

1.2. High AC Current Capacitors / Heavy Current Capacitors / Resonant Capacitors :

LC2-RNM / LC3-RNM series :

Applications :

High Continuous AC Current applications, High Frequency AC/DC Filter, Medium Frequency Power applications, Induction Heating Equipments, High Current Welding, Resonant Circuits, Motor Controls; Oscillating, Bypass and Coupling circuits,.

Properties :

Easy Installation
 Doesn't need any Water or Force Air Cooling
 High RMS Ripple Current with 100% duty
 Low ESR and ESL
 Low Thermal Resistance
 High continuous power with Lower Internal loss
 High Operating Temperature range up to +105C ranges
 Plastic Enclosure and Light Weight
 Flame Retardant UL94-V0 grade

Electrical Characteristics :

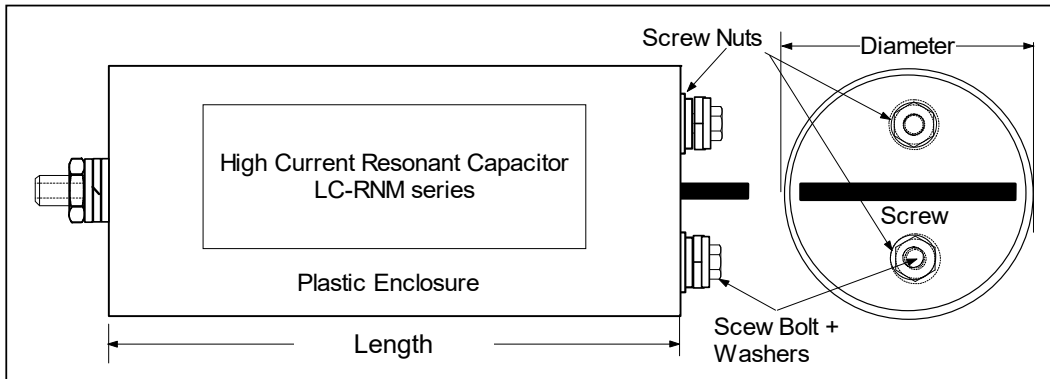
Rated Voltage : 250Vrms – 450Vrms - Support higher voltage requirement
 Capacitance range : 3 – 47uF (can be customized)
 Ripple RMS Current up to 240A - All the listed Currents are for 100% duty.
 Reactive Power up to 65kVAR

Other Electrical Characteristics :

Capacitance Tolerance : +/-5%; +/-10%
 Operating Temperature : +70C / +85C / +90C / +105C
 Thermal Resistance R θ : refer to the table below

Thermocouple can be built-in, capacitor internal temperature can be measured. The output temperature signal can be used as one of the reference signals in the circuit and trigger other function.

Specifications and Size : LC2-RNM series



LC2-RNM 250Vrms / 1000Vdc

P/N	Cn uF	Diameter D mm	Length L mm	Max. I _{rms} +70C	R θ C/W +70C	Max. Power KVAR +70C	Max. I _{rms} +85C	R θ C/W +85C	Max. Power KVAR +85C	Max. I _{rms} +105C	R θ C/W +105C	Max. Power KVAR +105C	ESR mohm 100khz 25C	Stray Inductance nH
LC2-RNM126K250VR	12	65	180	65	0.9	16	55	1.2	14	45	1.8	11	1.65	15
LC2-RNM156K250VR	15	65	215	80	0.6	20	70	0.8	18	55	1.4	14	1.45	15
LC2-RNM186K250VR	18	65	225	100	0.4	25	80	0.7	20	65	1.1	16	1.35	15
LC2-RNM206K250VR	20	65	255	100	0.5	25	80	0.8	20	65	1.2	16	1.20	15
LC2-RNM226K250VR	22	90	170	120	0.4	30	90	0.7	23	75	1.0	19	1.10	15
LC2-RNM256K250VR	25	90	200	130	0.3	33	110	0.5	28	80	0.9	20	1.05	15
LC2-RNM306K250VR	30	90	230	160	0.3	40	130	0.4	33	100	0.7	25	0.90	15
LC2-RNM356K250VR	35	90	250	180	0.2	45	150	0.3	38	120	0.5	30	0.85	15
LC2-RNM406K250VR	40	90	260	200	0.2	50	150	0.4	38	120	0.6	30	0.75	15
LC2-RNM456K250VR	45	90	295	220	0.2	55	150	0.4	38	120	0.6	30	0.70	15
LC2-RNM476K250VR	47	90	295	240	0.1	60	150	0.4	38	120	0.6	30	0.70	15

In all circumstance, it is better to keep the actual capacitor I_{rms} smaller than the listed I_{rms} at the specific temperature.

