

## **DESCRIPTION**

The ARM load resistor cabinets are composed of one to three groupings of 3 resistances, with their respective terminal block and its 2 A magnetothermal switch, located in a metal cabinet with ventilation (natural or forced, depending on the characteristics requested) and with the connections protected by a sealable cover. The cabinet is made of sheet (coated steel or stainless steel, depending on requirements) with double bitted lock of 3 mm operated latch, and sealed with slotted screw to prevent tampering.

Dimensions (mm)			Weight	
High (A)	Long (B)	Width (C)	Approx. (kg)	Description
400	300	210	10	Cabinet with 1 group of resistances
500	500	210	15	Cabinet with 2 groups of resistances
700	500	250	20	Cabinet with 3 groups of resistances

They are designed for interior service, but on demand can be manufactured in other materials (such as stainless steel, lacquered sheet or polyester) for outdoor service, as well as with different configurations.

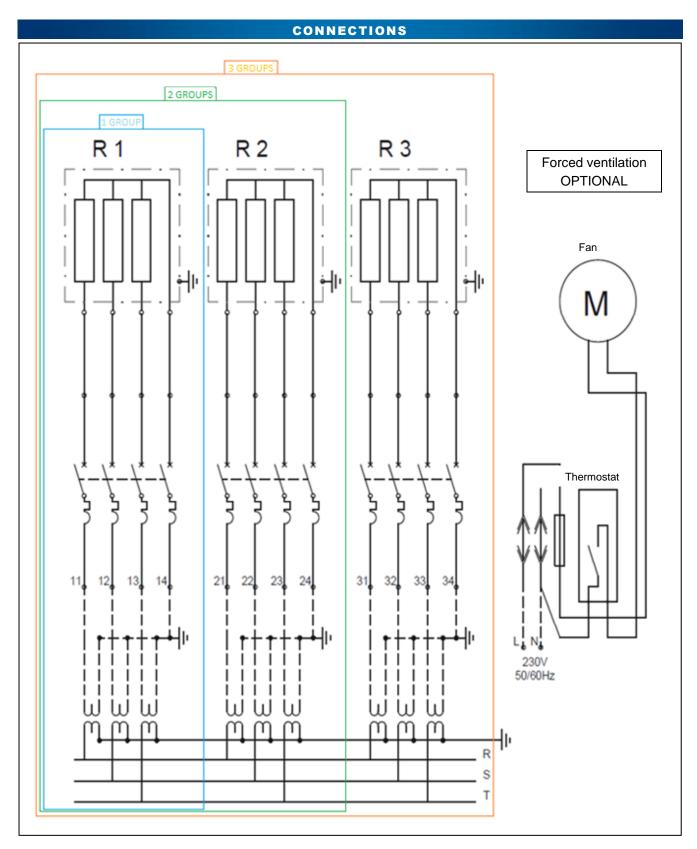
Its function is to consume the power necessary for the transformer to work, at least, 25% of its precision load in cases where the loads connected to the device (meters, relays, etc.) do not reach the minimum necessary to guarantee the accuracy of the measurement; according to BOE-A-2020-2.

The value of the resistances is determined by the load that we want to add to the TT:

$$P = \frac{U^2}{R}$$

where:

- P is the burden or load, which we want to compensate, in volt-amperes (VA).
- U is the secondary voltage, in volts (V).
- R is the value of the resistance, in ohms  $(\Omega)$ .



In this section we observe on the left the connection diagram of the different ARM sets. We can differentiate the connection scheme for 1, 2 and / or 3 groups of resistors.

According to the characteristics of the environment where the resistance cabinet will be installed and for loads over 75 VA of the secondary of the transformer, it will be necessary to install forced ventilation by means of a fan with magnetothermic protection and a thermostat for DIN rail, 0° to 60°C.

## **SPECIFICATIONS** Cabinets Burden (VA) Burden Voltage Value R Reference Power R (±4%) 20 VT (VA) 110√3 -7% 110√3 110√3 +7% ARM/27 10 110/√3 150 W $1400 \Omega$ 2,5 2,9 3,3 ARM/28 110/√3 150 W 3,75 4,3 5,0 15 930 $\Omega$ ARM/29 20 110/√3 150 W $700 \Omega$ 5 5,8 6,6 110/√3 150 W 560 $\Omega$ 6,25 ARM/30 25 7,2 8,3 ARM/31 30 110/√3 150 W 465 $\Omega$ 7,5 8,7 9,9 ARM/32 110/√3 150 W 10 11,6 13,2 40 350 $\Omega$ ARM/33 50 110/√3 150 W 280 $\Omega$ 12,5 14,5 16,5 150 W 18,75 24,8 ARM/35 110/√3 190 $\Omega$ 21,7 75

Value of the resistance calculated at  $\pm$  7% of fluctuation of the network, according to Royal Decree 1955/2000, of December 1, article 104.

140  $\Omega$ 

25

28,9

33,1

150 W

110/√3

100

ARM/99

## **DIMENSIONS** (mm)

