



# Press Release

Nippon Chemi-Con Corporation  
October 7, 2022

## **Snap-in Type Aluminum Electrolytic Capacitors KHU/LHU Series** 60% higher capacitance compared to existing products of same size

Nippon Chemi-Con has developed snap-in type capacitors KHU Series which guarantees 3,000 hours at 105°C, and LHU Series which guarantees 5,000 hours at 105°C. These capacitors are for power supply input smoothing and contributes to downsizing and longer life of switching power supplies and general-purpose inverters.

Snap-in type aluminum electrolytic capacitors are mainly used in smoothing circuits of power supplies. However, demand has increased for server power supplies for U.S./Canada, and in recent years, power conditioners for solar power generation/electricity storage systems aimed towards the realization of carbon neutrality. Such applications require higher capacitance for 475V and 500V high-voltage resistance products. We have engaged in development of new products to meet requirements for these power supplies.

The newly developed KHU Series and LHU Series realize higher capacitance for 475V and 500V products of the existing KHS/LHS Series without reducing endurance. Capacitance per volume can be increased by a maximum of 60% compared to the existing Series.

### **Technical Features**

By expanding the usage voltage range of new materials adopted in the existing KHS Series (475V) and last year's KHE Series to 500V, we have realized longer life and higher capacitance.

### **Product Specifications**

	KHU Series	LHU Series
Category temperature range	-40°C to +105°C	
Rated voltage range	475V to 500V	
Case size	ø25.4mm×25mmL to ø35mm×60mmL	
Capacitance range	120μF to 950μF	120μF to 900μF
Endurance	3,000 hours at 105°C	5,000 hours at 105°C

### **Samples and Mass Production**

Samples and mass production of the KHU Series and LHU Series started in August 2022.

## Production Site

Chemi-Con East Japan Corp. Fukushima Plant

## KHU Series & LHU Series: Performance comparison with existing products

\*Chart figures: Capacitance ( $\mu\text{F}$ , 20°C, 120Hz)/Rated ripple current (Arms, 105°C, 120Hz)

Rated voltage	Case size	3,000 hours at 105°C		5,000 hours at 105°C	
		KHS Series (existing)	KHU Series	LHS Series (existing)	LHU Series
475V	ø25.4×60L	440 / 1.98	<b>490 / 2.19</b>	—	<b>460 / 2.12</b>
	ø30×60L	640 / 2.38	<b>730 / 2.78</b>	470 / 2.05	<b>690 / 2.70</b>
	ø35×60L	870 / 2.77	<b>950 / 3.16</b>	560 / 2.21	<b>900 / 3.08</b>
500V	ø25.4×60L	270 / 1.51	<b>430 / 2.05</b>	—	<b>410 / 2.00</b>
	ø30×60L	390 / 1.87	<b>640 / 2.60</b>	390 / 1.87	<b>610 / 2.54</b>
	ø35×60L	560 / 2.22	<b>860 / 3.01</b>	560 / 2.21	<b>830 / 2.95</b>

## Product Appearance



KHU Series



LHU Series