3122 137 18530

DEVELOPMENT SAMPLE DATA

This information is derived from development samples made available for evaluation. It does not necessarily imply that the device will go into regular production.

AT1991

DEFLECTION UNIT

• For use with very high resolution c.r.t. M38-200.

QUICK REFERENCE DATA

Associated c.r.t. diagonal neck diameter	38 cm (15 in) 36,8 mm
Deflection angle	700
Line deflection current, edge to edge, at 18 kV	5,7 A
Inductance of line coils	135 μH
Field deflection current, edge to edge, at 18 kV	590 mA
Resistance of field coils	23 Ω

APPLICATION

This deflection unit is for use with 38 cm, 70° cathode ray tube M38-200, neck diameter 36,8 mm.

DESCRIPTION

3

tab

binder

blue

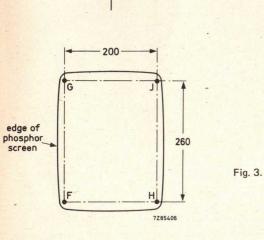
PHILIPS

PHILIPS

The saddle-shaped line and field deflection coils are surrounded by a Ferroxcube yoke ring in such a way that the line and field deflection centres coincide. Centring magnets are provided for centring correction. The field coils have internal damping resistors. The unit has a non-magnetic metal clamping ring for fixing to the tube neck.

PHILIPS

The deflection unit meets the self-extinguishing requirements of UL.



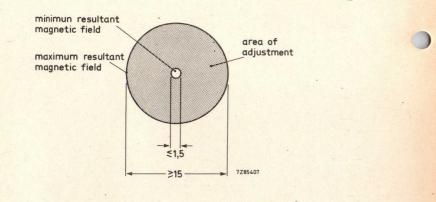
Geometric distortion measured without centring magnets.

+

CENTRING CORRECTION

June 1981

The eccentricity of the c.r.t. and the deflection unit can be corrected by two independently movable centring magnets, which are magnetized diametrically. By turning the magnets with respect to each other the resulting field strength is varied. The direction of the resulting magnetic field is adjusted by turning the magnets simultaneously.



Fy: $+1,0^{+1,0}_{-1,0}$ Fx: $+1,0^{-1,0}_{+1,0}$ Gy: $+1,0^{+1,0}_{-1,0}$ Gx: $+1,0^{+1,0}_{-1,0}$ Jy: $+1,0^{-1,0}_{+1,0}$ Jx: $+1,0^{+1,0}_{-1,0}$ Hy: $+1,0^{-1,0}_{+1,0}$ Hx: $+1,0^{-1,0}_{+1,0}$

1

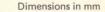
AT1991

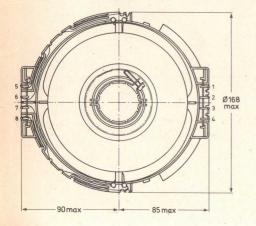
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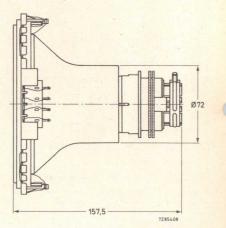
Deflection unit

DEVELOPMENT SAMPLE DATA

MECHANICAL DATA







Tightening torque on clamping ring Torque on centring magnets

0,6 to 0,9 Nm 35 to 250 mNm

Mounting

The unit should be mounted as far forward as possible on the neck of the tube, so that it touches the cone.

Fig. 1.

To orient the raster correctly, the unit may be manually rotated around the neck. The screw-tightened clamping ring permits it to be locked, both axially and radially, in the desired position.

ENVIRONMENTAL DATA

June 1981

Maximum operating temperature (average copper temperature) Storage temperature range Flame retardant Flammability 95 °C -25 to +90 °C according to UL492.3 according to UL94, category V1

ELECTRICAL DATA

Line deflection coils, terminals 3, 4, 5 and 6 inductance	135 μH ± 4,5%
resistance	0,38 Ω
Line deflection current, edge to edge, at 18 kV	5,7 A
Field deflection coils, terminals 1, 2, 7 and 8 inductance resistance	22 mH 23 Ω ± 8%
Field deflection current, edge to edge, at 18 kV	590 mA ± 3,5%
Maximum voltage between line and field coils	2500 V (d.c.)

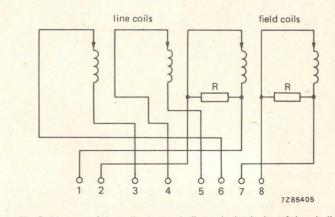


Fig. 2 Diagram of the coils. Arrows indicate the beginning of the windings.

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PHILIPS

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