

ELECTRONIC TUBE REFERENCE

PL5551

Specialized - Ignitron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

IGNITRONPOWERSWITCH

Water-cooled ignitron for single- and three-phase resistance-welding control and high-current industrial switching.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 IgnitronPowerSwitch
No fixed ratings recorded.
Water-cooled ignitron for single- and three-phase welding control; equivalent electrically to PL5551A except for thermostat provisions.

Water-cooled ignitron for single- and three-phase welding control; equivalent electrically to PL5551A except for thermostat provisions.

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 · IgnitronPowerSwitch

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
t o-ti(q	4 degC	Typical characteristics t o-ti(q = 4 1/min.) = max. 4 °C
Mains voltage	250 V	Limiting values 4) For mains voltages between 250 V and 600 V. Tav is
Mains voltage	600 V	Limiting values 4) For mains voltages between 250 V and 600 V. Tav is
T(lsurge) = max	0.15 s	Welding service T(lsurge) = max.0.15 sec
Ignitor current	100 A	Limiting values IF. = max. 100 A
pour un temps d'amorgage de	100 µsec	Ignitor characteristics pour un temps d'amorgage de 100 µsec u max.. di/dt =

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Firing current	-8 A	Ignitor characteristics Firing current = 6-8A
l'amorg	4 a	Ignitor characteristics l'amorg4age 12 A
l'amorg	12 A	Ignitor characteristics l'amorg4age 12 A
Vc Dens lea conditions de i'onctionnement	50 V	Ignitor characteristics Vc Dens lea conditions de i'onctionnement = 650±50 V
(conduction time	5 s	Intermittent rectifier service (conduction time 05sec
Peak inverse anode voltage	1200 V	Intermittent rectifier service Va fwd =Va invp=1200V

1999 Philips E-Z

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

1999 PHILIPS E-Z
Section 1 · IgnitronPowerSwitch

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application: 4.C. control: two tubes in inverse parallel	4 A	Application: 4.C. control: two tubes in inverse parallel
conuection will control 600 kVA at 250	250 w	conuection will control 600 kVA at 250 -
com.ection will control 600 kXVA at 250	250 w	com.ection will control 600 kXVA at 250 -
Irms	10 ms	Irms = max. 10 A
5 280% of max. demand current (rms value)	280 %	5 280% of max. demand current (rms value)
7 Max. value at the indicated voltage	7 Ma	7 Max. value at the indicated voltage
Irms	10 ms	Irms = maxX, 10 A
phase control lis used	1 a	phase control lis used

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage range 6	6 V	Voltage range 6
5)uax. value at the indicated voltage	5 ua	5)uax. value at the indicated voltage
6)For intermediate values Tavy is inversely proportional	6 a	6)For intermediate values Tavy is inversely proportional