



RCS OCS RCK OCK

Monophase speed control

CE

Technical data sheet

Rev.00

 **ecoclima**
AIR EVOLUTION



The RCS series controllers, designed to control fans with single-phase asynchronous motors, incorporate specific technical features to ensure optimal regulation performance without compromising the proper operation of the motor. For the control phase, they use an 8-bit microprocessor that continuously and precisely tracks the sine wave, ensuring perfect triac switching and therefore optimal motor operation.

Model	RCS300	RCS600	RCS900	RCS210	RCS250
Electrical supply	230 VAC- 1F- 50 Hz	230 VAC- 1F- 50 Hz	230 VAC- 1F- 50 Hz	230 VAC- 1F- 50 Hz	230 VAC- 1F- 50 Hz
Nominal power (W)	300	600	900	1500	2500
Nominal current (A)	1,5	3	5	7,5	12
Maximum current (A)	3	5	7,5	12	18
Fuse protection (A)	3,15	5	6,3	10	16
Soft-start				X	X
Sur-demarrage				X	X
Dimensions	110x75hx59	110x75hx59	135x75hx73	107x105hx82	107x105hx82
IP	55	55	55	55	55

Soft-start: at motor start-up, it provides a gradual ramp to avoid inrush current peaks, typically between 2 and 5 times the nominal current.

Sur-demarrage: this is a function that, when the controller is switched on, adds 40% of the difference between the set voltage and the maximum voltage to the set value, then returns to the set voltage after the ramp-up phase.
 For example, if the controller is switched on with the potentiometer set to about 100 V, this function adds 40% of $(230\text{ V} - 100\text{ V}) = 130\text{ V}$, which is 52 V. Therefore, the controller effectively starts as if the potentiometer were set to 152 V. After starting at 152 V with the ramp-up phase and reaching that value, it automatically returns to 100 V, thus ensuring reliable start-up even for motors requiring higher starting torque.



The OCS controller range was developed with the aim of providing more advanced performance in the control of ventilation and extraction systems. With the ability to immediately display any abnormal conditions, it ensures improved system operation and more efficient use of the installation.

Model	OCS900	OCS1500	OCS2500
Electrical supply	230 VAC- 1F- 50 Hz	230 VAC- 1F- 50 Hz	230 VAC- 1F- 50 Hz
Nominal power (W)	900	1500	2500
Nominal current (A)	5	7,5	12
Maximum current (A)	7,5	12	18
Fuse protection (A)	6,3	10	16
Soft-start		X	X
Sur-demarrage		X	X
AUX 1 for gas solenoid valve		X	X
Unit alarm		X	X
Limiter		X	X
Dimensions	110x75hx59	110x75hx59	135x75hx73
IP	55	55	55

Soft-start: at motor start-up, it provides a gradual ramp to avoid inrush current peaks, typically between 2 and 5 times the nominal current.

Sur-demarrage: this is a function that, when the controller is switched on, adds 40% of the difference between the set voltage and the maximum voltage to the set value, then returns to the set voltage after the ramp-up phase. For example, if the controller is switched on with the potentiometer set to about 100 V, this function adds 40% of (230 V - 100 V) = 130 V, which is 52 V. Therefore, the controller effectively starts as if the potentiometer were set to 152 V. After starting at 152 V with the ramp-up phase and reaching that value, it automatically returns to 100 V, thus ensuring reliable start-up even for motors requiring higher starting torque.

Aux 1: this function allows a 230 V gas solenoid valve to be connected to the controller (mandatory for new large kitchen installations). It can be activated instantly when the controller is switched on or with a delay (approximately 20 seconds), allowing the extractor fan to purge the ducts before enabling ignition of the burners.

Unit Alarm: this function signals an anomaly in the fan controller circuit, such as a disconnected load or activation of the motor's thermal protection. It does so by flashing the red LED and stopping the voltage supply.

Limiter: this function allows an operating current limit (in amperes) to be set for the controller. If, for any reason, the current draw exceeds this value, the controller will begin reducing the output voltage until the values return within the set parameters. This provides an important "system protection" function, preventing overheating of both the motor and the controller.



The RCK series controllers are an evolution of the RCS series, featuring a built-in double-pole switch for controlling the neon light typically installed in kitchen hoods.

