



ELECTRONIC TUBE REFERENCE

PL5551A

Specialized - Ignitron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

IGNITRONPOWERSWITCH

Water-cooled ignitron for single- and three-phase welding control with provision for thermostatic protection.

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

SECTION 1 IgnitronPowerSwitch

No fixed ratings recorded.

Water-cooled ignitron for single- and three-phase welding control with provision for thermostatic protection.

Water-cooled ignitron for single- and three-phase welding control with provision for thermostatic protection.

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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Montage : vertical, la connexion de l'anode en haut	1 a	Montage : vertical, la connexion de l'anode en haut
1) When the cooling systems of the tubes are connected in	1 W	1) When the cooling systems of the tubes are connected in
2) When a number of tubes is cooled in series, ti_ _ lis	2 W	2) When a number of tubes is cooled in series, ti_ _ lis
3) tm	3 a	3) tm = temperature of thermostat mount
Ignitor connector. Unfolded length 330 mm , ,	330 nf	Ignitor connector. Unfolded length 330 mm , ,
Montage : vertical, la connexion de l'anode en haut	1 a	Montage : vertical, la connexion de l'anode en haut
For mains voltages between 250 V and 600 V, Tgy is	600 ma	For mains voltages between 250 V and 600 V, Tgy is
Ohmic resistance of series inductance (1 mH)	1 Ohm	Ohmic resistance of series inductance (1 mH)
Chmic resistance of 60 uH inductance	60 s	Chmic resistance of 60 uH inductance
M7 onduction time 0.5sec] I	0.5 s	M7 onduction time 0.5sec] I

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
2) Max. average current of each tube at max. demand	2 Ma	2) Max. average current of each tube at max. demand
3) Max. demand at max. average current	3 Ma	3) Max. demand at max. average current
1) Max. average current at max. peak current	1 Ma	1) Max. average current at max. peak current
2) Max. peak current at max. average current	2 Ma	2) Max. peak current at max. average current

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
time of max. 100 usec, di/dt	0.12 ma	time of max. 100 usec, di/dt = min. 0.12 A/usec)
time of max. 100 psec, di/dt	0.12 ma	time of max. 100 psec, di/dt = min. 0.12 A/usec