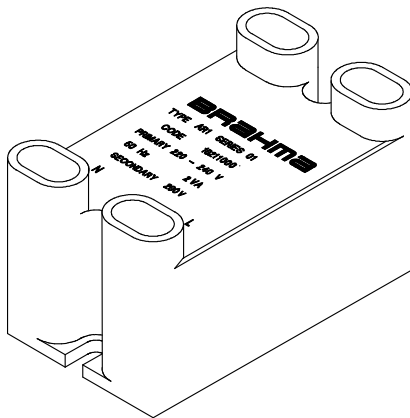


ARx – RC1 SERIES

ACCESSORIES FOR FLAME DETECTION IN LIVE-LIVE OR LIVE-NEUTRAL MAINS SUPPLY SYSTEMS WITHOUT EARTH CONNECTION



DESCRIPTION

In case of mains supply systems with unearthed neutral, for a correct flame detection the controllers provided with a built-in ignition transformer (SR3/TR... AT5/TR...etc. and their by-products) require an electrical connection between the burner mass and terminal 2 (neutral) of the controller. This connection can be carried out by an RC circuit, a pre-wired unit named RC1. Both of its conductors are to be connected to the earth terminal (\oplus), a yellow-green wire, and terminal 2, a black wire respectively.

In case of unbalanced live-live mains supply systems, the voltage between the flame detection electrode and the burner mass can be not enough to guarantee the correct operation of the controller. This inconvenience is eliminated by employing the Brahma isolation transformer type ARx.

As it is well shown in the below wiring diagram, the secondary winding of the transformer is connected in series to the detection electrode. The voltage between electrode and burner mass is increased notably so as to guarantee a safe operation of the controller.

Warning: in order to make the installation easier, the terminals of the ARx are numbered: not respecting polarity while connecting the primary or the secondary winding compromises the controller efficiency.

These components are useless for the other Brahma controllers provided with a built-in isolation transformer, such as for example SR3 – VE3.2 – M300 – MF2 controllers, etc.

Fig. 1 shows the standard wiring diagram.

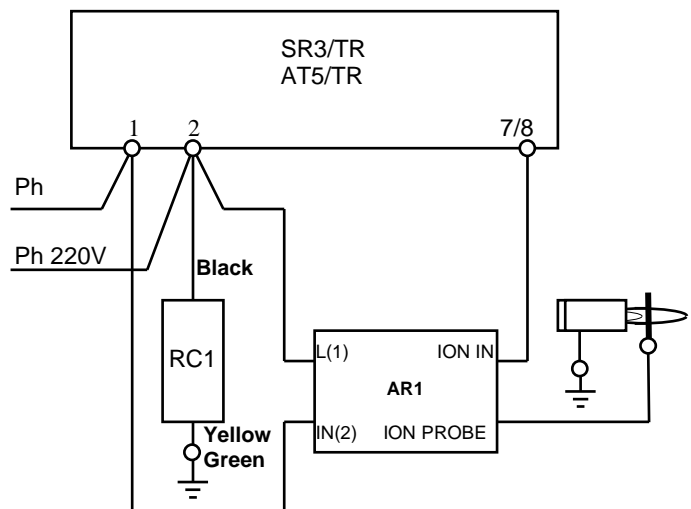


Fig. 1

TECHNICAL FEATURES

AR1 transformer:

The transformer type AR1 is manufactured in several versions, differing from each other in the supply voltage and the secondary voltage:

L (1) N (2)	ION IN - ION PROBE	POWER
220 - 240V	110 - 120V	0,6 VA
220 - 240V	260 - 280V	0,7 VA
110 - 120V	260 - 280V	0,5 VA

- 6,3mm male fast-on terminals
- Frequency: 50-60Hz
- Max. power absorbed from primary winding: 2VA
- Max. ambient temperature 60°C

AR1 transformer for PCxF:

The transformer type AR1 for PCxF is manufactured with components suitable for use at a max. room temperature of 85°C, and is available in two versions, differing from each other in the supply voltage and the secondary voltage:

L1 (1) N1 (2)	L2 (3) N2 (4)	POWER
220 - 240V	220 - 240V	0,7 VA
110 - 120V	220 - 240V	0,7 VA

- 6,3mm male fast-on terminals
- Frequency: 50-60Hz
- Max. power absorbed from primary winding: 3VA
- Max. ambient temperature 85°C

AR2 transformer for PCxF:

The transformer type AR2 for PCxF has the same electrical characteristics as the transformer type AR1 for PCxF. However the AR2 is not equipped with any internal thermal fuse, as the transformer windings are protected against short-circuit by construction.

RC1 device:

- Epoxy resin insulation
- Flexible conductor terminals
- Polycarbonate casing

OVERALL DIMENSIONS

Fig. 2 and Fig. 3 show the main dimensions of the AR1, AR2 series transformer and of the RC1 unit respectively.

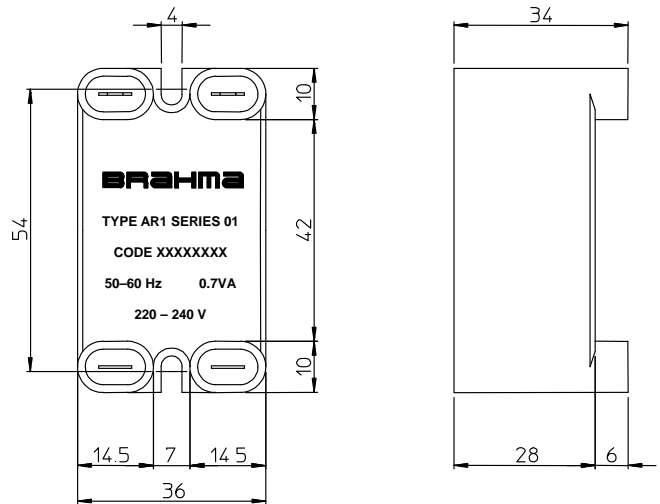


Fig. 2

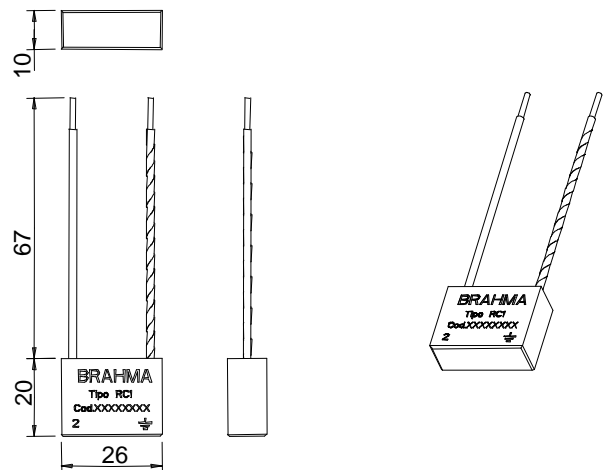


Fig. 3



NOTES ABOUT PRODUCT DISPOSAL

The device contains electronic components and cannot therefore be disposed of as normal household waste. For the disposal procedure, please refer to the local rules in force for special waste.

ATTENTION --> Company Brahma S.p.A. declines any responsibility for any damage resulting from Customer tampering with the device

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