

Ultra high voltage power supply
AUH Series



The safety design without the exposure of the high-voltage part

Up to 200kV/2kW! An ultra-high voltage power supply debut!

Rack mount type High voltage power supply

AUH series
150kV to 200kV / 1.2kW, 2kW



Ultra high voltage models of 150kV to 200kV debuts at 19-inch size!

The innovative high voltage power supply which lost exposure of the high voltage part and improved safety





AUH series is high performance HV power supply which can output ultra high voltage of maximum 200kV in the 19-inch rack size. By the safety design without the exposure of the high voltage output part, quantity of outbreak of the corona is held down as compared with the open type power supply.

Therefore, the large space reservation for prevention of electric shock becomes needless and enables setting in the space-saving.

In addition, by various remote control functions and a full protection function, AUH has high reliability and usability.

Features

- Ultra high voltage of 200kV and high power of 2kW.
- AUH is largely miniaturized by having made the high voltage output part into the seal structure by potting.
- The high reliable design that is hard to be affected by the use environment.

Applications

- Ion implantation equipment
- Electron beam system
- Capacitor charge
- For electron beam acceleration

Lineup

Output	Output	Output	Model
voltage	current	power	
150kV	8mA	1200W	AUH-150*8
	13.3mA	2000W	AUH-150*13.3
160kV	7.5mA	1200W	AUH-160*7.5
	12.5mA	2000W	AUH-160*12.5
180kV	6.66mA	1200W	AUH-180*6.66
	11.1mA	2000W	AUH-180*11.1
200kV	6mA	1200W	AUH-200*6
	10mA	2000W	AUH-200*10

* : P / Positive polar output, N / Negative polar output

Specifications

We have heard consultation individually about each specification such as ripple and temperature coefficient, etc. Feel free to contact us.

Input voltage

200VAC to 240VAC ±10% 50 or 60Hz single-phase 200VAC to 240VAC ±10% 50 or 60Hz three-phase(option)

Please consult about 100VAC input. AC input power(Maximum)

,		
1200W models	1500VA	
2000W models	2500VA	

Power factor 0.98 typ.(single phase) 0.94 typ.(three phase)

Rush current

single-phase 200 to 240V	three-phase 200 to 240V		
50A(≦10ms)	50A(≦10ms)		

Output control Local: Voltage / 10-turn potentiometer on front panel Current / 10-turn potentiometer on front panel

> Remote: Voltage / External control voltage 0 to 10Vdc (input impedance more than $1M\Omega$)

or external variable resistor $5k\Omega$ Current / External control voltage 0 to 10Vdc (input impedance more than $1M\Omega$) or external variable resistor $5k\Omega$

Voltage regulation Line: ±0.02% for ±10% input change

Load: 0.02% for 10% to 100% load change

Current regulation Line: ±0.05% for ±10% input change Load: 0.05%±100µA for 10% to 100% load change

Ripple 0.3%p-p

0.1%p-p(when -L(200V3P)option selected)

Stability 0.05%/H

Temperature coefficient

100ppm/°C

Output display Output voltage: 3.5-digit digital meter ±1999

Output current: 3.5-digit digital meter 1999

Monitor Output voltage monitor output

10V/Maximum output voltage (output impedance 1kΩ)

Output current monitor

10V/Maximum output current (output impedance $1k\Omega$)

Protections Over voltage protection (Cut off when 110% of rating, manual recovery)

Over current protection (high-voltage cut off, manual recovery) Protection against output short-circuit and arc discharge Over temperature protection (Cut off, manual recovery)

Other Remote switch ON/OFF (by external relay)

functions Door switch (by external relay)

Output status signal output (by internal relay) Remote reset (only when -LOc option selected)

Operating temp. 0°C to +40°C Storage temp. -20°C to +70°C

Humidity 20% to 80%RH (no condensation)

Accessories AC input cable 2.5m(1) (only when single phase input)

*See "Input / Output cable" for details

HV output shielded cable 2.5m(flying lead) (1)

