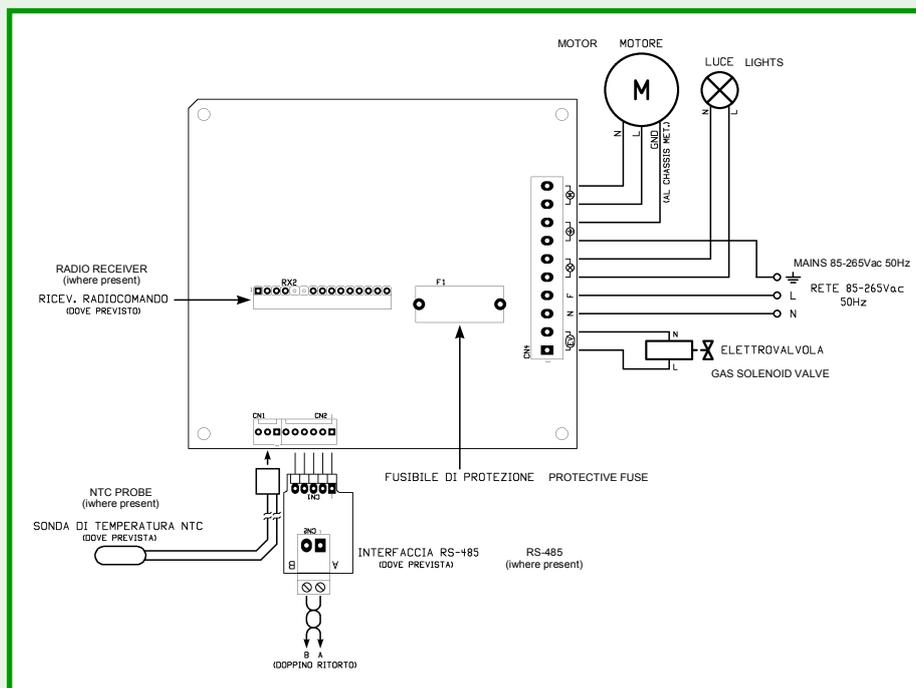
FE230/R: regulator equipped with **radio receiver** for the management of FE1004 (optional 433,92 MHz 5-button remote control);

FE230/S: regulator provided with serial communication bidirectional port **RS-485** to allow the use of the regulator itself within a local network managed by the control unit FE1011;

FE230/C: regulator equipped with **NTC probe**, **radio receiver** for the management of FE1004 (optional 433,92 MHz 5-button remote control), serial communication bidirectional port **RS-485**.

TECHNICAL CHARACTERISTICS

	FE230	FE230/T	FE230/R	FE230/S	FE230/C
Supply voltage	85/265Vac-50Hz	85/265Vac-50Hz	85/265Vac-50Hz	85/265Vac-50Hz	85/265Vac-50Hz
MAXIMUM load MOTOR	4,5 A				
MAXIMUM load LIGHTS	2 A	2 A	2 A	2 A	2 A
Management of gas solenoid valve	Yes	Yes	Yes	Yes	Yes
Commands	Keyboard: 5 keys				
Power consumption in stand-by (loads off)	0,35 W				
Size (mm)	158x118x77	158x118x77	158x118x77	158x118x77	158x118x77
Weight (kg)	0,37	0,37	0,37	0,37	0,37
Protection	IP55	IP55	IP55	IP55	IP55
MIN and MAX speed calibration procedure	Yes	Yes	Yes	Yes	Yes
Protection fuse	Yes	Yes	Yes	Yes	Yes
NTC probe	No	Yes	No	No	Yes
Radio receiver	No	No	Yes	No	Yes
RS-485	No	No	No	Yes	Yes



FE230 regulator's external connection scheme.



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