

WFC-Series Capacitors



NWL pioneered the development of water cooled capacitors and has become the supplier of choice for many induction heating furnace manufacturers worldwide. With decades of design expertise and manufacturing excellence, NWL is one of the top manufacturers of water cooled capacitors in the world.

NWL's WFC-Series water cooled/liquid cooled capacitors provide solutions in a wide variety of induction heating applications, from forging to melting, heat treating and annealing, to billet heating and hardening.

Over 50 electrical configurations are currently available in a welded aluminum package, with the following features and options available upon request:

- Pressure switches
- Internal discharge resistors
- Live or dead case construction
- Single to multiple fine-tuning values per capacitor
- Choice of bracket style and location
- Choice of cooling water connections
- Choice of terminal connections

Quick Reference Features

WFC-Series capacitors have these features and the following technical specifications:

- Liquid cooled
- High KVAR
- High frequency

Jumbo Can™ Capacitor

NWL also offers the Jumbo Can™ capacitor, specifically designed for low frequency and high voltage AC resonant circuits.

WFC-Series Capacitors Product Information and Specifications

General Specifications

Reference Standard	IEC/EN 60110
Capacitance Tolerance	+15% -0% typical
KVAR	Volt RMS x Amps RMS reactive power
Power Losses	0.10 – 0.40 watts/KVAR typical
Voltages	AC RMS sinewave, +10% typical surge AC non-sinusoidal
RMS Currents	115 % rating max
Temperature Ratings	+45 °C max water temperature out peak current @ 40 °C ambient
Operating Temperature	-40 °C to +85 °C
Encapsulation	Low loss oil impregnant

Electrical Ratings Overview

KVAR	VAC RMS	Frequency (HZ)	Cap (uF)	Current RMS	Case	Sections	Width (in)	Length (in)	Height (in)	Weight (kg)
965	1250	100	985	772	dead	1	8.00	22.00	28.00	94
1000	800	200	1243	1250	dead	6	7.25	13.50	29.00	78
2084	1000	200	1658	2084	dead	1	8.00	22.00	28.00	94
1500	2400	200	207	625	dead	6	6.25	13.50	28.00	65
1750	800	250	1740	2188	dead	1	8.00	22.00	28.00	94



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KVAR	VAC RMS	Frequency	Cap	Current RMS	Case	Sections	Width	Length	Height	Weight
		(HZ)	(uF)				(in)	(in)	(in)	(kg)
2900	1250	300	985	2321	dead	1	8.00	22.00	28.00	94
1270	1500	300	300	850	dead	1	6.25	13.50	26.00	42
4000	1800	300	650	2210	dead	1	8.00	22.00	31.00	104
4000	2000	300	531	2000	dead	1	7.50	22.00	28.00	89
4300	2400	300	396	1792	dead	1	8.00	22.00	32.00	107
4000	2800	300	271	1428	dead	1	8.00	22.00	28.00	94
6000	3000	300	354	2000	dead	1	7.50	22.00	31.00	100
1200	800	400	1131	2274	dead	1	6.50	13.50	28.00	68
2500	2400	400	173	1042	dead	1	6.25	13.50	28.00	66
4800	2800	400	244	1715	dead	1	7.50	22.00	28.00	88
2000	1000	500	637	1000	dead	1	7.50	22.00	13.00	42
4200	1250	500	856	3360	live	2	8.00	22.00	28.00	94
4780	2500	500	244	1912	dead	1	7.50	22.00	28.00	88
5900	3000	500	209	1980	dead	2	7.50	22.00	24.00	77
1918	800	600	795	2398	dead	1	6.50	13.50	28.00	68
1000	1250	600	169	800	dead	6	6.25	13.50	12.50	30
3350	1800	600	274	1861	dead	1	6.25	13.50	29.00	67
7200	3000	600	255	2500	dead	1	7.50	22.00	31.00	98
2600	1090	1000	348	2385	live	1	6.50	13.50	18.50	32
2600	1250	1000	265	2080	dead	8	6.25	13.50	21.50	52
3000	1250	1000	306	2400	dead	1	6.25	13.50	21.50	39
3300	1850	1000	153	1784	dead	1	6.25	13.50	18.50	30
4800	1000	1200	637	4800	dead	2	8.00	22.00	28.00	94
1200	1250	1200	102	960	live	6	5.13	13.50	13.00	26
2000	1250	1200	170	1600	live	6	5.25	13.50	15.25	30
1200	1500	1200	71	800	live	6	5.38	13.50	13.00	27
3000	1500	1200	177	2000	live	8	6.25	13.50	17.50	42
4320	1800	1200	177	2400	dead	1	6.00	22.00	13.50	34
6921	3000	1200	102	2307	dead	1	6.38	13.50	28.00	48
7350	3300	1500	72	2272	dead	1	6.50	13.50	29.00	49

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KVAR	VAC RMS	Frequency	Cap	Current RMS	Case	Sections	Width	Length	Height	Weight
		(HZ)	(uF)				(in)	(in)	(in)	(kg)
900	400	3000	298.00	2250	dead	8	6.25	13.50	13.00	31
450	800	3000	37.00	565	live	6	4.13	13.50	7.00	12
900	800	3000	75.00	1125	live	4	4.13	13.50	13.00	21
1900	800	3000	158.00	2375	live	8	6.25	13.50	13.00	31
1200	1250	3000	41.00	960	live	8	4.13	13.50	9.00	14
3000	1250	3000	102.00	2400	live	8	6.13	13.50	14.00	33
2333	1500	3000	55.00	1710	live	8	4.13	13.50	13.00	21
3600	1800	3000	59.00	2000	live	8	5.13	13.50	13.00	26
3900	3000	6000	12.00	1300	dead	8	4.63	13.50	15.25	28
900	440	9600	77.00	2045	live	6	4.13	13.50	13.00	21
450	800	9600	12.00	562	live	6	4.13	13.50	7.00	12
1200	800	9600	31.00	1500	live	5	4.13	13.50	7.00	12
1900	800	10000	47.00	2378	live	8	4.38	13.50	9.50	16
3000	1250	10000	31.00	2400	live	8	5.25	13.50	13.00	26
3000	2500	10000	8.00	1200	live	6	5.75	13.50	13.50	30
3016	2000	20000	6.00	1508	live	7	5.13	13.50	14.00	29
1050	800	25000	10.00	1320	live	6	4.13	13.50	7.00	12
3000	2000	30000	4.00	1508	live	7	5.13	13.50	15.25	30
955	800	50000	4.80	1200	live	6	6.13	13.50	15.00	36
1235	1250	50000	2.50	988	live	6	6.13	13.50	14.25	34
3150	3000	50000	1.10	1050	dead	6	6.25	13.50	14.00	34
563	800	70000	2.00	700	dead	6	4.25	13.50	7.00	11
1000	1250	100000	1.00	800	live	6	4.50	13.50	6.00	11
1000	1250	200000	0.51	800	live	6	4.50	13.50	5.00	10
1000	2500	200000	0.13	404	live	6	4.50	13.50	5.00	10
1000	1250	450000	0.23	800	live	6	4.50	13.50	5.00	10
1000	2500	450000	0.06	404	live	6	4.50	13.50	5.00	10