LC2-RNM 325Vrms / 1200Vdc

P/N	Cn uF	Diameter D mm	Length L mm	Max. Irms +70C	Rθ C/W +70C	Max. Power KVAR +70C	Max. Irms +85C	Rθ C/W +85C	Max. Power KVAR +85C	Max. Irms +105C	Rθ C/W +105C	Max. Power KVAR +105C	ESR mohm 100khz 25C	Stray Inductance nH
LC2-RNM106K325VR	10	65	185	60	0.9	20	50	1.3	16	40	2.0	13	1.90	15
LC2-RNM126K325VR	12	65	220	70	0.7	23	60	1.0	20	45	1.7	15	1.70	15
LC2-RNM156K325VR	15	65	260	90	0.5	29	75	0.7	24	60	1.1	20	1.50	15
LC2-RNM186K325VR	18	90	180	100	0.4	33	80	0.7	26	65	1.1	21	1.35	15
LC2-RNM206K325VR	20	90	185	110	0.4	36	90	0.6	29	75	0.9	24	1.25	15
LC2-RNM226K325VR	22	90	220	125	0.3	41	100	0.5	33	85	0.7	28	1.20	15
LC2-RNM256K325VR	25	90	250	150	0.2	49	125	0.3	41	100	0.5	33	1.10	15
LC2-RNM306K325VR	30	90	260	170	0.2	55	150	0.3	49	120	0.5	39	0.90	15
LC2-RNM356K325VR	35	90	295	200	0.2	65	170	0.3	55	135	0.4	44	0.80	15

LC2-RNM 360Vrms / 1400Vdc

P/N	Cn uF	Diameter D mm	Length L mm	Max. Irms +70C	Rθ C/W +70C	Max. Power KVAR +70C	Max. Irms +85C	Rθ C/W +85C	Max. Power KVAR +85C	Max. Irms +105C	Rθ C/W +105C	Max. Power KVAR +105C	ESR mohm 100khz 25C	Stray Inductance nH
LC2-RNM605K360VR	6	65	185	50	1.5	18	40	2.3	14	35	3.0	13	1.80	15
LC2-RNM805K360VR	8	65	225	70	0.8	25	55	1.4	20	40	2.6	14	1.6	15
LC2-RNM106K360VR	10	90	155	85	0.7	31	65	1.1	23	50	1.9	18	1.45	15
LC2-RNM126K360VR	12	90	185	100	0.5	36	80	0.9	29	65	1.3	23	1.3	15
LC2-RNM156K360VR	15	90	220	120	0.4	43	100	0.6	36	80	1.0	29	1.1	15
LC2-RNM206K360VR	20	90	270	160	0.3	58	130	0.4	47	100	0.7	36	0.9	15

LC2-RNM 415Vrms / 1700Vdc

P/N	Cn uF	Diameter D mm	Length L mm	Max. Irms +70C	Rθ C/W +70C	Max. Power KVAR +70C	Max. Irms +85C	Rθ C/W +85C	Max. Power KVAR +85C	Max. Irms +105C	Rθ C/W +105C	Max. Power KVAR +105C	ESR mohm 100khz 25C	Stray Inductance nH
LC2-RNM305K415VR	3	65	150	35	2.1	15	30	2.9	12	20	6.5	8	2.3	15
LC2-RNM405K415VR	4	65	185	45	1.5	19	35	2.4	15	25	4.8	10	2.0	15
LC2-RNM505K415VR	5	65	220	55	1.1	23	45	1.6	19	35	2.7	15	1.8	15
LC2-RNM605K415VR	6	65	260	65	0.8	27	55	1.2	23	45	1.7	19	1.7	15
LC2-RNM805K415VR	8	90	185	85	0.6	35	70	0.8	29	60	1.1	25	1.5	15
LC2-RNM106K415VR	10	90	220	100	0.4	42	85	0.6	35	70	0.9	29	1.35	15
LC2-RNM126K415VR	12	90	260	120	0.3	50	100	0.5	42	80	0.8	33	1.2	15

LC2-RNM 450Vrms / 2000Vdc

P/N	Cn uF	Diameter D mm	Length L mm	Max. Irms +70C	Rθ C/W +70C	Max. Power KVAR +70C	Max. Irms +85C	Rθ C/W +85C	Max. Power KVAR +85C	Max. Irms +105C	Rθ C/W +105C	Max. Power KVAR +105C	ESR mohm 100khz 25C	Stray Inductance nH
LC2-RNM305K450VR	3	65	230	40	1.5	18	35	2.0	16	25	3.8	11	2.5	15
LC2-RNM405K450VR	4	65	295	50	1.0	23	40	1.6	18	30	2.9	14	2.3	15
LC2-RNM505K415VR	5	90	180	65	0.7	29	55	0.9	25	40	1.8	18	2.1	15
LC2-RNM605K450VR	6	90	210	75	0.6	34	60	0.9	27	50	1.3	23	1.8	15
LC2-RNM805K450VR	8	90	250	85	0.5	38	70	0.7	32	60	1.0	27	1.65	15

In all circumstance, it is better to keep the actual capacitor Irms smaller than the listed Irms at the specific temperature.