

**Aluminum Electrolytic Capacitors  
AC Motor Start B4270X series  
B42701 B42702 B42704 B42705**

**Features**

- Non Polar
- Flame Retardant Plastic Case (V2 Class)
- Fast-on Terminals 6,35mm Width
- Safety Vent
- Discharge Resistor 15KOhms / 2W (optional)
- UL recognized: file E183224
- RoHS-compatible



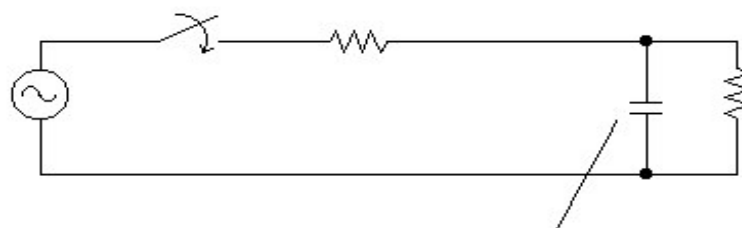
**Applications**

For single-phase AC motors, refrigeration and washing machines

**Technical Data**

Capacitance Range	21...1080 $\mu$ F
Rated Voltage Un (RMS)	110...330 Vac
Maximum Voltage Up (RMS)	1,1xUn Vac
Rated Frequency	50...60 Hz
Maximum Power Factor (Un / 60Hz / 25°C)	15%
Endurance Test Specification	See below "Endurance Test Specification"
Evaluation After Endurance Test	$\Delta C/C \leq 25\%$ Power factor shall not exceed 20%.
Vibration Test Specification	In accordance with IEC68-2-6 Displacement amplitude: 0,75mm Frequency range: 10...55Hz Maximum acceleration: 5g Duration: 6h (3x2h)
Climatic Category	20/065/21 according to IEC 60068-1 Lower category: -20°C Upper category: +65°C Damp heat test: 21 days

**Life Test Circuit**



Capacitor under test

The electronic switch represented in the circuit close at the zero-voltage crossing and open at the zero-current crossing.



## Endurance Test Specification

Rated test voltage	Capacitance Range		Duty cycle		Duration of Test
<i>Vac rms</i>	$\mu F$		<i>s</i>		<i>Nº of starts</i>
	From	To	On	Off	
110	21-25	124-149	$\frac{3}{4}$	29 $\frac{1}{4}$	25.000
	130-156	243-292	1	59	25.000
	270-324	378-454	1	89	16.750
	400-480	540-648	1	119	12.500
	590-708	850-1020	1	179	8.250
	1000-1200	1326-1590	1	239	6.250
150	21-25	88-106	1	59	16.750
	108-130	124-149	1	89	16.750
	130-156	216-259	1	119	12.500
	233-280	340-408	1	179	8.250
	378-454	850-1020	1	239	6.250
180 / 220	21-25	43-52	1	59	16.750
	37-56	72-86	1	89	16.750
	88-106	145-174	1	119	12.500
	161-193	243-292	1	179	8.250
	270-324	460-552	1	239	6.250
250	21-25	30-36	1	89	16.750
	36-43	64-77	1	119	16.750
	72-86	88-106	1	149	12.500
	108-130	189-227	1	209	8.250
	216-259	430-516	1	269	6.250
330	21-25	21-25	1	119	16.750
	25-30	30-36	1	149	16.750
	36-43	64-77	1	179	12.500
	72-86	88-106	1	239	8.250
	108-130	270-324	1	299	6.250

**Codification**

Code B 4 2 7 0 - - - - - A - - -  
 Digit 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Digit	Meaning
1	B= Passive Components
2	4= Electrolytic Capacitors
3	2 = Bipolar
4 and 5	7 = Type
6	Indicates the can size: 1 = can # 1 2 = can # 2 4 = can # 4 5 = can # 5
7	A or F = Standard Capacitor Any other letter = Special Development
8	Indicates the nominal voltage: 0 = Any voltage except 250 and 330Vac 2 = 250Vac 8 = 330Vac
9 to 13	Capacitance and tolerance given in coded form. Example: <div style="text-align: center; margin-top: 10px;"> <p>Data Digit</p> <p>Code B 4 2 7 0 2 - A 0 <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">1</span> <span style="border: 1px solid black; padding: 2px;">7</span> - <span style="border: 1px solid black; padding: 2px;">A</span> <span style="border: 1px solid black; padding: 2px;">6</span></p> <p style="margin-left: 100px;"> <math>(21 \cdot 10 \text{ pF}) + 6\mu\text{F} = 216\mu\text{F}</math> </p> <p style="margin-left: 100px;">A = Special tolerance</p> </div>
14	Indicates the accessories and the way they are packed: 0 = normal (without accessory) 1 = with end cap, dismantled 2 = with end cap, mounted 3 = with end cap and bracket, dismantled 4 = with end cap and bracket, mounted 5 = with end cap and bracket "special", dismantled 7 = normal with 3 wires 8 = normal with 1 wire
15	Indicates the different constructive types: 0 – normal; 1 – with fast-on cable welded; 2 – with resistor; 3 – with resistor and fast-on cable welded; 4 – with resistor and fast-on cable 300mm welded; 5 – with special disc (terminals at 135°) and 15KOhms resistor; 6 – with circle terminal cable welded; 7 – with resistor and circle terminal cable welded; 8 – with "special" fast-on cable welded; 9 – with resistor and "special" fast-on cable – 350mm welded;