



ELECTRONIC TUBE REFERENCE

AL2210

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Nine-inch radar-display CRT identified by the manufacturer as equivalent to type 9RP33. Its construction and co-designation place it in direct-view radar indicator service.

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

SECTION1 Cathode Ray

No fixed ratings recorded.

CRT-specific electrical, optical, deflection, focusing, capacitance, and mechanical data are retained in TUBE_SECTION_PARAMETER because the locked promoted fields primarily target conventional electrode sections.

The Mullard AL2210 is explicitly identified as an equivalent/co-designation of 9RP33 in the supplied source.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1957 Philips Receiving and Amplifying Tubes

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

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 1 · Cathode Ray

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—
DeflectionMethod	Magnetic	—
FocusMethod	Electrostatic	LowVoltage

SOURCE OPERATING CONDITIONS

1963 Mullard

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

1963 MULLARD

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—
Focusing Method	Electrostatic text	—
Deflection Method	Magnetic text	—
Fluorescence	Orange text	—
Persistence	Long text	—
Anode-Coating Capacitance	700 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage Maximum	14000 V	—
Anode Voltage Minimum	8000 V	—
Typical Anode Voltage	12000 V	—
Grid 2 Voltage	100 V	—
Grid 4 Voltage Range	-200 to +200 V	—
Grid 1 Cutoff Voltage Range	-30 to -70 V	—



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

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen color	Orange	RadarCRT
Focusing	Electrostatic	RadarCRT
Deflection	Double magnetic	RadarCRT
Screen persistence	Long	RadarCRT

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen useful dimension	200 mm	RadarCRT
Final accelerator voltage	12 kV	RadarCRT
Grid No.2 voltage	300 V	RadarCRT
Heater voltage	6.3 V	RadarCRT
Heater current	300 mA	RadarCRT
Focusing grid voltage range	-200 to +200 V	RadarCRT
Grid No.1 extinction voltage	-30 to -70 V	RadarCRT



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V3

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V3

Section 1 · Cathode Ray

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
of focus voltage the limit of	200 V	of focus voltage the limit of -200 to +200 V is such
a voltage of at least	300 V	a voltage of at least -300 to +300 V will be required
Heater current	300 mA	rallele If = 300 mA
Useful screen diameter	200 mm	longue Nachleuchtdauer lang Useful diameter Diametre utile 200 mm Nutzbarer Durchmesser For curves of the screen properties see front

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid capacitance	8 pF	Capaci tea Cg < 8 pF

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen-grid voltage	300 V	Vg2 300V
Control-grid voltage	-3 V	Vg1 = -3G/-70 v6)



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	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Useful screen diagonal/diameter	200 mm	—
Deflection method	Magnetic	—
Focusing method	Low-voltage electrostatic	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 capacitance maximum	8 pF	—
Cathode capacitance maximum	8 pF	—
External coating capacitance	700 pF	—

TUBE TINKER

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

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