



# *AC Capacitors for Motor Run Applications*



*Proven IEC-252 Class B Compliant*  
10,000 Hour Reliability Standard



PROLINE Capacitors 1946 West Cook Road, Fort Wayne, Indiana 46818 USA  
Phone: (260) 416-5400 Fax: (260) 416-5460 Email: [capacitors@regalbelloit.com](mailto:capacitors@regalbelloit.com)  
[www.prolinecapacitors.com](http://www.prolinecapacitors.com)





# Capacitor Application Data Sheet

To ensure correct selection of a capacitor for your application, please provide the information indicated below. This sheet may be duplicated or additional copies may be obtained from RBC.

Of particular importance are the voltages and current waveforms complete with values of voltage and current over a complete cycle.

Send this data to your local RBC Sales Representative or directly to:

**PROLINE Capacitors**

1946 West Cook Road

Fort Wayne, Indiana 46818 USA

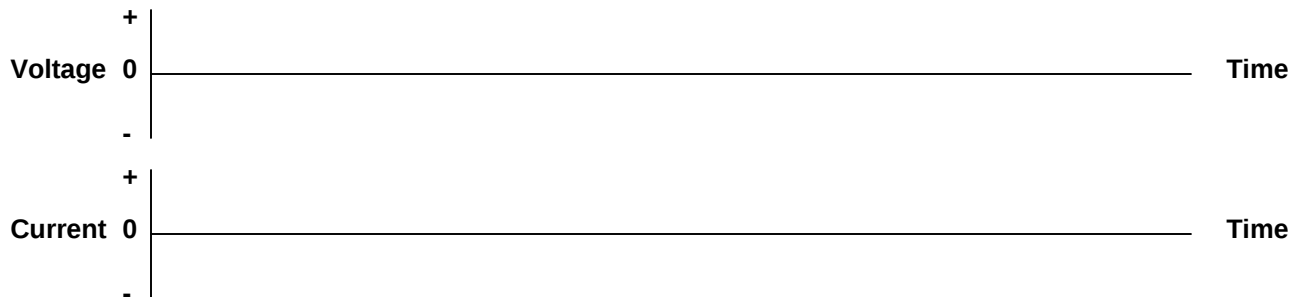
**Phone:** (260) 416-5400

**Fax:** (260) 416-5460

**Email:** capacitors@regalbeloit.com

## PRIMARY INFORMATION (Essential)

1. **Application:** \_\_\_\_\_
2. **Capacitance:** \_\_\_\_\_ **Tolerance:** \_\_\_\_\_
3. **Peak Voltage:** \_\_\_\_\_ **RMS Voltage:** \_\_\_\_\_
4. **Peak Current:** \_\_\_\_\_ **RMS Current:** \_\_\_\_\_
5. **Transient Voltage:** \_\_\_\_\_ **Duration:** \_\_\_\_\_ **Freq. Of Occurrence:** \_\_\_\_\_
6. **Frequency or Repetition Rate (Hz):** \_\_\_\_\_ **Duty Cycle:** \_\_\_\_\_
7. **Ambient Temperature:** \_\_\_\_\_ **Max.:** \_\_\_\_\_ **Min.:** \_\_\_\_\_
8. **Capacitor Charge Time:** \_\_\_\_\_ **Discharge Time:** \_\_\_\_\_
9. **Required Operating Life (Hours):** \_\_\_\_\_
10. **Waveforms:**



## SECONDARY INFORMATION (Provide as Appropriate)

11. **Physical Size Limitations:** \_\_\_\_\_
12. **Mounting Requirements:** \_\_\_\_\_
13. **Applicable Specifications:** \_\_\_\_\_
14. **Type of Cooling Available:** \_\_\_\_\_
15. **Unusual Atmospheric Conditions:** \_\_\_\_\_
16. **Other Special Requirements:** \_\_\_\_\_
17. **Number of Samples Required:** \_\_\_\_\_
18. **Potential Usage:** \_\_\_\_\_



|                                             |    |
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## PROLINE Capacitors for Motor Run Applications

Metallized film capacitors are unsurpassed in terms of size, weight, performance, and reliability for AC applications. Regal-Beloit brings over 60 year of capacitor manufacturing experience to the product lines described in this publication. These capacitors represent the best in product design for long-term reliability and safe operation. Regal-Beloit's materials, product, and process development work continue to provide capacitor users with outstanding total value.

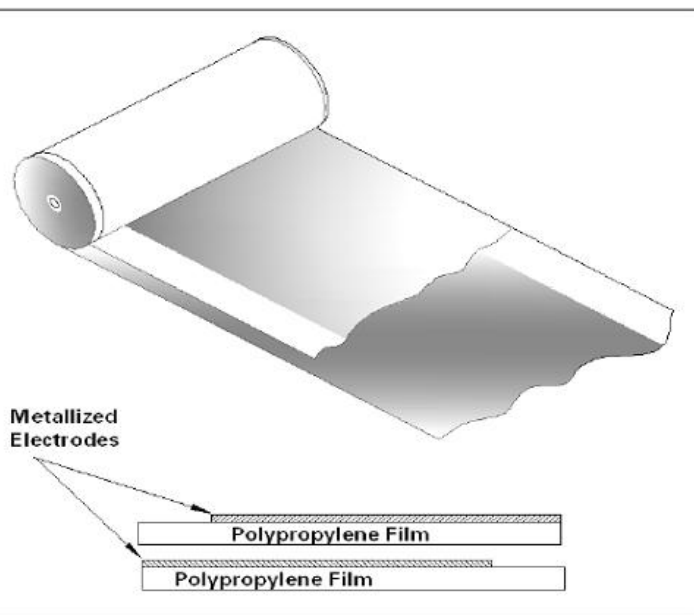
The PROLINE Capacitors for Motor Run Applications are widely used with permanent split phase capacitor motors for the more efficient use of electricity. These motors are used in heating and cooling equipment, appliances, business machines, office equipment, and a wide variety of light commercial and industrial equipment.

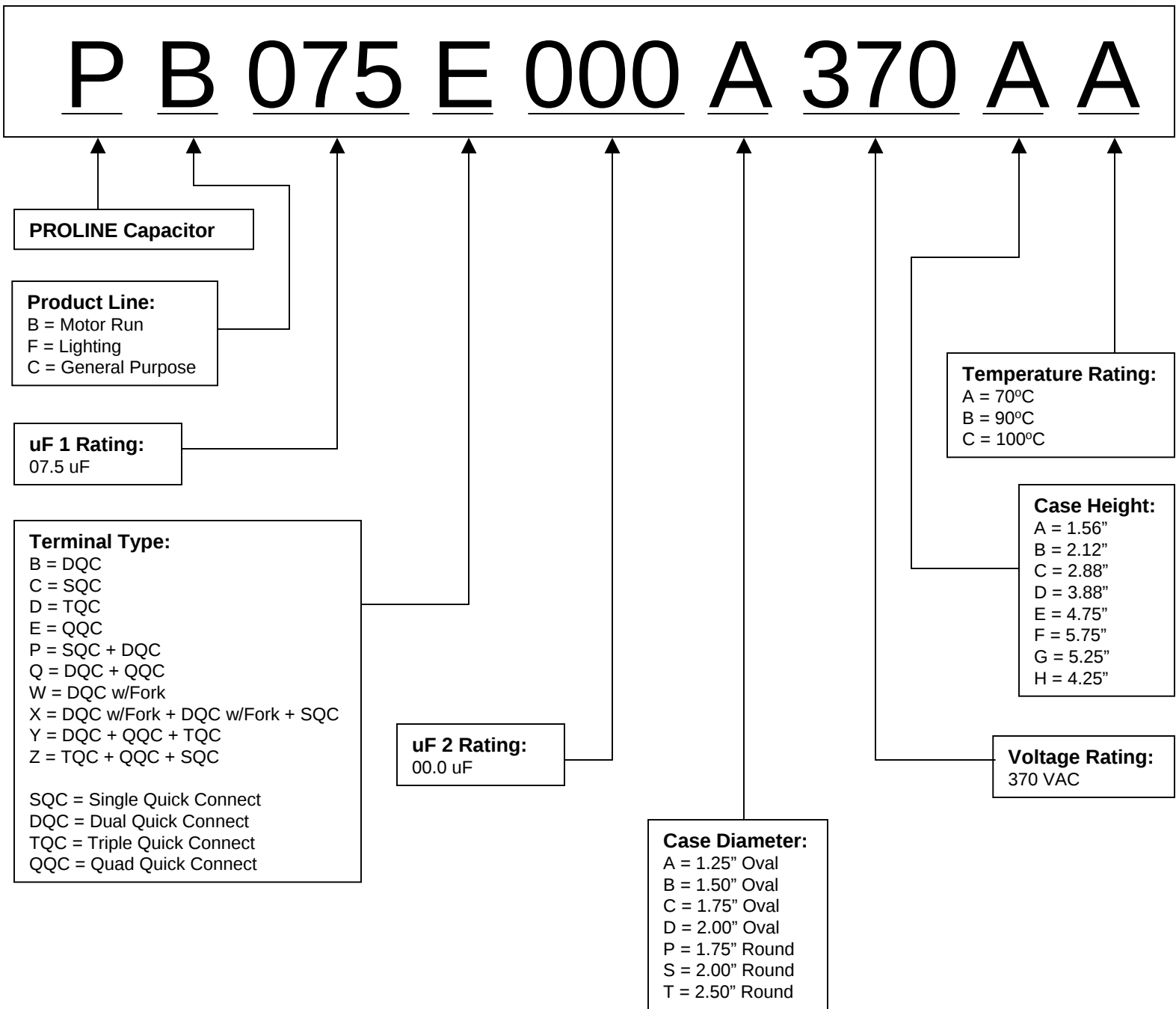
### PROLINE Construction

PROLINE Capacitors are manufactured with high-grade metallized polypropylene film. This film is in the range of 5 to 10 microns thick, depending on the application, voltage, and conditions. The metallized electrode is several hundred angstroms thick.

