

EL

Motor Start Electrolytic Capacitors



The EL electrolytic capacitor have **high capacitance** (μF 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 μF to 550 μF
■ 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: $\tan \delta = W / (V \times I) = (\text{true watts} / \text{apparent watts})$
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: $C = (I \times 10^6) / 2 \pi^2 \times f \times V$



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
220V		20 μF	50 μF	100 μF	150 μF	200 μF	300 μF	-
280V		10 μF	25 μF	50 μF	80 μF	100 μF	150 μF	200 μF

Note: the indicated voltages are the working capacitor voltages

STANDARDS AND APPROVALS

Reference standards	CEIEN 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 (μ F)	Dimension D x H (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

Case	Plane base self-extinguishing plastic case
Finishing	Double faston terminal. Dimension = 6,3 x 0,8 mm
Figure	