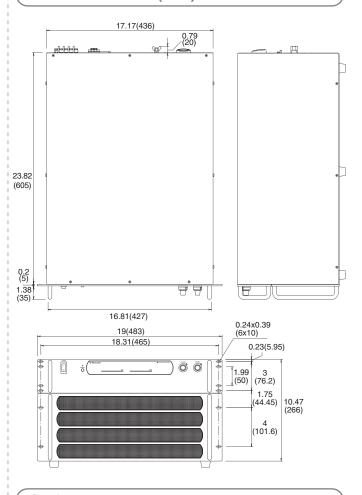
Insulating oil, Instruction manual (1)

Input / Output cable

Input		CABLE TYPE5 (Flying lead)
mput	(-L(200V3P) option)	CABLE TYPE6 (Flying lead)*
Output	L=2.5m Flying lead (shield cable) Dimensions change by the output voltage. Please contact our sales office for detail.	150kV models CN-150-MHVP 160kV, 180kV, 200kV models CN-200-MHVP

*Separated.

Dimentions inch(mm)



Options

-LLr *1 Lower ripple

Ripple becomes 0.1%p-p.

-LF Floating ground (Isolation voltage: 50Vdc)

It is used when measuring the very small current which

flows into load.

(This option is not usable in a use to let a high voltage power supply make floating.)

-LMs *2 Master slave control

Maximum of 4 slave units can be controlled with

one master unit.

-LW Slow start

> Takes about 10-second to reach maximum rating voltage from when OUTPUT switch or remote switch is turned on.

-L(200V3P) *1 Three-phase input

-LOc *2 Cut off when over current

- *1 -LLr option and -L(200V3P) option cannot be selected together. Only one of each can be selected.
- *2 When simultaneously equipped with the -LMs option and the -LOc option, please consult to us.

When ordering, suffix the above option mark to the model number

<e.g.> AUH-150PB-LFOcW(200V3P), AUH-200N10-LFMsW(200V3P) Alphabetical and input voltage order.



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Customer Inquiry Sheet (AUH series)

Please copy this page and above fax number after filling out form below.

I would like							
A quotation	☐ An explanation of product	A demonstration	☐ To purchase				
Other ()					
■ Give us your requirement / comment							
L			J				
■ Please fill in below							
Address:							
Company:							
Dept.:		Title:					
Name:							
Tel:		Fax:					
E-mail:							

We warrant that products contained in this catalog (hereinafter, the "Products") are free from defects in material and workmanship under normal use for a period of one (1) year from the date of shipment thereof. However, the warranty period for X-ray detectors and X-ray source shall be either one (1) year from the date of shipment or 1,000 hours, whichever shorter. The above warranty shall not apply to any Product which, at our sole judgment, has been:i)Repaired or altered by persons unauthorized by us; or ii)Connected, installed, adjusted or used otherwise than in accordance with the instructions furnished by us (including being used in an inappropriate installation environment, such as in corrosive gas, high temperature and humidity). We are not liable for any loss, damage or failure of the Products after the shipment thereof caused by external factors such as disasters. If any Product is showed to be defective as satisfactory to us, we, at our sole discretion, repair or replace such defective Products at no cost to the purchaser. We assume no liability to the purchaser or any third party for special, incidental, consequential, or other damages resulting from a breach of the foregoing warranty. This warranty excludes any and all other warranties not set forth herein, express or implied, including without limitation the implied warranties of merchantability or fitness for a particular purpose. The Products are not designed and produced for such applications as requiring extremely high reliability and safety, or involving human lives (such as nuclear power, aerospace, social infrastructure facility, medical equipment, etc.). The use under such environment is not covered by this warranty and may require additional design and manufacturing processes. Regarding RoHS compliance, Matsusada Precision Inc. does not intentionally use objectionable substances in the products listed within this catalog. Matsusada Precision Inc. manufactures products using components which, according to our suppliers, are "RoHS compliant parts". However, Matsusada Precision does not analyze each and every unit to confirm. Therefore, there may be some customized products which do not comply to RoHS. Please contact your nearby sales office for confirmation.



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