The film is wound into capacitor rolls on high-speed, high-precision machines. The winding is extremely tight so that there is not enough space between the layers for corona (localized partial electrical discharges) to occur. The rolls are sprayed on both ends with metal to make the connection to the extremely thin edges of the metallized electrodes. This process is critical to the quality and performance of the capacitors.

The rolls are assembled in metal cases, Regal-Beloit's proprietary Dielektrol VII liquid is introduced under vacuum, and the capacitors are sealed. They are then subjected to 100% electrical testing for capacitance, dissipation factor, and high potential electrical withstand, both terminal-to-terminal and terminal-to-case.

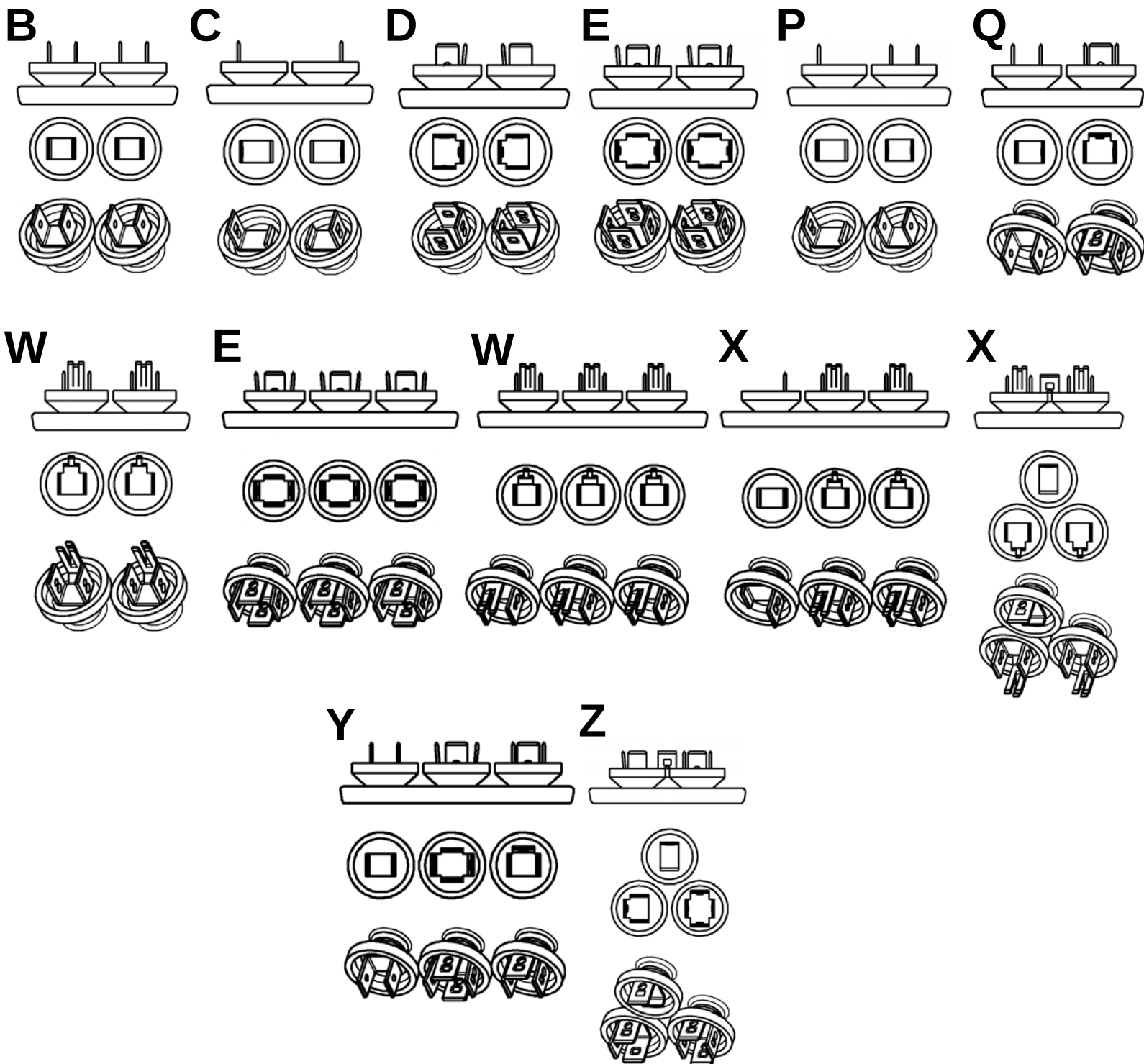




## Data from Example Part Nbr Above:

|                     |            |
|---------------------|------------|
| Product Line:       | Motor Run  |
| uF 1 Rating:        | 7.5uF      |
| Terminal Type:      | E (QQC)    |
| uF 2 Rating:        | 0.0uF      |
| Case Diameter:      | 1.25" Oval |
| Voltage Rating:     | 370VAC     |
| Case Height:        | 1.56"      |
| Temperature Rating: | 70°C       |

## Terminal Codes



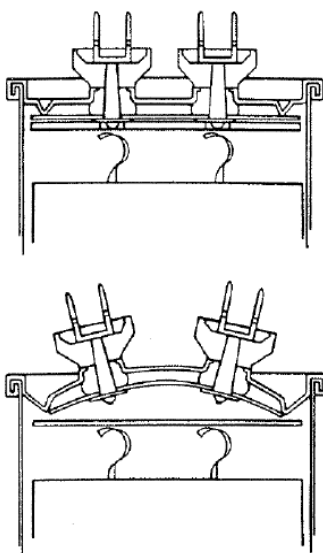
## Pressure Sensitive Interrupter

All the capacitors listed in this publication contain Regal-Beloit's Pressure Sensitive Interrupter (PSI). This device, developed by GE, is designed to sense the build-up of pressure within the capacitor if a fault occurs and to interrupt the internal electrical connections before the case can rupture.

The PSI carries U.L.\* recognition for applications where the specified fault currents are not exceeded. The fault current is the maximum current that is available from the circuit to flow through the capacitor if the capacitor were to become a short circuit with zero impedance. **It is the responsibility of the capacitor user to determine what the available fault current is for a particular application.**

In the Catalog Number listings a four character U.L. Code, Pxxx, is given. This number is part of the listing for Regal-Beloit in U.L. File No. E322597. When applying to U.L. for approvals or recognition of equipment using these capacitors refer to the Pxxx number and not the Catalog Number of the capacitor in question.

Proper operation of the PSI requires that the cover be able to expand without restriction. The following mounting considerations should be noted in mounting the these capacitors.

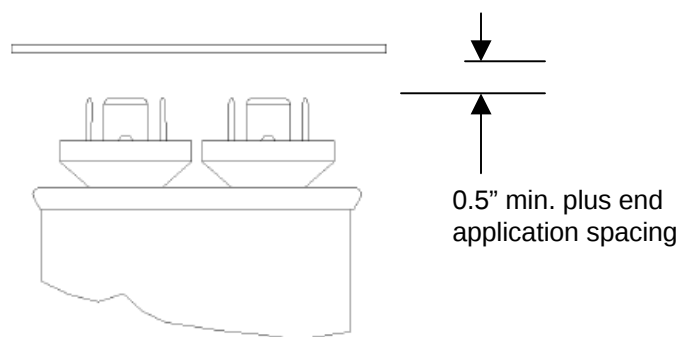


\*Underwriter's Laboratory

## Mounting Considerations

### Vertical Clearance

There must be sufficient clearance between the tops of the terminals (and/or the assembled wire connectors) and a plane perpendicular to the capacitor terminals. This clearance must be at least 0.5 inches plus the electrical spacing requirements of the end application.

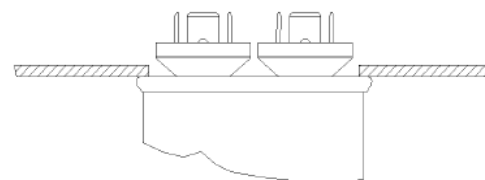
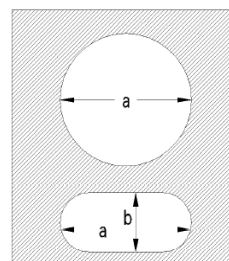


### Cut-Out Clearance

In certain instances, capacitors are mounted with the top of the capacitors case resting against the chassis and the terminals protruding through the chassis. Care must be taken to see that the cutout in the chassis is large enough. The following dimensions are recommended.

| Case Style | a    | b    |
|------------|------|------|
| A          | 2.00 | 1.00 |
| B          | 2.25 | 1.25 |
| C          | 2.50 | 1.62 |
| D          | 3.25 | 1.62 |

| Case Style | a    |
|------------|------|
| P          | 1.62 |
| S          | 1.88 |
| T          | 2.38 |



# Motor Run Capacitors – GEM III

## 370 & 440 VAC

07

This capacitor series is **designed specifically for the motor run applications** where the capacitors are used in conjunction with permanent split capacitor type motors. They may be **used on either 50 or 60-Hertz systems** but should not be used at higher frequencies or in applications where higher frequency harmonics are present. If there are **any questions** regarding the correct application of these products, please **contact your RBC sales representative**.

