

220V single phase speed regulator

- cod. 12300100 - cod. 12300105 - cod. 12300110
- cod. 12300115 - cod. 12300120



DESCRIPTION

The regulator regulates the effective value of the voltage on the load by partialising the wave form operated by a TRIAC. It is equipped with suitable filters (inductances and capacitors) to eliminate any disturbances introduced into the power supply line or radiated by the equipment.

An indicator light, incorporated into the bipolar switch, indicates the presence of voltage on the load.

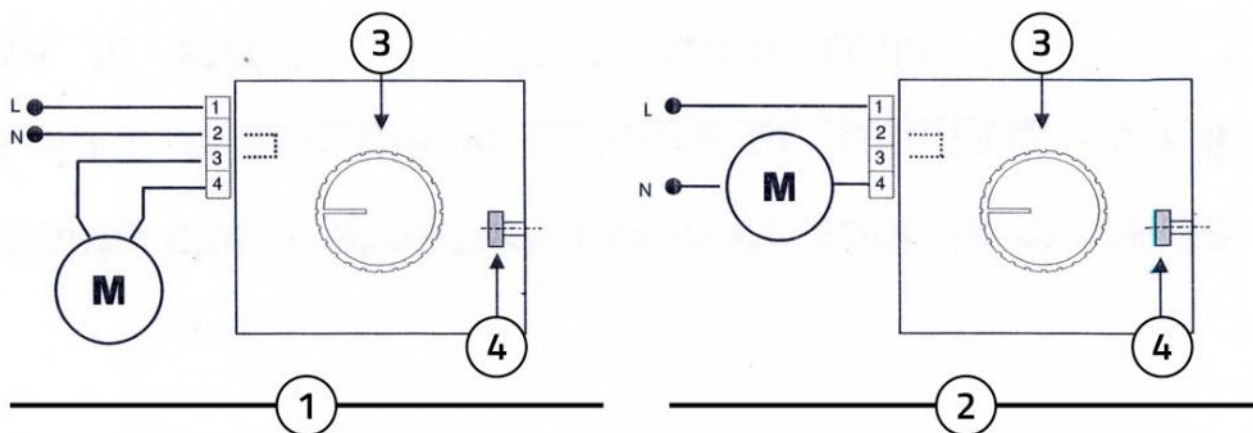
A potentiometric control allows the voltage to be adjusted up to a minimum value that can be set by means of a trimmer.

The trimmer, coated with plastic material, is accessible from the outside via a 5 mm diameter spindle.

Typically, the regulator is suitable to the speed regulation of single-phase motors, or however, with ohm conductive loads, not being designed for the regulation of capacitive loads. The protection is enabled by means of internal fuse.

The 12300120 model is also equipped with a finned heat sink to better dispose of the heat generated by the TRIAC.

CONNECTION DIAGRAM CODE 12300100



[1] 4-wire connection

[2] 2-wire connection

[3] Adjustment

[4] Minimum

CONNECTION DIAGRAM CODE 12300105 - 12300110 - 12300115

Both connections A and B ensure compliance with European Community directives (73/23 EEC, 89/336 EEC, 93/68 EEC), both from the point of view of safety and electromagnetic compatibility.

However, the use of connection A is still preferable.

In fact, by using the regulator as speed regulator in the single-phase asynchronous motors, they are significantly quieter with the connection A, especially when the voltage drops below 150 Veff; in addition, the overheating of the motor is also lower.