Model	RCK1200	RCK1800
Electrical supply	230 VAC- 1F- 50 Hz	230 VAC- 1F- 50 Hz
Nominal power (W)	1200	1800
Nominal current (A)	6	8
Maximum current (A)	10	13
Fuse protection (A)	8	10
Soft-start		X
Sur-demarrage		X
AUX 1 for gas solenoid valve	X	X
AUX 2 for neon lamp	X	X
Dimensions	135x75hx73	170x105hx82
IP	55	55

Soft-start: at motor start-up, it provides a gradual ramp to avoid inrush current peaks, typically between 2 and 5 times the nominal current.

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Aux 1: this function allows a 230 V gas solenoid valve to be connected to the controller (mandatory for new large kitchen installations). It can be activated instantly when the controller is switched on or with a delay (approximately 20 seconds), allowing the extractor fan to purge the ducts before enabling ignition of the burners.

Aux 2: output terminal block with an illuminated double-pole switch for controlling a neon lamp, typically installed in kitchen extraction hoods.



Regolatori specifici per cappe aspiranti di grandi cucine. La serie OCK, derivata dalla serie OCS, si differisce per l'aggiunta di un interruttore bipolare luminoso che comanda l'accensione della luce integrata nella cappa. Questa serie è la più completa di sistemi per il controllo e il monitoraggio del ventilatore.

Model	OCK1200	OCK1500	OCK1800
Electrical supply	230 VAC- 1F- 50 Hz	230 VAC- 1F- 50 Hz	230 VAC- 1F- 50 Hz
Nominal power (W)	900	1500	1800
Nominal current (A)	5	7,5	12
Maximum current (A)	7,5	12	18
Fuse protection (A)	6,3	10	16
Soft-start		X	X
Sur-demarrage		X	X
AUX 1 for gas solenoid valve		X	X
AUX 2 for neon lamp		X	X
Unit alarm		X	X
Limiter		X	X
Dimensions	135x75hx73	170x105hx82	170x105hx82
IP	55	55	55

Soft-start: at motor start-up, it provides a gradual ramp to avoid inrush current peaks, typically between 2 and 5 times the nominal current.

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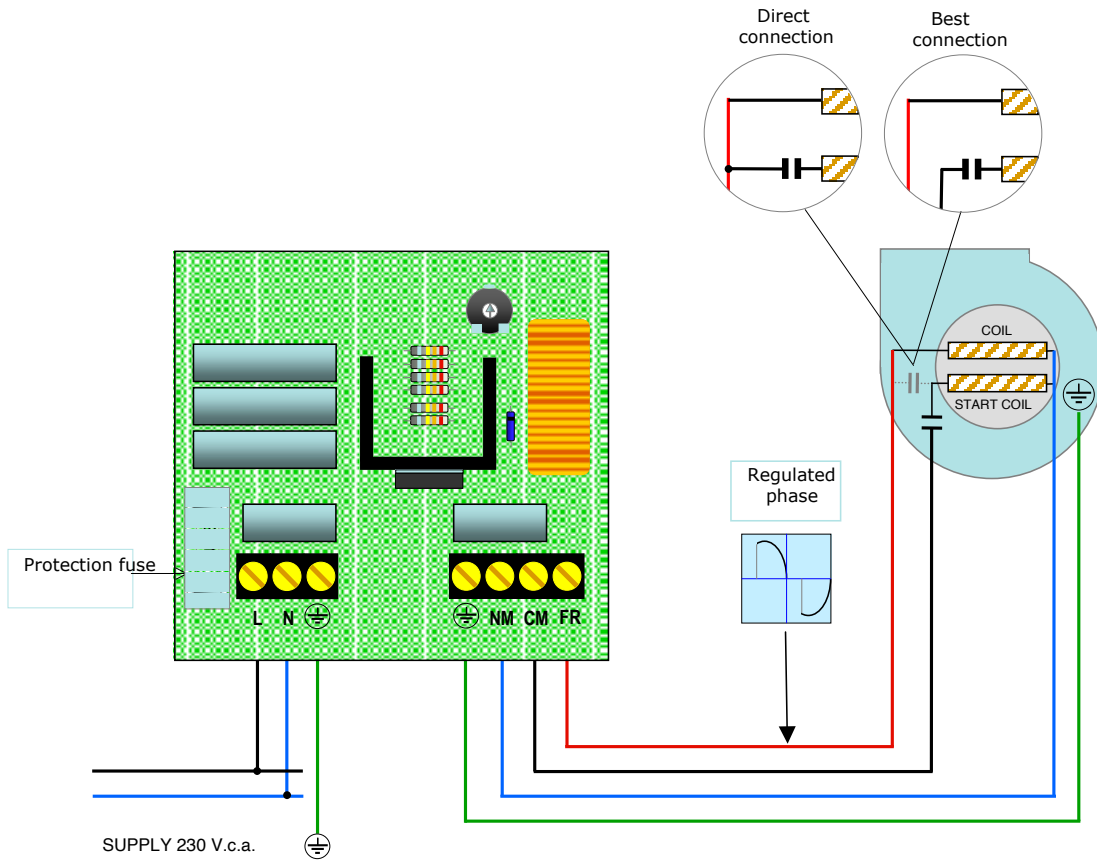
Aux 2: output terminal block with an illuminated double-pole switch for controlling a neon lamp, typically installed in kitchen extraction hoods.