### SPECIFICATIONS:

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Available Capacitance Range:            | 2 to 120 $\mu$ F                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Capacitance Tolerance:                  | $\pm$ 6%                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Capacitance Variation with Temperature: | See Chart M-1 on page 14.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Rated Voltage:                          | See Rating Tables. Rating is the 50/60Hz RMS voltage for a sinusoidal waveform.                                                                                                                                                                                                                                                                                                                                                                               |
| Leakage Current:                        | 30 $\mu$ A maximum                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Frequency:                              | 50/60 Hz. For higher frequencies use General Purpose AC Capacitor Series.                                                                                                                                                                                                                                                                                                                                                                                     |
| Operating Temperature:                  | -40°C to +70°C                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Storage Temperature:                    | -40°C to +90°C                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Operating Life:                         | 10,000 hours with 94% survival<br>(In accordance with the IEC-252 Class B Standard)                                                                                                                                                                                                                                                                                                                                                                           |
| Dissipation Factor:                     | 0.1% maximum                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Case Material/Finish:                   | Unpainted Aluminum case, terne plate steel cover.<br>Contact Regal-Beloit if material/finish to meet UL outdoor standards is required.                                                                                                                                                                                                                                                                                                                        |
| Terminations:                           | 'Combo' terminal: 0.250" x 0.031" quick connect blades                                                                                                                                                                                                                                                                                                                                                                                                        |
| Dielectric Fluid:                       | Dielektrol VIII                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Internal Protection:                    | UL recognized Pressure Sensitive Interrupter. See Ratings Table for Regal-Beloit's UL Code Number listed under Regal-Beloit's UL File E322597. For UL submittals with these capacitors, use the RBC 'Pxxx' number not the Catalog Number. The corresponding generic UL designation that includes the Available Faults Current (AFC) rating is given below. All these capacitors are capable of interrupting available fault currents of up to 10,000 amperes. |

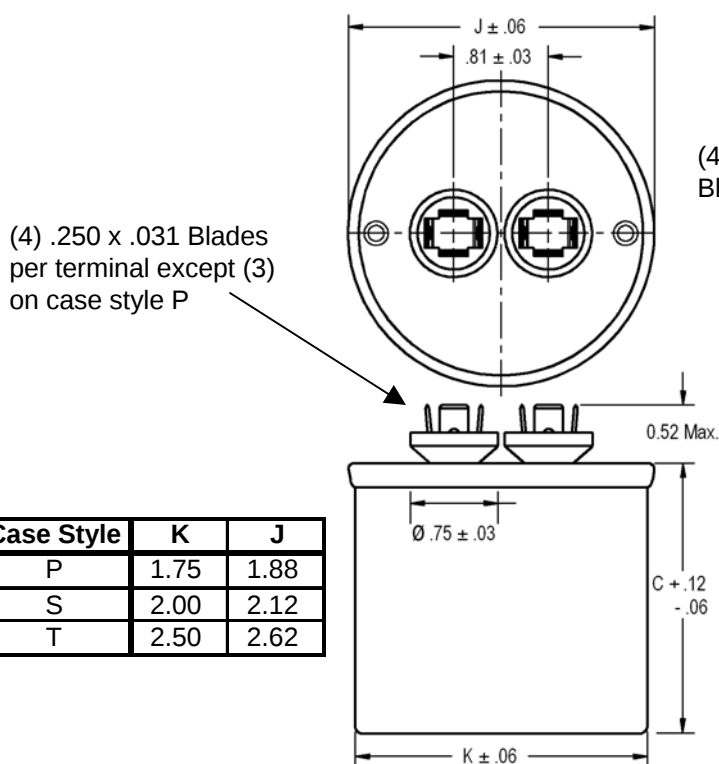
| Case Style | RBC Code | Generic UL Code |
|------------|----------|-----------------|
| A          | P921     | A10000AFC       |
| C          | P923     | C10000AFC       |
| D          | P924     | D10000AFC       |
| P          | P965     | P10000AFC       |
| S          | P968     | S10000AFC       |
| T          | P969     | T10000AFC       |

# Motor Run Capacitors – GEM III

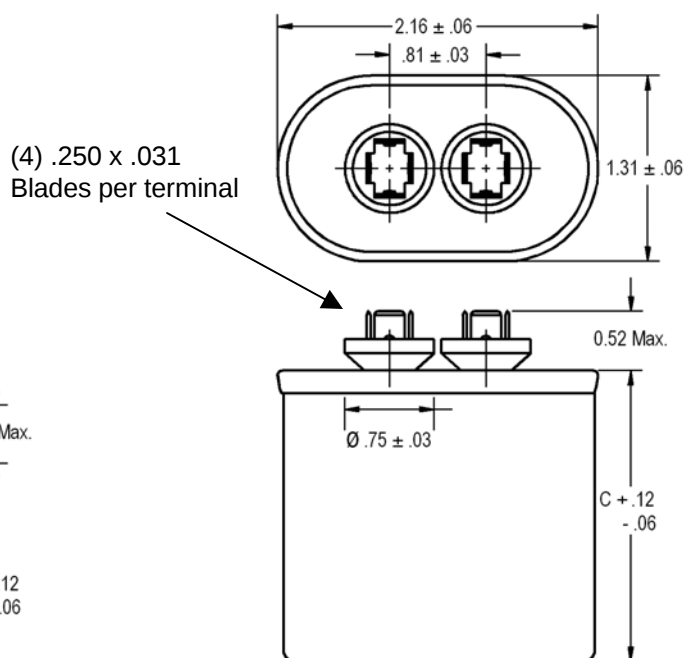
## Single Ratings – 1 Section

| Voltage (VAC) | Capacitance (μF) | Catalog Number          | Case Style | Base Size (in.) | Can Type | Height C (in.) | UL Code |
|---------------|------------------|-------------------------|------------|-----------------|----------|----------------|---------|
| 370           | 3.0              | P B 030 E 000 A 370 A A | A          | 1.25            | Oval     | 1.56           | P921    |
|               | 4.0              | P B 040 E 000 A 370 A A | A          | 1.25            | Oval     | 1.56           | P921    |
|               | 5.0              | P B 050 E 000 A 370 A A | A          | 1.25            | Oval     | 1.56           | P921    |
|               | 6.0              | P B 060 E 000 A 370 B A | A          | 1.25            | Oval     | 2.12           | P921    |
|               | 7.5              | P B 075 E 000 A 370 B A | A          | 1.25            | Oval     | 2.12           | P921    |
|               | 10.0             | P B 100 E 000 A 370 C A | A          | 1.25            | Oval     | 2.88           | P921    |
|               | 12.5             | P B 125 E 000 A 370 C A | A          | 1.25            | Oval     | 2.88           | P921    |
|               | 15.0             | P B 150 E 000 A 370 C A | A          | 1.25            | Oval     | 2.88           | P921    |
|               | 20.0             | P B 200 E 000 P 370 C A | P          | 1.75            | Round    | 2.88           | P965    |
|               | 25.0             | P B 250 E 000 P 370 C A | P          | 1.75            | Round    | 2.88           | P965    |
|               | 30.0             | P B 300 E 000 S 370 C A | S          | 2.00            | Round    | 2.88           | P968    |
|               | 35.0             | P B 350 E 000 S 370 C A | S          | 2.00            | Round    | 2.88           | P968    |
|               | 40.0             | P B 400 E 000 P 370 D A | P          | 1.75            | Round    | 3.88           | P965    |
|               | 45.0             | P B 450 E 000 P 370 E A | P          | 1.75            | Round    | 4.75           | P965    |
|               | 50.0             | P B 500 E 000 P 370 E A | P          | 1.75            | Round    | 4.75           | P965    |
|               | 55.0             | P B 550 E 000 S 370 E A | S          | 2.00            | Round    | 4.75           | P968    |
|               | 60.0             | P B 600 E 000 T 370 D A | T          | 2.50            | Round    | 3.88           | P969    |
|               | 65.0             | P B 650 E 000 T 370 D A | T          | 2.50            | Round    | 3.88           | P969    |
|               | 70.0             | P B 700 E 000 T 370 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 75.0             | P B 750 E 000 T 370 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 80.0             | P B 800 E 000 T 370 E A | T          | 2.50            | Round    | 4.75           | P969    |

Case Style P, S, and T



Case Style A



\*It is Regal-Beloit's goal to serve you with the **most cost effective** and **highest quality capacitor** designs. Standardization to the catalog type shown is a major program at Regal-Beloit. However, Regal-Beloit remains sensitive to your needs and requirements, and **will continue to offer the above ratings (and more) in case configurations to meet your application(s).**

