

# EL

## Motor Start Electrolytic Capacitors



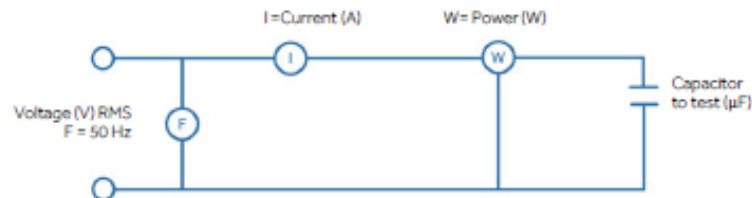
The **EL** electrolytic capacitor have **high capacitance** ( $\mu\text{F}$  value) able to provide an high starting torque to the motor. It is a non polarized capacitor especially designed for intermittent AC voltage applications for single-phase motors.

### PERFORMANCE DATA

- Rated Voltage 250 Vac
- Rated Frequency 50 / 60 Hz
- Capacitance Range from 25  $\mu\text{F}$  to 550  $\mu\text{F}$
- Capacitance Tolerance 0% + 20% o -/+ 10% (0% + 22% for 8141910)
- Operating class:
  - 250 Vac The standard time rating defined of IEC 60252 is 1,7% full time and corresponds to a duty cycle of 3 seconds on and 177 seconds off.
  - 330 Vac The standard time rating defined of IEC 60252 is 0,55% full time and corresponds to a duty cycle of 1 second.

### TECHNICAL DATA

- Operating Temperature -45 °C / +65 °C (higher temperatures on request)
- Storage Temperature -40 °C / +70 °C
- Endurance test 500 h
- Dissipation Loss Angle Measurement frequency: 50 Hz, the typical value shall not exceed 0,10, calculated as follows:  
 $\text{Tan } d = W / (V \times I) = (\text{true watts} / \text{apparent watts})$
- Capacitance Measurement Capacitance shall be determined by measuring the current – after 2/3 sec. of energizing – through the capacitor at rated voltage and frequency.  
 The capacitance is defined as follows:  $C = (I \times 10^6) / 2 \pi \times 2 \times f \times V$



### TYPICAL VALUES

|                        |    |                  |                  |                   |                   |                   |                   |                   |
|------------------------|----|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| For Single-phase Motor | kW | 0,074            | 0,183            | 0,368             | 0,552             | 0,736             | 1,104             | 1,472             |
|                        | HP | 1/10             | 1/4              | 1/2               | 3/4               | 1                 | 1,5               | 2                 |
| 220 V                  |    | 20 $\mu\text{F}$ | 50 $\mu\text{F}$ | 100 $\mu\text{F}$ | 150 $\mu\text{F}$ | 200 $\mu\text{F}$ | 300 $\mu\text{F}$ | -                 |
| 280 V                  |    | 10 $\mu\text{F}$ | 25 $\mu\text{F}$ | 50 $\mu\text{F}$  | 80 $\mu\text{F}$  | 100 $\mu\text{F}$ | 150 $\mu\text{F}$ | 200 $\mu\text{F}$ |

Note: the indicated voltages are the working capacitor voltages

### STANDARDS AND APPROVALS

- Reference standards CEI EN 60252-2 (capacitor); UL 810; CEI EN 60695-11-10 (electrolyte).
- Homologation JIS C 4905 IMQ CE 133-3; SEV 1029; EIA RS 463; CQC
- Directives It complies with the RoHS Directive



**CONFIGURATION**

Table

Standard version:

| Type    | Cn<br>( $\mu$ F) | Dimension<br>D x H<br>(mm) |
|---------|------------------|----------------------------|
| 8140610 | 25 - 30          | 46 x 85                    |
| 8140710 | 31,5 - 37        | 46 x 85                    |
| 8140810 | 40 - 48          | 46 x 85                    |
| 8140910 | 50 - 60          | 46 x 85                    |
| 8141010 | 64 - 77          | 46 x 85                    |
| 8141110 | 80 - 96          | 46 x 85                    |
| 8141210 | 100 - 120        | 46 x 85                    |
| 8141310 | 125 - 150        | 46 x 85                    |
| 8141410 | 160 - 192        | 46 x 85                    |
| 8141510 | 200 - 240        | 46 x 85                    |
| 8141610 | 250 - 300        | 46 x 85                    |
| 8141710 | 315 - 378        | 46 x 85                    |
| 8141810 | 400 - 480        | 46 x 85                    |
| 8141910 | 450 - 550        | 46 x 85                    |

Optional requests:

- Protective cap, code 730046
- Mounting bracket, code 565008;
- Bipolar cable, length 300 mm with Female Faston 6.35 mm, code 7850694;

**MECHANICAL CONFIGURATION**

