



ELECTRONIC TUBE REFERENCE

ESU111

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Indirectly heated mercury-vapor half-wave rectifier for high-voltage industrial supplies. Its heavy heater requires extended warm-up before providing several amperes of rectified current.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 12 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	20000 V
NOMINAL OUTPUT CURRENT	6 A
PEAK FORWARD CURRENT	25 A
FORWARD VOLTAGE DROP	15 V
WARM-UP TIME	180 s

Indirectly heated mercury-vapour half-wave rectifier with a three-minute cathode heating delay and temperature-derated operation up to 20 kV peak inverse voltage.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 AEI Industrial Valves

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

1961 AEI INDUSTRIAL VALVES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
CondensedMercuryTemperatureRange	25–70 C	—
Peak Cathode Current	25 A	MercuryTemp=70C;PIV=5kV
Average Cathode Current	6 A	MercuryTemp=70C;PIV=5kV
Peak Cathode Current	20 A	MercuryTemp=65C;PIV=10kV
Average Cathode Current	5 A	MercuryTemp=65C;PIV=10kV
Peak Cathode Current	18 A	MercuryTemp=60C;PIV=15kV
Average Cathode Current	4 A	MercuryTemp=60C;PIV=15kV
Peak Cathode Current	15 A	MercuryTemp=55C;PIV=20kV
Average Cathode Current	3 A	MercuryTemp=55C;PIV=20kV

TUBE TINKER

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