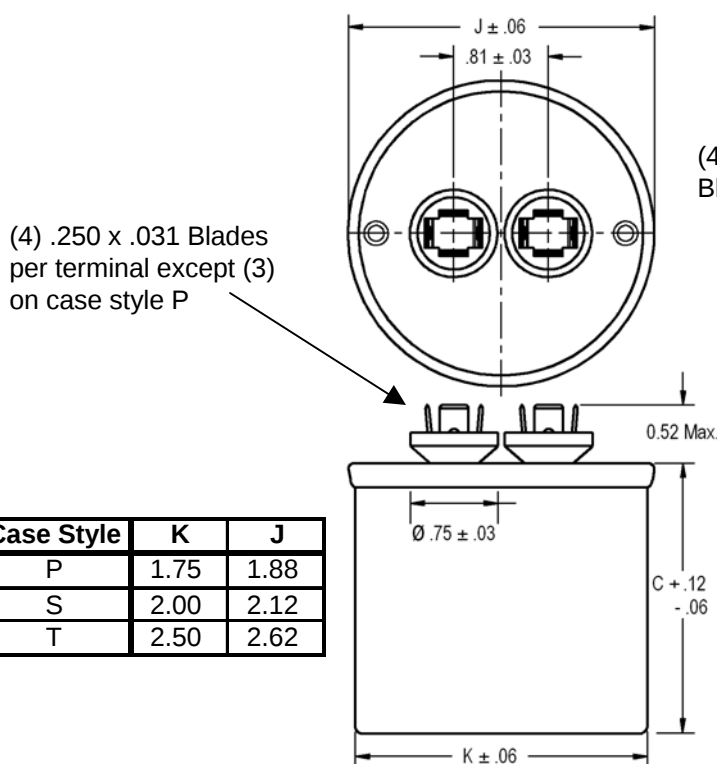
# Motor Run Capacitors – GEM III

## Single Ratings – 1 Section

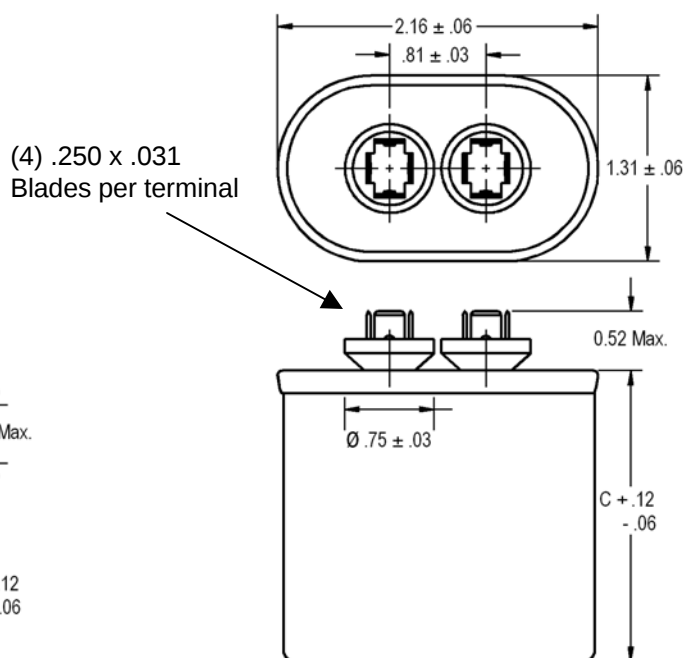
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| Voltage (VAC) | Capacitance (μF) | Catalog Number          | Case Style | Base Size (in.) | Can Type | Height C (in.) | UL Code |
|---------------|------------------|-------------------------|------------|-----------------|----------|----------------|---------|
| 440           | 3.0              | P B 030 E 000 A 440 B A | A          | 1.25            | Oval     | 2.12           | P921    |
|               | 4.0              | P B 040 E 000 A 440 C A | A          | 1.25            | Oval     | 2.88           | P921    |
|               | 5.0              | P B 050 E 000 A 440 B A | A          | 1.25            | Oval     | 2.12           | P921    |
|               | 6.0              | P B 060 E 000 A 440 C A | A          | 1.25            | Oval     | 2.88           | P921    |
|               | 7.5              | P B 075 E 000 A 440 C A | A          | 1.25            | Oval     | 2.88           | P921    |
|               | 10.0             | P B 100 E 000 A 440 C A | A          | 1.25            | Oval     | 2.88           | P921    |
|               | 12.5             | P B 125 E 000 A 440 D A | A          | 1.25            | Oval     | 3.88           | P921    |
|               | 15.0             | P B 150 E 000 A 440 E A | A          | 1.25            | Oval     | 4.75           | P921    |
|               | 20.0             | P B 200 E 000 S 440 C A | S          | 2.00            | Round    | 2.88           | P968    |
|               | 25.0             | P B 250 E 000 P 440 D A | P          | 1.75            | Round    | 3.88           | P965    |
|               | 30.0             | P B 300 E 000 P 440 D A | P          | 1.75            | Round    | 3.88           | P965    |
|               | 35.0             | P B 350 E 000 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 40.0             | P B 400 E 000 P 440 E A | P          | 1.75            | Round    | 4.75           | P965    |
|               | 45.0             | P B 450 E 000 S 440 E A | S          | 2.00            | Round    | 4.75           | P968    |
|               | 50.0             | P B 500 E 000 T 440 D A | T          | 2.50            | Round    | 3.88           | P969    |
|               | 55.0             | P B 550 E 000 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 60.0             | P B 600 E 000 T 440 E A | T          | 2.50            | Round    | 4.75           | P968    |
|               | 65.0             | P B 650 E 000 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 70.0             | P B 700 E 000 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |

Case Style P, S, and T



Case Style A

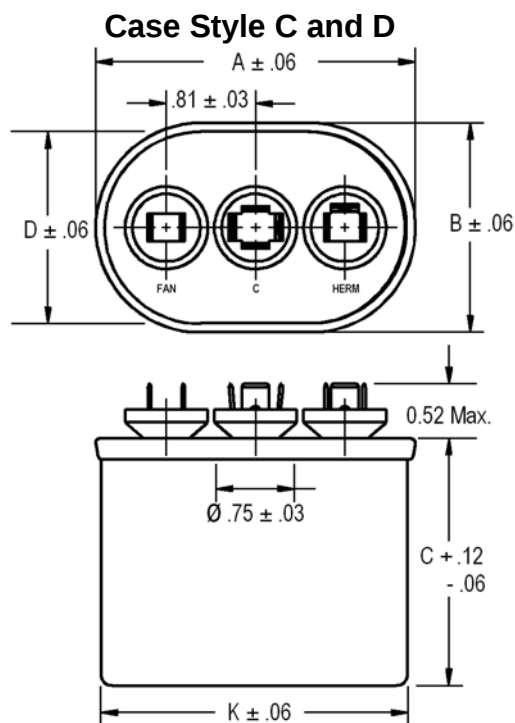


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# Motor Run Capacitors – GEM III

## Dual Ratings – 2 Sections

| Voltage<br>(VAC) | Capacitance |          | Catalog<br>Number       | Case<br>Style | Base<br>Size (in.) | Can<br>Type | Height<br>C (in.) | UL<br>Code |
|------------------|-------------|----------|-------------------------|---------------|--------------------|-------------|-------------------|------------|
|                  | Herm (μF)   | Fan (μF) |                         |               |                    |             |                   |            |
| <b>370</b>       | 10.0        | 10.0     | P B 100 Y 100 C 370 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 15.0        | 5.0      | P B 150 Y 050 C 370 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 15.0        | 7.5      | P B 150 Y 075 C 370 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 15.0        | 10.0     | P B 150 Y 100 C 370 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 20.0        | 5.0      | P B 200 Y 050 C 370 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 20.0        | 7.5      | P B 200 Y 075 C 370 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 20.0        | 10.0     | P B 200 Y 100 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 25.0        | 5.0      | P B 250 Y 050 C 370 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 25.0        | 7.5      | P B 250 Y 075 C 370 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 25.0        | 10.0     | P B 250 Y 100 C 370 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 30.0        | 5.0      | P B 300 Y 050 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 30.0        | 7.5      | P B 300 Y 075 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 30.0        | 10.0     | P B 300 Y 100 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 35.0        | 5.0      | P B 350 Y 050 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 35.0        | 7.5      | P B 350 Y 075 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 35.0        | 10.0     | P B 350 Y 100 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 40.0        | 5.0      | P B 400 Y 050 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 40.0        | 7.5      | P B 400 Y 075 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 40.0        | 10.0     | P B 400 Y 100 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 45.0        | 5.0      | P B 450 Y 050 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 45.0        | 7.5      | P B 450 Y 075 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 45.0        | 10.0     | P B 450 Y 100 C 370 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 50.0        | 5.0      | P B 500 Y 050 C 370 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 50.0        | 7.5      | P B 500 Y 075 C 370 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 50.0        | 10.0     | P B 500 Y 100 D 370 E A | D             | 2.00               | Oval        | 4.75              | P968       |



| Case Style | A    | B    | D    | K    |
|------------|------|------|------|------|
| C          | 2.91 | 1.91 | 1.81 | 2.81 |
| D          | 3.66 | 1.97 | 1.88 | 3.56 |

