Motor-Run Capacitors

AM RAD Engineering, Inc.

MOTOR RUN CAPACITORS

A Division of American Radionic, Co., Inc.

AC CAPACITORS

FLUID-FILLED • METALLIZED • POLYPROPYLENE

MOTOR RUN APPLICATIONS

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Series V2000 & R2000
(Motor Run Capacitors)

A metallized polypropylene dielectric capacitor encapsulated in a non-toxic, biodegradable patented viscous fluid (LG22™). The container is a metal can (either deep drawn steel or impact extruded aluminum) with a double-rolled cover which provides a leak-proof enclosure.

UL File No. E133000(N) per UL-810 for 10,000 AMP Fault Current

Approved by Canadian Standard Association – C22.2 NO. 190

The capacitors are provided with a UL approved internal current interrupter designed to disconnect the capacitor element if excessive pressure should develop inside the case from misapplication.

The terminals are four blade "quick disconnect" surrounded by terminal insulators meeting minimum spacing requirements per UL-810 specifications.

Performance Characteristics

1. **CAPACITANCE:** 3.0uF to 100.0uF. Shall be within the specified tolerance limits of the nominal value measured at 1 KHz at 25˚C.
2. **CAPACITANCE TOLERANCE:** ±6% and ±10%. Other tolerances available upon request.
3. **DISSIPATION FACTOR:** Measured at 1 KHz at 25˚C shall not exceed

   .10% (.0010) for capacitors up to 7.5uF
   .25% (.0025) for capacitors up to 15.0uF
   .30% (.0030) for capacitors up to 25.0uF
   .45% (.0045) for capacitors up to 40.0uF
   .70% (.0070) for capacitors up to 70.0uF

   The dissipation factor shall not exceed .10% when measured at rated voltage, 60 Hz at 25˚C.
4. **INSULATION RESISTANCE:** When measured at 25˚C at 200 VDC (for capacitors rated up to 250 VAC) / 400 VDC (for 330-440 VAC rated capacitors) with two minute electrification, shall not be less than 100,000 megohms x mfds.
5. **VOLTAGE RATING:** Full temperature range – 250 VAC and 370 VAC, 50-60Hz. Other Voltage ratings available upon request.
6. **TEMPERATURE RANGE:** -40˚C + 70˚C.
7. **DIELECTRIC VOLTAGE-WITHSTAND TEST:**

   A) The capacitors shall withstand 1.5 x rated voltage for ten seconds applied to terminals of opposite polarity. (Tests may also be performed by applying a DC voltage equal to 1.4 x AC testing voltage.)

   B) The capacitors shall withstand without breakdown, 2000 VDC applied between terminals and the case.
8. **ACCELERATED, CYCLING LIFE TEST:**

   8.1 The capacitors shall withstand a life test of 1.25 x rated AC voltage at 80˚C for 2000 hours.

   8.2 AFTER LIFE TEST:

   a) Maximum capacitance change when measured as specified in paragraph 1. (±3%)

   b) Maximum dissipation factor when measured as specified in paragraph 3. (1.5 x Specified value per paragraph 3)

   c) Minimum insulation resistance when measured as specified in paragraph 4. (100,000 megohms x mfd)

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Series V2000
(Motor Run Capacitors – Oval Can)

Single Value 370 VAC

Part Number	CuF	Base	Height-H
V2000/37-406 S	4.0	A	1.58"
V2000/37-405	4.0	A	2.38"
V2000/37-505 S	5.0	A	1.58"
V2000/37-505	5.0	A	2.38"
V2000/37-605	6.0	A	2.38"
V2000/37-755	7.5	A	2.38"
V2000/37-106	10.0	A	2.38"
V2000/37-1255	12.5	A	3.10"
V2000/37-156	15.0	A	3.10"
V2000/37-1755	17.5	B	3.10"
V2000/37-206	20.0	B	3.10"
V2000/37-256	25.0	B	3.10"
V2000/37-306	30.0	B	3.10"
V2000/37-356	35.0	B	3.88"
V2000/37-406	40.0	B	3.88"
V2000/37-456	45.0	B	3.88"
V2000/37-506	50.0	B	3.88"
V2000/37-556	55.0	B	3.88"
V2000/37-606	60.0	B	3.88"
V2000/37-656	65.0	C	3.88"
V2000/37-706	70.0	C	3.88"

Single Value 440 VAC

Part Number	CuF	Base	Height-H
V2000/44-405	4.0	A	2.38"
V2000/44-505	5.0	A	2.38"
V2000/44-755	7.5	A	2.38"
V2000/44-106	10.0	A	3.88"
V2000/44-1255	12.5	A	3.88"
V2000/44-156	15.0	A	3.88"
V2000/44-1755	17.5	B	3.88"
V2000/44-206	20.0	B	3.88"
V2000/44-256	25.0	B	3.88"
V2000/44-306	30.0	B	3.88"
V2000/44-356	35.0	B	3.88"
V2000/44-406	40.0	B	3.88"
V2000/44-456	45.0	C	3.88"
V2000/44-506	50.0	C	3.88"
V2000/44-656	65.0	C	3.88"

