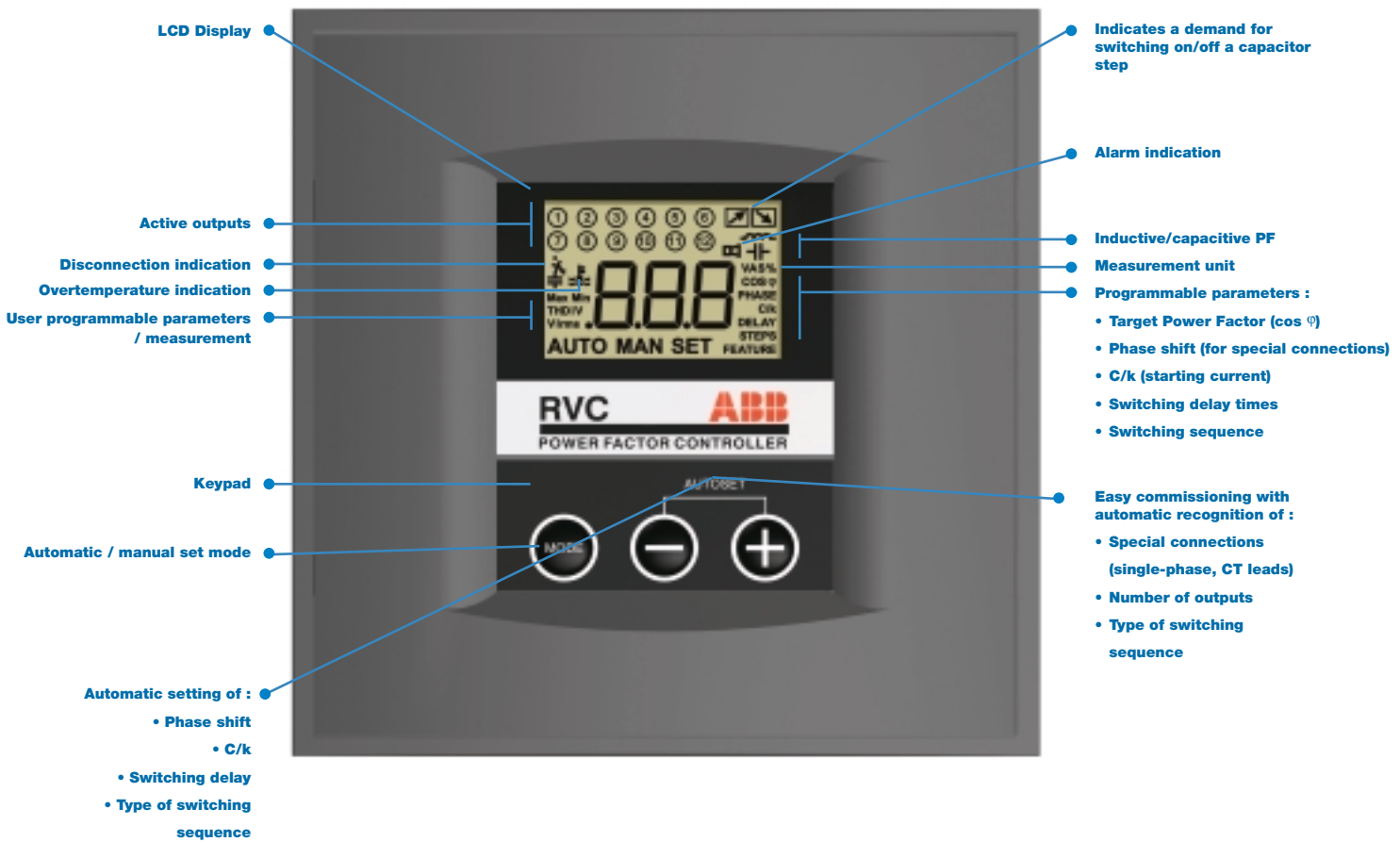


Power Factor Controller RVC

The user-friendly PF controller



RVC : The user-friendly PF controller



Powerful features

- Common range for all network voltages from 100V to 440V.
- Measurement and display of key parameters like voltage, current, power factor, THDV and THDI.
- Fully programmable switching sequence.
- 1A or 5A current input.
- Easy commissioning.
- Complete auto set-up (starting current-C/k, type of switching sequence, phase shift, special connections).
- Easy to use thanks to a user-friendly interface and ease of access to parameters for manual setting.
- Highly efficient switching strategy combining integral, direct and circular switching.
 - This allows to :
 - control the $\cos \phi$ in presence of rapidly varying loads,
 - reduce the number of switching,
 - avoid unnecessary intermediary switchings,
 - increase the lifetime of the capacitors and contactors.