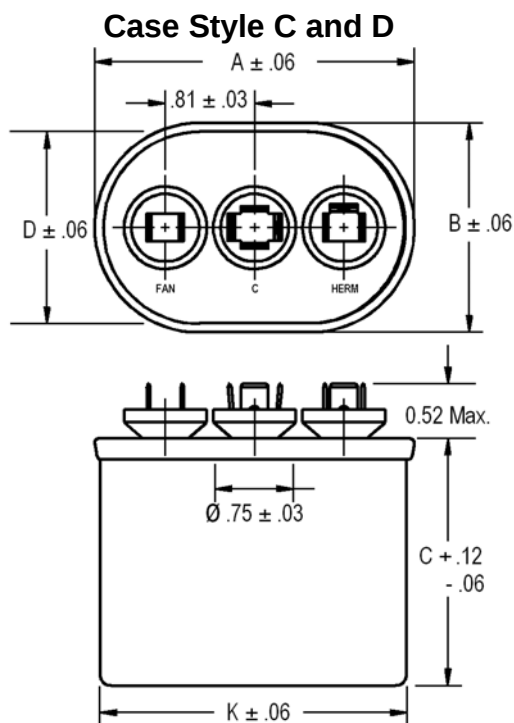
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# Motor Run Capacitors – GEM III

## Dual Ratings – 2 Sections

11

| Voltage<br>(VAC) | Capacitance |          | Catalog<br>Number       | Case<br>Style | Base<br>Size (in.) | Can<br>Type | Height<br>C (in.) | UL<br>Code |
|------------------|-------------|----------|-------------------------|---------------|--------------------|-------------|-------------------|------------|
|                  | Herm (μF)   | Fan (μF) |                         |               |                    |             |                   |            |
| 440              | 10.0        | 10.0     | P B 100 Y 100 C 440 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 15.0        | 5.0      | P B 150 Y 050 C 440 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 15.0        | 7.5      | P B 150 Y 075 C 440 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 15.0        | 10.0     | P B 150 Y 100 C 440 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 20.0        | 5.0      | P B 200 Y 050 C 440 C A | C             | 1.75               | Oval        | 2.88              | P923       |
|                  | 20.0        | 7.5      | P B 200 Y 075 C 440 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 20.0        | 10.0     | P B 200 Y 100 C 440 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 25.0        | 5.0      | P B 250 Y 050 C 440 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 25.0        | 7.5      | P B 250 Y 075 C 440 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 25.0        | 10.0     | P B 250 Y 100 C 440 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 30.0        | 5.0      | P B 300 Y 050 C 440 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 30.0        | 7.5      | P B 300 Y 075 C 440 D A | C             | 1.75               | Oval        | 3.88              | P923       |
|                  | 30.0        | 10.0     | P B 300 Y 100 C 440 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 35.0        | 5.0      | P B 350 Y 050 C 440 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 35.0        | 7.5      | P B 350 Y 075 C 440 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 35.0        | 10.0     | P B 350 Y 100 C 440 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 40.0        | 5.0      | P B 400 Y 050 C 440 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 40.0        | 7.5      | P B 400 Y 075 C 440 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 40.0        | 10.0     | P B 400 Y 100 D 440 E A | D             | 2.00               | Oval        | 4.75              | P968       |
|                  | 45.0        | 5.0      | P B 450 Y 050 C 440 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 45.0        | 7.5      | P B 450 Y 075 D 440 E A | D             | 2.00               | Oval        | 4.75              | P968       |
|                  | 45.0        | 10.0     | P B 450 Y 100 C 440 E A | C             | 1.75               | Oval        | 4.75              | P923       |
|                  | 50.0        | 5.0      | P B 500 Y 050 D 440 F A | D             | 2.00               | Oval        | 5.75              | P968       |
|                  | 50.0        | 7.5      | P B 500 Y 075 D 440 F A | D             | 2.00               | Oval        | 5.75              | P968       |
|                  | 50.0        | 10.0     | P B 500 Y 100 D 440 F A | D             | 2.00               | Oval        | 5.75              | P968       |



| Case Style | A    | B    | D    | K    |
|------------|------|------|------|------|
| C          | 2.91 | 1.91 | 1.81 | 2.81 |
| D          | 3.66 | 1.97 | 1.88 | 3.56 |

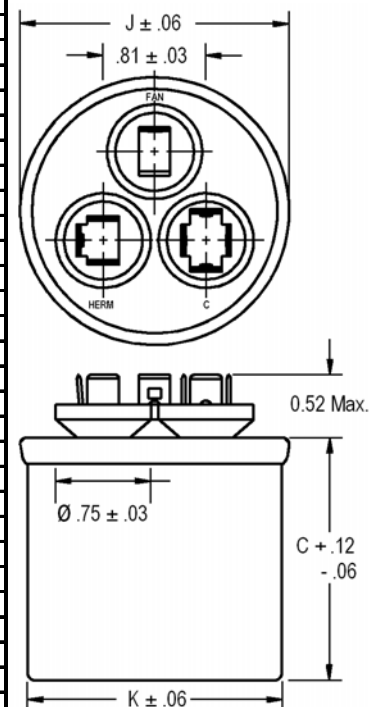
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# Motor Run Capacitors – GEM III

## Dual Ratings – 2 Concentric Sections

| Voltage<br>(VAC) | Capacitance |          | Catalog<br>Number       | Case<br>Style | Base<br>Size (in.) | Can<br>Type | Height<br>C (in.) | UL<br>Code |
|------------------|-------------|----------|-------------------------|---------------|--------------------|-------------|-------------------|------------|
|                  | Herm (μF)   | Fan (μF) |                         |               |                    |             |                   |            |
| 370              | 15.0        | 5.0      | P B 150 Z 050 S 370 C A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 15.0        | 7.5      | P B 150 Z 075 S 370 C A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 15.0        | 10.0     | P B 150 Z 100 S 370 C A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 20.0        | 5.0      | P B 200 Z 050 S 370 C A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 20.0        | 7.5      | P B 200 Z 075 S 370 C A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 20.0        | 10.0     | P B 200 Z 100 S 370 C A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 25.0        | 5.0      | P B 250 Z 050 S 370 C A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 25.0        | 7.5      | P B 250 Z 075 S 370 C A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 25.0        | 10.0     | P B 250 Z 100 S 370 D A | S             | 2.00               | Round       | 3.88              | P968       |
|                  | 30.0        | 5.0      | P B 300 Z 050 S 370 C A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 30.0        | 7.5      | P B 300 Z 075 S 370 D A | S             | 2.00               | Round       | 2.88              | P968       |
|                  | 30.0        | 10.0     | P B 300 Z 100 S 370 D A | S             | 2.00               | Round       | 3.88              | P968       |
|                  | 35.0        | 5.0      | P B 350 Z 050 S 370 D A | S             | 2.00               | Round       | 3.88              | P968       |
|                  | 35.0        | 7.5      | P B 350 Z 075 S 370 D A | S             | 2.00               | Round       | 3.88              | P968       |
|                  | 35.0        | 10.0     | P B 350 Z 100 S 370 D A | S             | 2.00               | Round       | 3.88              | P968       |
|                  | 40.0        | 5.0      | P B 400 Z 050 S 370 D A | S             | 2.00               | Round       | 3.88              | P968       |
|                  | 40.0        | 7.5      | P B 400 Z 075 S 370 D A | S             | 2.00               | Round       | 3.88              | P968       |
|                  | 40.0        | 10.0     | P B 400 Z 100 S 370 D A | S             | 2.00               | Round       | 3.88              | P968       |
|                  | 45.0        | 5.0      | P B 450 Z 050 S 370 D A | S             | 2.00               | Round       | 3.88              | P968       |
|                  | 45.0        | 7.5      | P B 450 Z 075 S 370 E A | S             | 2.00               | Round       | 4.75              | P968       |
|                  | 45.0        | 10.0     | P B 450 Z 100 S 370 E A | S             | 2.00               | Round       | 4.75              | P968       |
|                  | 50.0        | 5.0      | P B 500 Z 050 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |
|                  | 50.0        | 7.5      | P B 500 Z 075 S 370 E A | S             | 2.00               | Round       | 4.75              | P968       |
|                  | 50.0        | 10.0     | P B 500 Z 100 S 370 E A | S             | 2.00               | Round       | 4.75              | P968       |
|                  | 55.0        | 5.0      | P B 550 Z 050 T 370 D A | T             | 2.50               | Round       | 3.88              | P969       |
|                  | 55.0        | 7.5      | P B 550 Z 075 T 370 D A | T             | 2.50               | Round       | 3.88              | P969       |
|                  | 55.0        | 10.0     | P B 550 Z 100 T 370 D A | T             | 2.50               | Round       | 3.88              | P969       |
|                  | 60.0        | 5.0      | P B 600 Z 050 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |
|                  | 60.0        | 7.5      | P B 600 Z 075 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |
|                  | 60.0        | 10.0     | P B 600 Z 100 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |
|                  | 70.0        | 5.0      | P B 700 Z 050 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |
|                  | 70.0        | 7.5      | P B 700 Z 075 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |
|                  | 70.0        | 10.0     | P B 700 Z 100 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |
|                  | 80.0        | 5.0      | P B 800 Z 050 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |
|                  | 80.0        | 7.5      | P B 800 Z 075 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |
|                  | 80.0        | 10.0     | P B 800 Z 100 T 370 E A | T             | 2.50               | Round       | 4.75              | P969       |