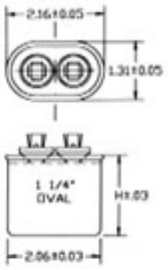
Dual Value 370 VAC

Part Number	CuF	Base	Height-H
V2000/37-(505+156)	5.0+15.0	B	3.88"
V2000/37-(505+206)	5.0+20.0	B	3.88"
V2000/37-(505+256)	5.0+25.0	B	3.88"
V2000/37-(505+306)	5.0+30.0	B	3.88"
V2000/37-(505+356)	5.0+35.0	B	3.88"
V2000/37-(505+406)	5.0+40.0	B	3.88"

Dual Value 440 VAC

Part Number	CuF	Base	Height-H
V2000/44-(505+156)	5.0+15.0	B	3.88"
V2000/44-(505+206)	5.0+20.0	B	3.88"
V2000/44-(505+256)	5.0+25.0	B	3.88"
V2000/44-(505+306)	5.0+30.0	B	3.88"
V2000/44-(505+356)	5.0+35.0	C	3.88"
V2000/44-(505+406)	5.0+40.0	C	3.88"

A BASE



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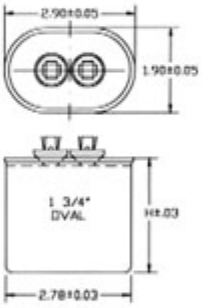
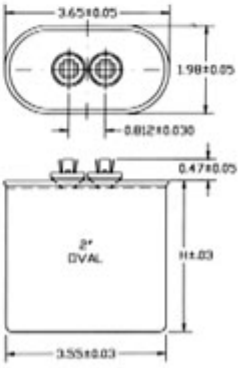


C BASE



Series R2000
(Motor Run Capacitors – Round Can)

Single Value 370 VAC

Part Number	CuF	Base	Height-H
R2000/37-405	4.0	L	2.38"
R2000/37-505	5.0	L	2.38"
R2000/37-755	7.5	L	2.38"
R2000/37-106	10.0	L	2.38"
R2000/37-1255	12.5	L	2.38"
R2000/37-156	15.0	L	2.38"
R2000/37-1755	17.5	L	3.10"
R2000/37-206	20.0	L	3.10"
R2000/37-256	25.0	L	3.10"
R2000/37-306	30.0	L	3.10"
R2000/37-356	35.0	M	3.88"
R2000/37-406	40.0	M	3.88"
R2000/37-456	45.0	M	3.88"
R2000/37-506	50.0	M	3.88"
R2000/37-556	55.0	M	3.88"
R2000/37-606	60.0	N	3.88"
R2000/37-656	65.0	N	3.88"
R2000/37-706	70.0	N	3.88"

Single Value 440 VAC

Part Number	CuF	Base	Height-H
R2000/44-405	4.0	L	2.38"
R2000/44-505	5.0	L	2.38"
R2000/44-755	7.5	L	2.38"
R2000/44-106	10.0	L	3.88"
R2000/44-1255	12.5	L	3.88"
R2000/44-156	15.0	L	3.88"
R2000/44-1755	17.5	L	3.88"
R2000/44-206	20.0	L	3.88"
R2000/44-256	25.0	L	3.88"
R2000/44-306	30.0	L	3.88"
R2000/44-356	35.0	M	3.88"
R2000/44-406	40.0	M	3.88"
R2000/44-456	45.0	N	3.88"
R2000/44-506	50.0	N	3.88"
R2000/44-556	55.0	N	3.88"
R2000/44-606	60.0	N	3.88"
R2000/44-656	65.0	N	3.88"
R2000/44-706	70.0	N	3.88"

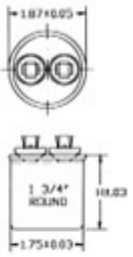
Dual Value 370 VAC

Part Number	CuF	Base	Height-H
R2000/37-(505+156)	5.0+15.0	M	3.88"
R2000/37-(505+206)	5.0+20.0	M	3.88"
R2000/37-(505+256)	5.0+25.0	M	3.88"
R2000/37-(505+306)	5.0+30.0	M	3.88"
R2000/37-(505+356)	5.0+35.0	M	4.25"
R2000/37-(505+406)	5.0+40.0	M	4.25"

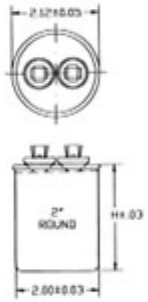
Dual Value 440 VAC

Part Number	CuF	Base	Height-H
R2000/44-(505+156)	5.0+15.0	M	3.88"
R2000/44-(505+206)	5.0+20.0	M	3.88"
R2000/44-(505+256)	5.0+25.0	M	3.88"
R2000/44-(505+306)	5.0+30.0	M	4.25"
R2000/44-(505+356)	5.0+35.0	N	3.88"
R2000/44-(505+406)	5.0+40.0	N	3.88"

L BASE



M BASE



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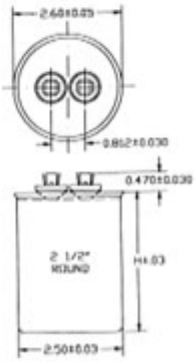

Standard Labeling