



ELECTRONIC TUBE REFERENCE

D1320BE

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Philips or Telefunken D-series cathode-ray instrument tube designed for oscillographic and measurement display, with manufacturer-defined electrostatic beam control, deflection, screen, and accelerating characteristics for type D1320BE.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Cathode Ray*No fixed ratings recorded.**Electrostatic focusing/deflection CRT section; electrical/screen/deflection data retained in parameter rows.*

D1320BE is a Philips high-frequency high-writing-speed metal-backed oscilloscope CRT. The supplied datasheet provides electrostatic-deflection, focusing, acceleration, screen and operating characteristics.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V2

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1963 PHILIPS ELECTRON TUBES HANDBOOK V2

Section 1 · Cathode Ray

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating
Screen fluorescence	Blue	Screen
Screen phosphorescence	Blue	Screen
Screen persistence	Medium short	Screen
Useful screen diameter	114 mm	Minimum
Useful horizontal scan	100 mm	DisplayGeometry
Useful vertical scan	40 mm	DisplayGeometry
Horizontal deflection factor	67 to 80 V/cm	OscilloscopeCRT
Vertical deflection factor	13.5 to 18.5 V/cm	OscilloscopeCRT

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Post-accelerator voltage	24 kV	OscilloscopeCRT
Isolation-shield voltage	4000 ± 200 V	OscilloscopeCRT
Deflection-plate shield voltage	4000 ± 200 V	OscilloscopeCRT
Accelerator voltage	4000 ± 200 V	OscilloscopeCRT
Focusing-electrode voltage	800 to 1400 V	OscilloscopeCRT
Grid No.1 voltage	-120 to -192 V	OscilloscopeCRT
Maximum deflection-linearity deviation	2 %	OscilloscopeCRT

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips 0-D

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1999 PHILIPS 0-D

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	300 mA	—
Vertical deflection coefficient	18.5 V/cm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Final/accelerator voltage	24000 V	—
Focusing electrode voltage	800–1400 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
electrodes	6 pF	—
Cathode	3.5 pF	—
electrodes	2.8 pF	—
electrodes -except	2.8 pF	—
Cyl	3 pF	—
electrodes	3 pF	—
x4	1.9 pF	—
¥1	1.5 pF	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