Case Style S and T



| Case Style | K    | J    |
|------------|------|------|
| S          | 2.00 | 2.12 |
| T          | 2.50 | 2.62 |

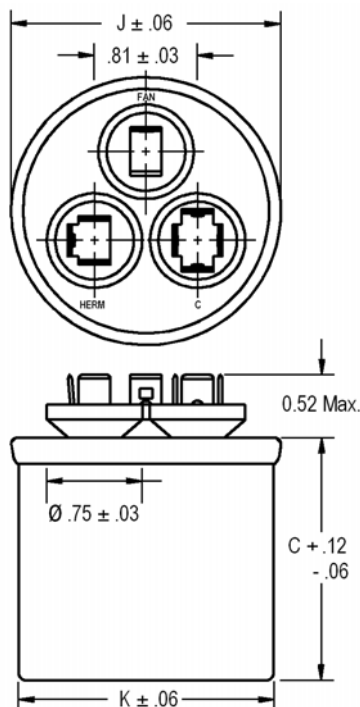
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# Motor Run Capacitors – GEM III

## Dual Ratings – 2 Concentric Sections

13

Case Style S and T



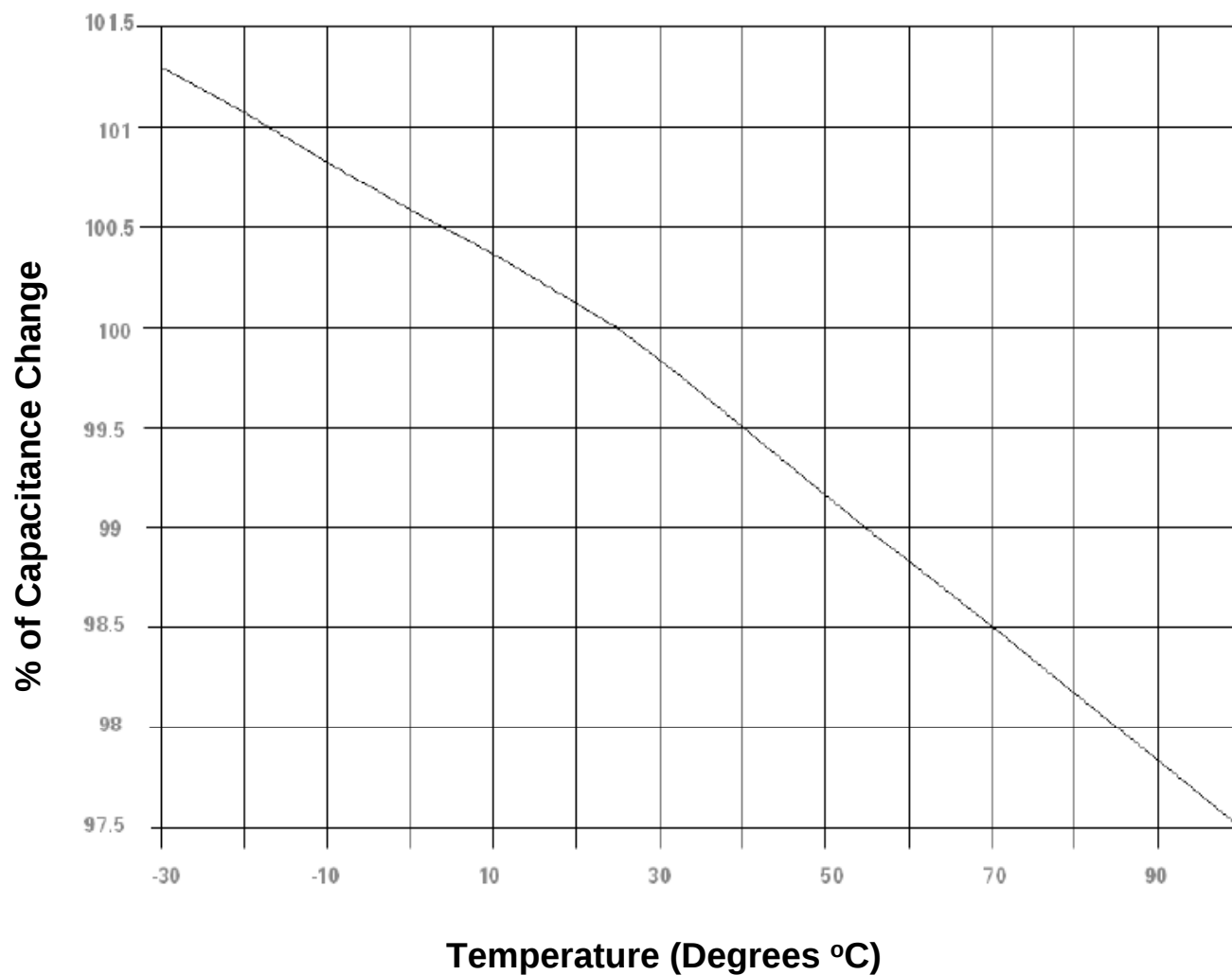
| Voltage (VAC) | Capacitance |          | Catalog Number          | Case Style | Base Size (in.) | Can Type | Height C (in.) | UL Code |
|---------------|-------------|----------|-------------------------|------------|-----------------|----------|----------------|---------|
|               | Herm (µF)   | Fan (µF) |                         |            |                 |          |                |         |
| 440           | 15.0        | 5.0      | P B 150 Z 050 S 440 C A | S          | 2.00            | Round    | 2.88           | P968    |
|               | 15.0        | 7.5      | P B 150 Z 075 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 15.0        | 10.0     | P B 150 Z 100 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 20.0        | 5.0      | P B 200 Z 050 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 20.0        | 7.5      | P B 200 Z 075 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 20.0        | 10.0     | P B 200 Z 100 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 25.0        | 5.0      | P B 250 Z 050 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 25.0        | 7.5      | P B 250 Z 075 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 25.0        | 10.0     | P B 250 Z 100 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 30.0        | 5.0      | P B 300 Z 050 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 30.0        | 7.5      | P B 300 Z 075 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 30.0        | 10.0     | P B 300 Z 100 S 440 D A | S          | 2.00            | Round    | 3.88           | P968    |
|               | 35.0        | 5.0      | P B 350 Z 050 S 440 E A | S          | 2.00            | Round    | 4.75           | P968    |
|               | 35.0        | 7.5      | P B 350 Z 075 S 440 E A | S          | 2.00            | Round    | 4.75           | P968    |
|               | 35.0        | 10.0     | P B 350 Z 100 T 440 D A | T          | 2.50            | Round    | 3.88           | P969    |
|               | 40.0        | 5.0      | P B 400 Z 050 T 440 C A | T          | 2.50            | Round    | 2.88           | P969    |
|               | 40.0        | 7.5      | P B 400 Z 075 S 440 E A | S          | 2.00            | Round    | 4.75           | P968    |
|               | 40.0        | 10.0     | P B 400 Z 100 S 440 E A | S          | 2.00            | Round    | 4.75           | P968    |
|               | 45.0        | 5.0      | P B 450 Z 050 T 440 D A | T          | 2.50            | Round    | 3.88           | P969    |
|               | 45.0        | 7.5      | P B 450 Z 075 T 440 D A | T          | 2.50            | Round    | 3.88           | P969    |
|               | 45.0        | 10.0     | P B 450 Z 100 T 440 D A | T          | 2.50            | Round    | 3.88           | P969    |
|               | 50.0        | 5.0      | P B 500 Z 050 T 440 D A | T          | 2.50            | Round    | 3.88           | P969    |
|               | 50.0        | 7.5      | P B 500 Z 075 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 50.0        | 10.0     | P B 500 Z 100 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 55.0        | 5.0      | P B 550 Z 050 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 55.0        | 7.5      | P B 550 Z 075 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 55.0        | 10.0     | P B 550 Z 100 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 60.0        | 5.0      | P B 600 Z 050 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 60.0        | 7.5      | P B 600 Z 075 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 60.0        | 10.0     | P B 600 Z 100 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 70.0        | 5.0      | P B 700 Z 050 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 70.0        | 7.5      | P B 700 Z 075 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 70.0        | 10.0     | P B 700 Z 100 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 80.0        | 5.0      | P B 800 Z 050 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 80.0        | 7.5      | P B 800 Z 075 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |
|               | 80.0        | 10.0     | P B 800 Z 100 T 440 E A | T          | 2.50            | Round    | 4.75           | P969    |

| Case Style | K    | J    |
|------------|------|------|
| S          | 2.00 | 2.12 |
| T          | 2.50 | 2.62 |

