GENERAL
The 31C12 is an electrostatically focused and magnetically deflected cathode-ray tube intended for use in Radio DF Compass equipment. The tube is aluminised, has a 6" diameter flat face, and is available with a "T2" screen which gives a blue-green trace of long persistence.

RATINGS
Heater voltage \( V_h \) 6.3 V
Heater current \( I_h \) 0.6 A
Maximum first and third anode voltage \( V_{a1,a3(max)} \) 14* kV
Minimum first and third anode voltage \( V_{a1,a3(min)} \) 10 kV
Maximum second anode voltage \( V_{a2(max)} \) ±700 V
Maximum heater/cathode voltage, d.c. (heater negative) \( V_{h-k(max)} \) 180 V
Maximum peak heater/cathode voltage, d.c. (heater negative) \( V_{h-k(pk)max} \) 400†‡ V

* 14kV is a design centre rating, the absolute rating of 15.5kV must not be exceeded.
† Absolute rating.
‡ During a warming-up period not exceeding 1 minute.

INTER-ELECTRODE CAPACITANCES
Grid/All other electrodes \( C_{g-all} \) 5.5 pF
Cathode/All other electrodes \( C_{k-all} \) 6.0 pF

These capacitances include an AEI duodecal holder type CRT92/7.

TYPICAL OPERATION
First and third anode voltage \( V_{a1,a3} \) 12 kV
Second anode voltage for focus (range) \( V_{a2} \) -100 to +300 V
Grid bias voltage for cut-off of raster \( V_g \) -30 to -72 V
Maximum peak to peak modulating voltage for modulation of limit cathode-ray tube up to 50μA 25 V
All dimensions in millimetres.
Not to be scaled.