



Press Release

Nippon Chemi-Con Corporation
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High-Capacitance Screw Terminal Type Aluminum Electrolytic Capacitors RWU/RWX Series 50% higher capacitance achieved

Nippon Chemi-Con has developed the RWU Series (guarantees 2,000 hours at 85°C) and the RWX Series (guarantees 5,000 hours at 85°C) as high-capacitance products of screw terminal type aluminum electrolytic capacitors.

These Series are based on our existing RWE/RWF Series and is specialized for capacitance performance. It is designed for use in inverter systems such as X-ray power supplies and UPS, where high capacitance and downsizing of capacitor banks are necessary. Capacitance performance is approximately 150% of the RWE/RWF Series, and the capacitance per unit volume is greatly improved.

By using a newly developed high-capacitance foil, as well as a high-density separator and high-voltage compatible electrolyte, the products have high CV (energy) and reliability. We conduct tests in a variety of harsh environments that are close to actual operating environments. We are considering applying the technology of these Series to provide products to servo press and welder applications that require high energy charge-discharge performance.

[RWU Series Main Specifications]

- Category temperature range: -25°C to +85°C
- Endurance: guarantees 2,000 hours at 85°C
- Rated voltage range: 400 to 450 V
- Capacitance range: 2,200 to 33,000 μ F
- Case size: ϕ 63.5 x 60 to ϕ 100 x 270 L mm
- Rated ripple current: 4.9 to 34.9 Arms

[RWX Series Main Specifications]

- Category temperature range: -25°C to +85°C
- Endurance: guarantees 5,000 hours at 85°C
- Rated voltage range: 400 to 450 V
- Capacitance range: 2,200 to 32,000 μ F
- Case size: ϕ 63.5 x 65 to ϕ 100 x 270 L mm
- Rated ripple current: 5.1 to 34.5 Arms

[Mass Production]

Mass production of the RWU Series is scheduled to start at Chemi-Con Fukushima Corp. (a wholly owned subsidiary of Nippon Chemi-Con) in July 2019, and the RWX Series in December 2019.

[Performance Comparison]

Comparison made with $\phi 89 \times 155$ L products.

Series	RWE	RWU	RWF	RWX
Guarantee	2,000 hours at 85°C		5,000 hours at 85°C	
Rated capacitance	8,200 μ F	14,000 μ F	8,200 μ F	13,000 μ F
Capacitance comparison	Standard	1.70 times	Standard	1.58 times

[Capacitor Bank Structure Case Study]

Comparison of the number of capacitors and capacitor bank volume assuming a bank capacity of 1.5F

Series	RWF	RWX
Rate	450V 15,000 μ F	450V 24,500 μ F
Capacitor size	$\phi 100 \times 250$ L	$\phi 100 \times 250$ L
Number of banks	2S200P	2S123P
Required quantity	400	246
	Standard	154 less
Bank volume [cm ³]	785,398	483,019
	Standard	-39%

[Product Appearance]