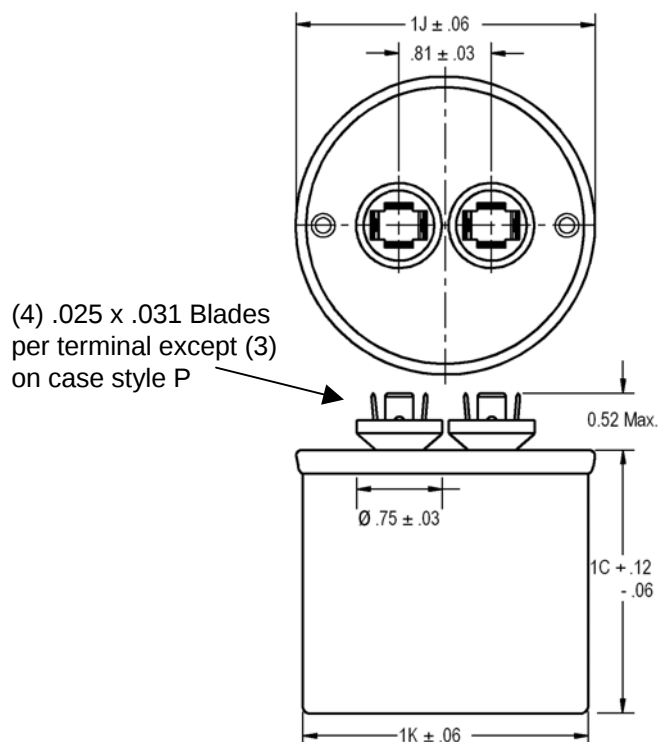
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## % CAPACITANCE vs. TEMPERATURE

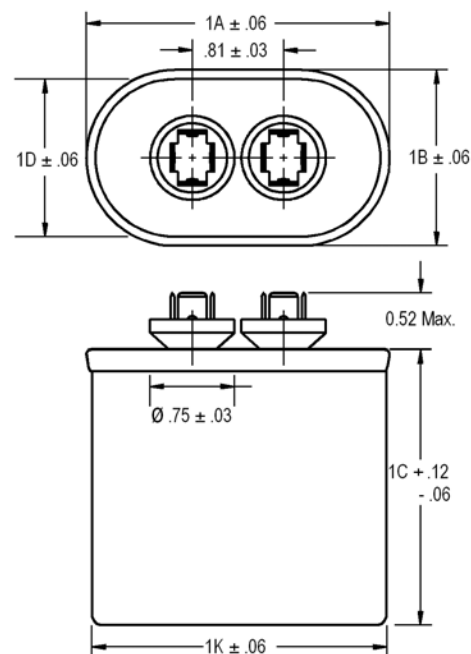
### CHART M-1



## Round Case Style (P, S, T)



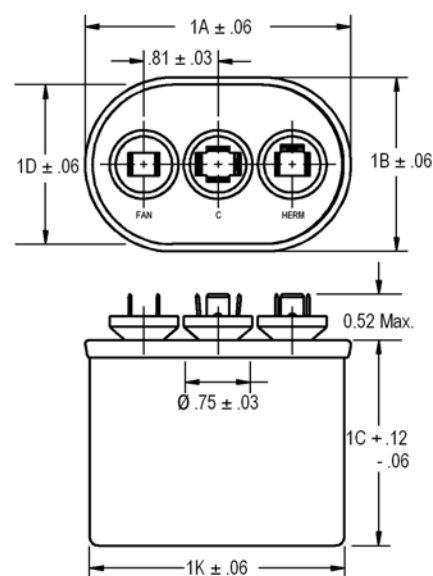
## Oval Case Style (A, B, C, D)



| Oval Case Style |           | Dimensions |      |      |      |
|-----------------|-----------|------------|------|------|------|
|                 |           | 1A         | 1B   | 1D   | 1K   |
| A               | Oval      | 2.16       | 1.31 | 1.21 | 2.06 |
| B               | Oval      | 2.69       | 1.56 | 1.47 | 2.58 |
| C               | Oval      | 2.91       | 1.91 | 1.81 | 2.81 |
| D               | Oval      | 3.66       | 1.97 | 1.88 | 3.56 |
| C               | Dual Oval | 2.91       | 1.91 | 1.81 | 2.81 |
| D               | Dual Oval | 3.66       | 1.97 | 1.88 | 3.56 |

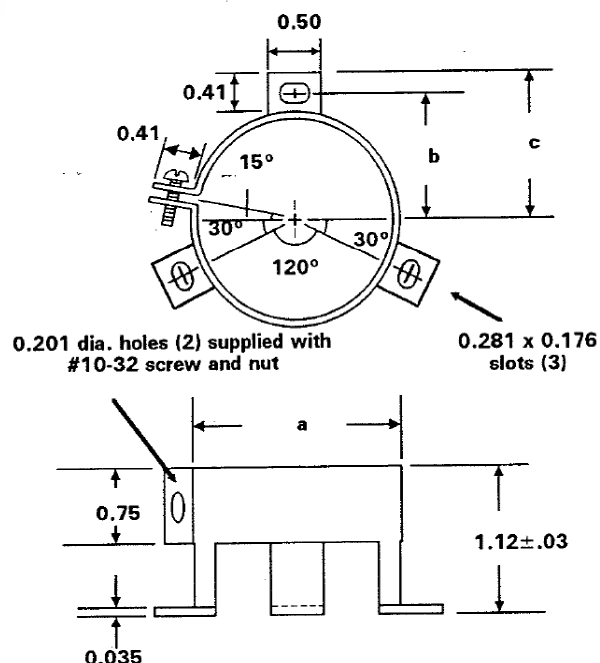
| Round Case Style |       | Dimensions |      |      |      |
|------------------|-------|------------|------|------|------|
|                  |       | 1K         |      |      | 1J   |
| P                | Round | 1.75       | ---- | ---- | 1.88 |
| S                | Round | 2.00       | ---- | ---- | 2.12 |
| T                | Round | 2.50       | ---- | ---- | 2.62 |

## Dual Oval Case Style (C and D)

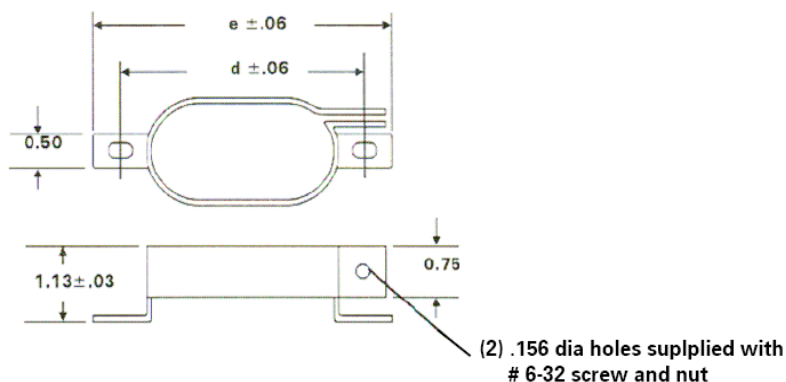


## UNIVERSAL WRAP AROUND BRACKETS – Round Cases

| Case Style | Bracket Part Number | a    | b    | c    |
|------------|---------------------|------|------|------|
| P          | M295A601631         | 1.75 | 1.12 | 1.31 |
| S          | M295A601632         | 2.00 | 1.25 | 1.44 |
| T          | M295A601633         | 2.50 | 1.50 | 1.69 |



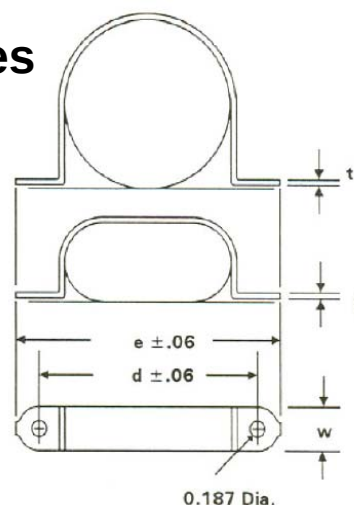
## UNIVERSAL WRAP AROUND BRACKETS – Oval Cases



| Case Style | Bracket Part Number | d    | e    |
|------------|---------------------|------|------|
| A          | M128A2244AC21       | 2.69 | 3.13 |
| B          | M128A2244AB25       | 3.27 | 3.70 |
| C          | M128A2244AB22       | 3.44 | 3.88 |
| D          | M128A2244AB23       | 4.19 | 4.63 |

## WRAP AROUND BRACKETS – Oval & Round Cases

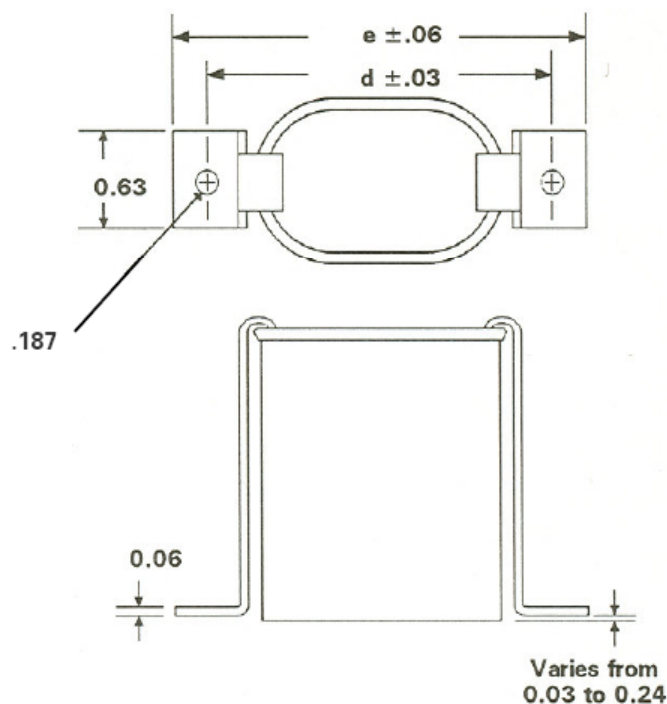
| Case Style | Bracket Part Number | d    | e    | w    | t    |
|------------|---------------------|------|------|------|------|
| A          | M982706521          | 2.56 | 2.94 | 0.50 | 0.02 |
| B          | M982706531          | 3.06 | 3.50 | 0.63 | 0.02 |
| C          | M614A30161          | 3.31 | 3.81 | 0.75 | 0.03 |
| D          | M614A30151          | 4.06 | 4.56 | 0.75 | 0.03 |
| P          | M279A723524         | 2.50 | 2.88 | 0.75 | 0.04 |
| S          | M279A723522         | 2.75 | 3.12 | 0.75 | 0.04 |
| T          | M279A723523         | 3.25 | 3.62 | 0.75 | 0.04 |