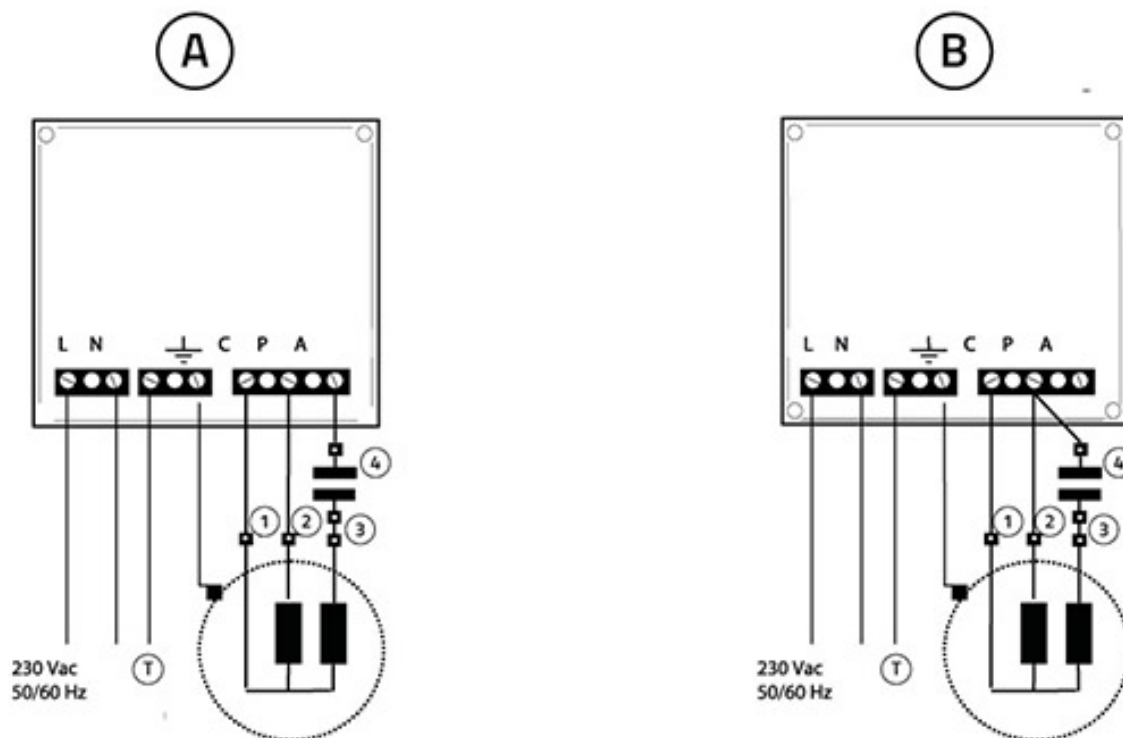
CONNECTION DIAGRAM CODE 12300120

The 12300120 model is also equipped with a finned heat sink to better dispose of the heat generated by the TRIAC.

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[A] Connection A
 [B] Connection B
 [1] Common
 [2] Main

[4] Condenser
 [T] Earth

TECHNICAL DATA

| Power supply | Frequency [Hz] | Current [A] | Peak current [A] | Dimensions [mm] | Electrical production | Temperature range [°C] | Casing protection class [IP] | Power cable min/max section [mm ²] |
|--------------|----------------|-------------|------------------|-----------------|-----------------------|------------------------|------------------------------|--|
| 230 ± 15% | 50/60 | 1,5 | 4,5 | 82 x 82 x 38 | Fast 5x20 10A fuses | -20 ÷ 70 | 20 | 1,5 ÷ 2,5 |
| 230 ± 15% | 50/60 | 3 | 12 | 125 x 125 x 90 | Fast 5x20 10A fuses | -10 ÷ 40 | 54 | 1,5 ÷ 2,5 |
| 230 ± 15% | 50/60 | 5 | 12 | 125 x 125 x 90 | Fast 5x20 10A fuses | -10 ÷ 40 | 54 | 1,5 ÷ 2,5 |
| 230 ± 15% | 50/60 | 9 | 26 | 125 x 125 x 90 | Fast 6.3x32 20A fuses | -10 ÷ 40 | 54 | 1,5 ÷ 2,5 |
| 230 ± 15% | 50/60 | 20 | -- | 175 x 175 x 105 | Fast 25A fuses | -10 ÷ 40 | 54 | 1,5 ÷ (2x2,5) |

ITEMS

| CODE | DESCRIPTION |
|----------|---|
| 12300100 | SINGLE-PHASE 220V SPEED CONTROL MODEL 200 - 300 - 400 - 600 |
| 12300105 | SINGLE-PHASE 220V SPEED CONTROL MODEL 800 |
| 12300110 | SINGLE-PHASE 220V SPEED CONTROL MODEL 1000-1300 |
| 12300115 | SINGLE-PHASE 220V SPEED CONTROL MODEL 1600-2100 |
| 12300120 | SINGLE-PHASE 220V SPEED CONTROL MODEL 2500-3000 |

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