

UNIVERSAL CERAMIC INFRARED EMITTERS. SHORT - MEDIUM - LONG WAVE.

MODEL IRU

General characteristics

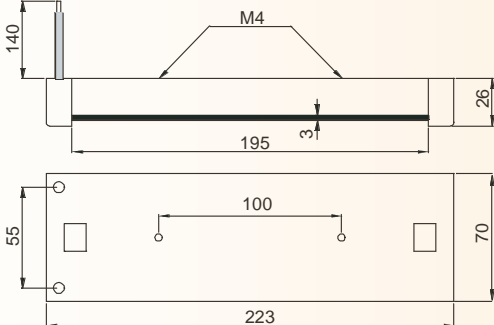
The IRU range of ceramic infrared emitters combines numerous innovations that allow responding to the difficulties of the most demanding industrial process: saving energy, faster productive process, quality control...

The main advantages of infrared radiation with respect to the classic techniques of heating based on convection or conduction are the rapidity and flexibility of use, absence of contact with the products that must be treated and the high density load that can be reached.

IRU emitter is manufactured with a ceramic plate of 3 mm thickness resistant to thermal shocks and low inertia due to its small mass. The addition of a special covering with high emissivity allows an optimal conversion of electrical energy in infrared radiation.

The total emissivity of the IRU emitter, calculated at 800 °C, on the spectral field located from 10 to 7000 cm-1 is 0'98 (in comparison with a black body e = 1). The effectiveness of the IRU emitter in relation to an idela radiation is 98% over the entire infrared spectre. In comparison, the emission factor in a metallic body is 50%, in a quartz tube it is 70%.

In the attached table, one can observe the behaviour of IRU emitter relating power to superficial temperature. By means of a energy regulator MR1 (Code 517193000 page n° 109) we can vary the power/superficial temperature of the emitter in such a way that the emitter will work along the indicated wavelength.



| Code | Volts | Watts |
|-------|--------|-------|
| IRU 1 | ~230 V | 1050 |

Technical data

| | | | | | |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| Electrical power | 300 W | 500 W | 700 W | 900 W | 1050 W |
| Superficial temperature | 300 °C | 462 ° C | 584 °C | 697 °C | 780 °C |
| Wavelength for maximum emissivity (λ) | 5,1 μm | 3,9 μm | 3,4 μm | 3 μm | 2,8 μm |
| Transmitted power (KW/m ²) | 23 KW/m ² | 39 KW/m ² | 55 KW/m ² | 70 KW/m ² | 82 KW/m ² |