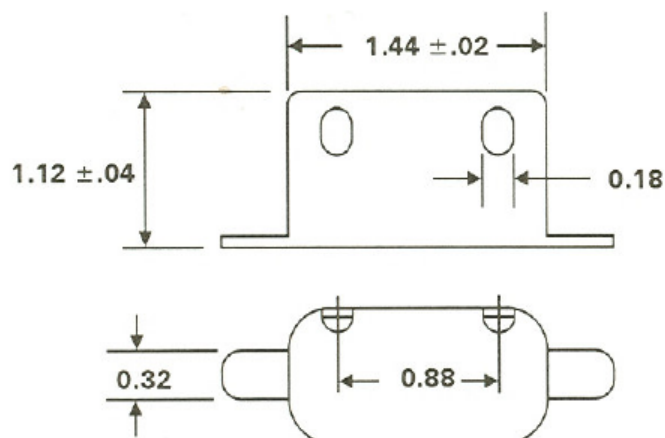
## FOOTED BRACKETS – Oval & Round Cases

| Case Height | Bracket Part Number |
|-------------|---------------------|
| 2.12        | M302C920210         |
| 2.88        | M302C920113         |
| 3.88        | M302C920115         |
| 4.75        | M302C920116         |
| 5.75        | M302C920209         |

| Case Style | d    | e    |
|------------|------|------|
| A          | 2.56 | 3.00 |
| B          | 3.13 | 3.56 |
| C          | 3.38 | 3.81 |
| D          | 4.13 | 4.56 |
| P          | 2.33 | 2.76 |
| S          | 2.57 | 3.00 |
| T          | 3.07 | 3.50 |

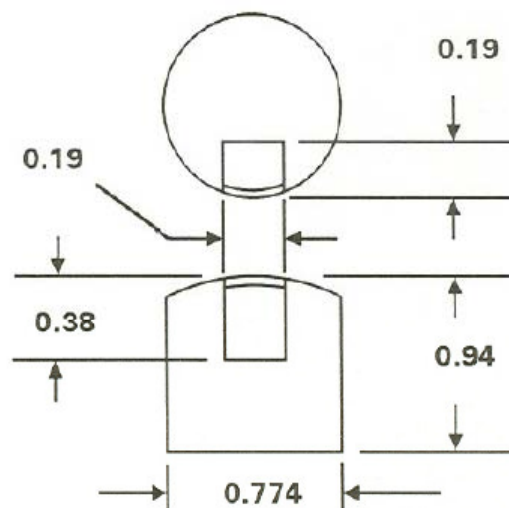


## PROTECTIVE BOOT

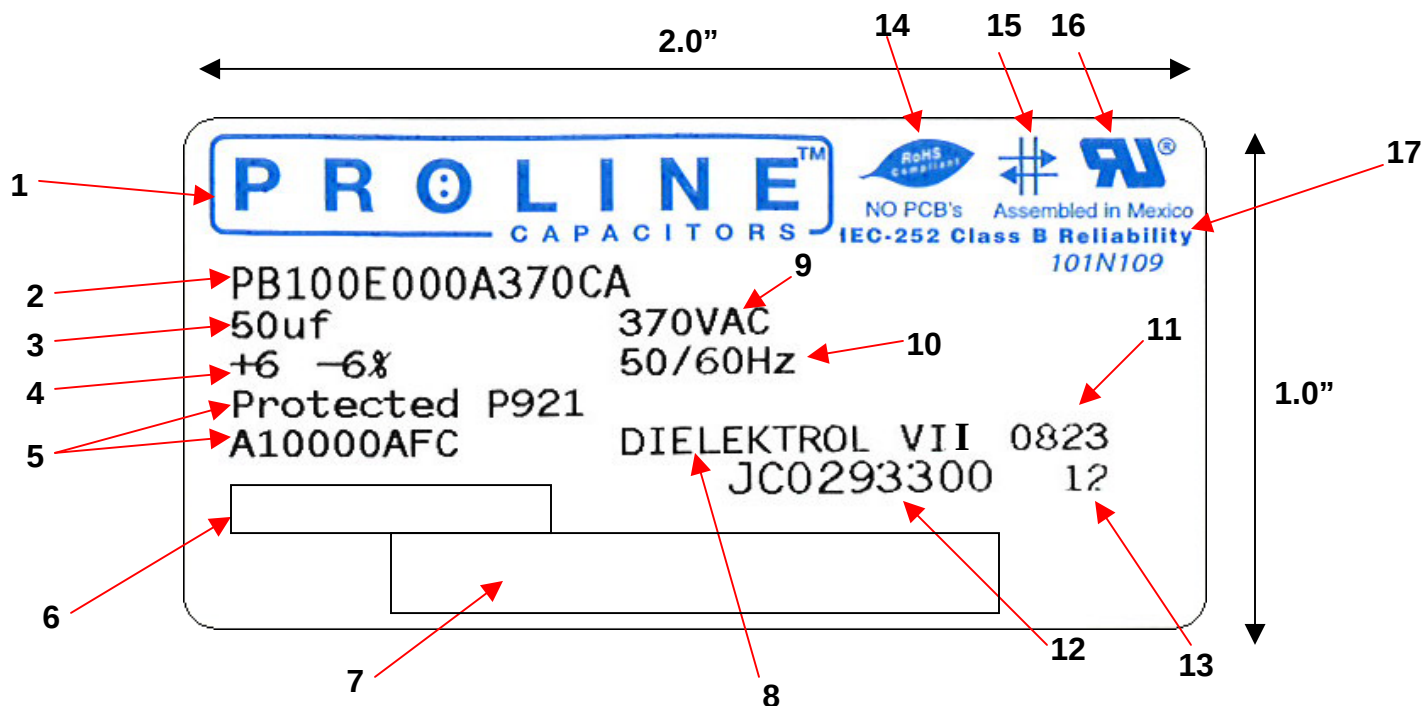


| Boot Part Number | Temperature Rating |
|------------------|--------------------|
| M614A52721       | 60°C               |
| M178A374421      | 105°C              |

## PROTECTIVE CAP

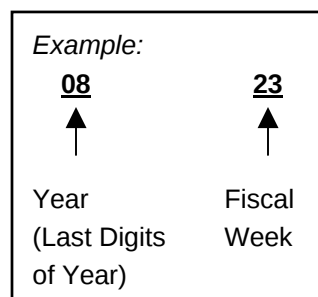


| Cap Part Number | M115A155223 |
|-----------------|-------------|
|-----------------|-------------|



1. Product / Brand
2. PROLINE Catalog Model Number
3. Capacitance in Micro-Farads
4. Tolerance
5. UL Designation Including Available Fault Current (AFC) Rating
6. Customer Part Number
7. Bar Code
8. PROLINE Product Name of Dielectric Fluid
9. AC Voltage Rating
10. Frequency

11. Manufacturing Date Code



12. Manufacturing WIP Job Number
13. Label Sequence Number
14. RoHS Compliant Logo
15. Self-Healing Symbol
16. UL Approved Logo
17. IEC-252 Class B Reliability Statement (10,000 Hr Reliability)

| AVAILABLE<br>REGAL-BELOIT COMPONENT CAPACITOR PUBLICATIONS |                                                       |                   |
|------------------------------------------------------------|-------------------------------------------------------|-------------------|
| Publication                                                | Description                                           | Replaces          |
| GTC-001                                                    | AC Capacitors for Motor Run Applications              | CPD-510           |
| GTC-002                                                    | AC Capacitors for HID Lighting Applications           | CPD-511           |
| GTC-003                                                    | Capacitors for AC and DC General Purpose Applications | CPD-512           |
| GTC-004                                                    | Screw Terminal Electrolytic Capacitors                | CPD-517           |
| GTC-005                                                    | Snubber, High Current DC, and Switching Capacitors    | CPD-518, 519, 520 |
| GTC-006                                                    | Dry Capacitors                                        | New Pub.          |
| GTC-007                                                    | Snap-In Electrolytic Capacitors                       | New Pub.          |
| PLC-001                                                    | PROLINE Capacitors                                    | New Pub.          |

Please contact your local Regal-Beloit Sales Representative for further information.

Call or write directly to:

**PROLINE Capacitors**  
1946 West Cook Road  
Fort Wayne, Indiana 46818 USA

**Phone:** (260) 416-5400  
**Fax:** (260) 416-5460  
**Email:** capacitors@regalbeloit.com



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**[www.prolinecapacitors.com](http://www.prolinecapacitors.com)**