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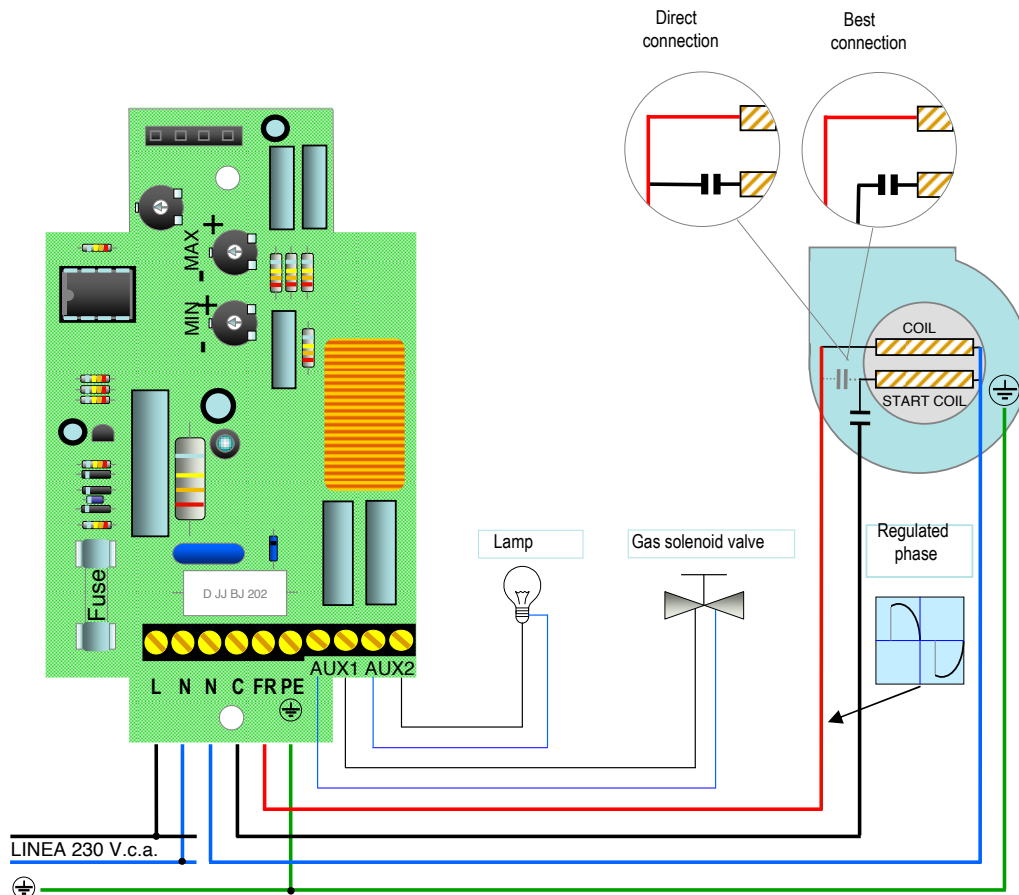
Limiter: this function allows an operating current limit (in amperes) to be set for the controller. If, for any reason, the current draw exceeds this value, the controller will begin reducing the output voltage until the values return within the set parameters. This provides an important "system protection" function, preventing overheating of both the motor and the controller.

ELECTRICAL CONNECTIONS

RCS and OCS900 connections:



OCS 1500-2500 and serie OCK, RCK connections::



CODE

How to order

RCS	210
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RCS

Monophase speed control.

OCS

Advance monophase speed control with alarm and limiter.

RCK

Monophase speed control for kitchen hoods with solenoid and neon lamp outputs.

RCK

Advance monophase speed control for large kitchen hoods with alarm and limiter functions, and outputs for a gas solenoid valve and a neon lamp.



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ISO 9001
ISO 50001
ISO 45001
ISO 14001

Certified Management System