- Suitable for hot environments thanks to max. ambient temperature rating of 60°C.
- Not affected by the harmonics.
- Overvoltage / undervoltage protection and protections against harmonic distortion (THDV).
- Alarm : an alarm contact is opened when any of these conditions are reached:
 - the target $\cos \phi$ is not reached within 6 minutes after all outputs have been switched on,
 - the internal temperature of the RVC rises above 85°C,
 - overvoltage / undervoltage limits are reached,
 - the power supply is out of range,
 - the THDV exceeds the limits.

Easy commissioning

The AUTO SET mode allows the RVC commissioning in only 2 simple steps :

Activation of the automatic setting of :

- Phase shift
- C/k
- Switching sequence

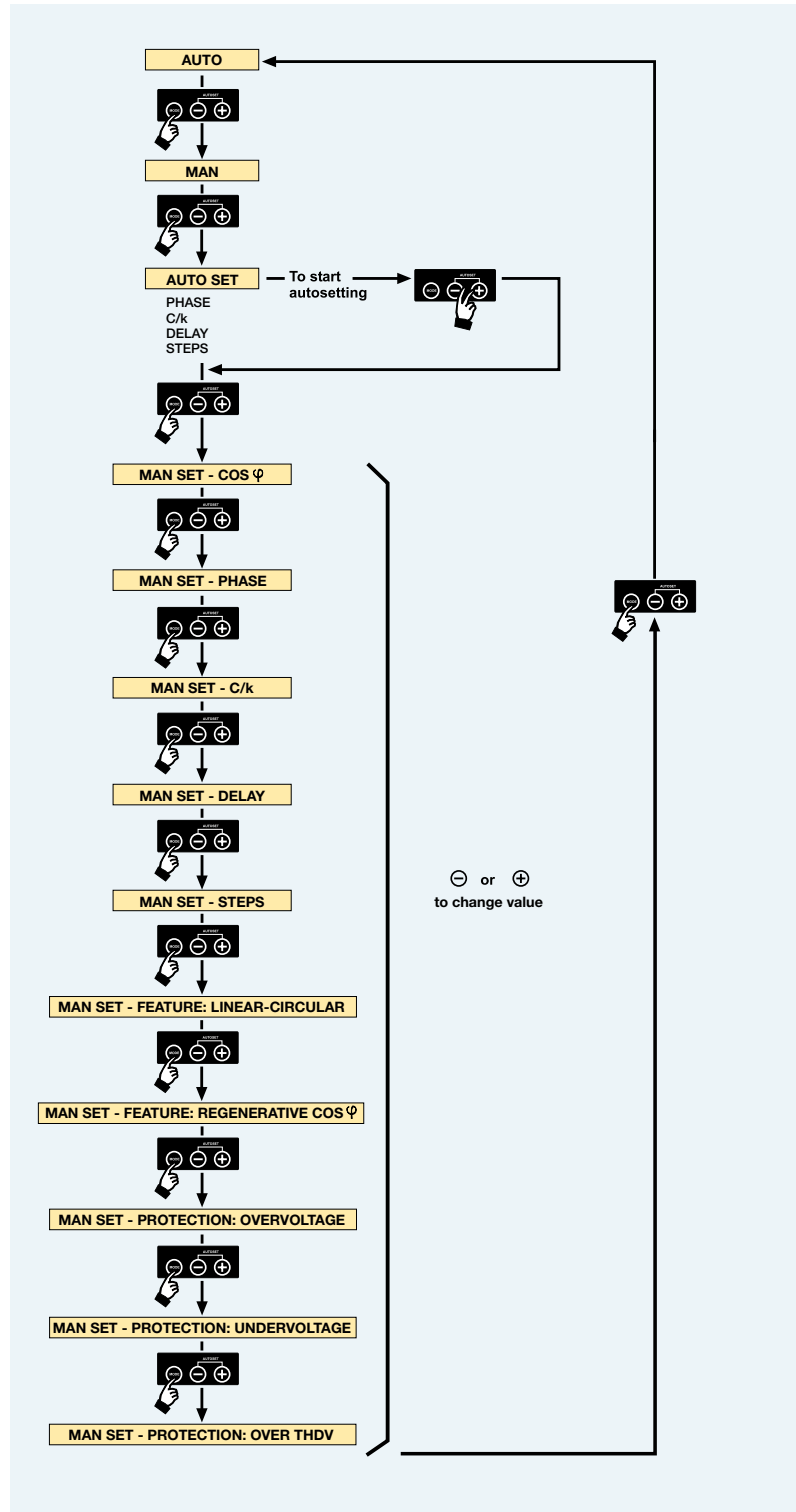


Setting of the target cos φ



Easy programming

All parameters are easily accessible for manual setting.



Technical specification

Measuring system:

micro-processor system for balanced three-phase networks or single-phase networks.

Operating voltage:

100V to 440V.

Voltage tolerance:

+/- 10% on indicated operating voltages.

Frequency range:

50 or 60 Hz +/- 5% (automatic adjustment to network frequency).

Measuring circuit terminals (L2, L3 and k, I):

CAT. III rated.

Current input:

1A or 5A (RMS).

Current input impedance:

<0.1 Ohm (recommended CT class 1.0, 10 VA min).

Consumption of the controller:

8 VA max.

Output contact rating:

- max. continuous current: 1.5 A;
- max. peak current: 5 A;
- max. voltage: 440 Vac;
- terminal A is rated for a continuous current of 16 A.

Alarm contact:

- normally open contact;
- max. continuous current : 5A;
- rated/max. breaking voltage: 250Vac/440Vac.

Power Factor setting:

from 0.7 inductive to 0.7 capacitive.

Starting current setting (C/k):

0.01 to 3A.

Automatic measurement of C/k.

Number of outputs:

- RVC-3: programmable up to 3 outputs.
- RVC-6: programmable up to 6 outputs.
- RVC-8: programmable up to 8 outputs.
- RVC-10: programmable up to 10 outputs.
- RVC-12: programmable up to 12 outputs.

Switching time between steps:

programmable from 1s to 999s (independent of reactive load).

Switching sequences:

User defined.

Mode of switching:

the mode of switching for all the programmable switching sequences is integral, direct, circular or linear.

Saving-function:

all programmed parameters and modes are saved in a non-volatile memory.

Power outage release:

quick automatic disconnection in less than 20ms (50Hz) in case of power outage or voltage drop.

Power outage reset delay time:

40 s.

Overvoltage and undervoltage protection.

Autoadaptation to the phase-rotation of the network and the CT-terminals.

Not affected by the harmonics.

Working with generative and regenerative loads.

LCD contrast automatically compensated with temperature.

Operating temperature:

-10° C to 60° C.

Storage temperature:

- 30° C to 85° C.

Mounting position:

vertical panel mounting.

Dimensions:

144x144x80 mm (hwxwd).

Weight:

0.4 kg (unpacked).

Connector:

Spring clamp terminal block.

Front plate protection:

IP40.

Relative humidity:

maximum 95%, non-condensing.

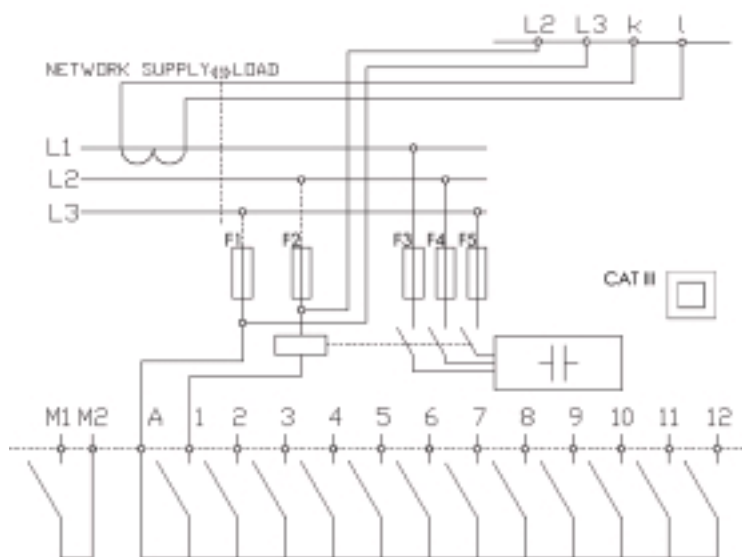
CE Marked.

Article number for ordering:

RVC-3	2GCA288098A0050
RVC-6	2GCA288097A0050
RVC-8	2GCA288096A0050
RVC-10	2GCA288095A0050
RVC-12	2GCA288094A0050

Wiring diagram

- k, I:** leads of the current transformer
- L2, L3:** 2 of the 3 phases (not monitored by the CT)
- M1, M2:** leads of the normally open contact
- A:** output relay common source
- 1-12:** outputs



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