



MYRON  ZUCKER

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***POWER FACTOR CORRECTION CAPACITOR CELLS***

**SPECIFICATIONS**

## DESCRIPTION

Metallized polypropylene capacitors offer improved performance and proven reliability in applications requiring power factor correction or harmonic filtering.

Metallized polypropylene film is used for its ability to operate at low temperatures and minimal loss of capacitance over the life of the cell. Encapsulated by a thermal setting polymer resin, excellent heat dissipation is achieved. In the event of a fault, three-phase pressure sensitive interrupters disconnect all three phases effectively taking the capacitor out of the circuit.

## CAPACITOR PROPERTIES



- Individual capacitors are self-healing. Vacuum deposited conductors on a polypropylene dielectric act as electrodes in this process.
- Each three-phase capacitor is furnished with a UL recognized, pressure sensitive interrupter. The interrupter will disconnect all three phases at the same time to maintain a balanced circuit.
- Capacitors are contained in hermetically sealed metal cans to prevent atmospheric contaminants from reducing the useful life.
- The dielectric material exhibits a loss of less than 0.5 Watts per KVAR.
- Encapsulation medium shall be a thermosetting polymer resin, which allows out gassing to engage the pressure interrupter.
- Nominal design life is 20 years.
- Individual capacitor cells are covered by a 2-year limited warranty.
- All capacitor cell terminations are threaded terminals for wire connection.
- All three-phase capacitors are listed as UL Recognized, CSA, and CE.

**CONSTRUCTION  
FEATURES**

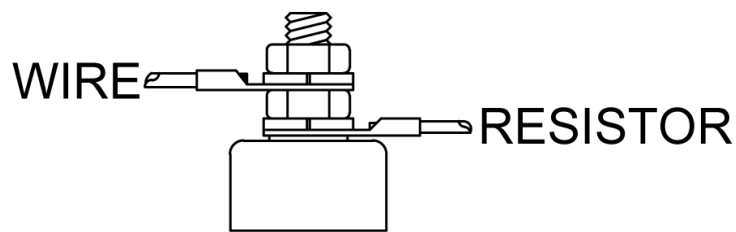
**Termination** – 12-24 or ¼ - 20 NC-2A threaded studs to ensure superior contact through compression. See figures 2-1 and 2-2.

**Cell Housing** – Constructed from a plated steel, the cell is hermetically sealed to prevent contamination.

**Dielectric / Electrode** – Constructed of metallized polypropylene film, a self-healing, low loss material. Results in low operating temperature and minimal loss of capacitance over the life of the cell.

**Three-Phase Construction** – Internally connected in a three-phase delta connection to ensure three-phase operation under all conditions and minimize external wiring.

**Three-Phase Pressure Interrupters** – UL Recognized device (10,000 amps fault current) to disconnect all three phases if fault occurs thus preventing single phase operation.



*Termination Connection*

**PERFORMANCE**

**Storage Temperature Range:** -40°F to 185°F (-40°C to 85°C)

**CHARACTERISTICS**

**Operating Temperature Range:** -40°F to 115°F (-40°C to 46°C)

**Design Life:** Life expectancy of capacitor cells is 20 years within operating specifications.

**Over Current:**

Standard: 135% x rated current continuous, includes harmonic currents

High Harmonic: 150% x rated current continuous, includes harmonic currents

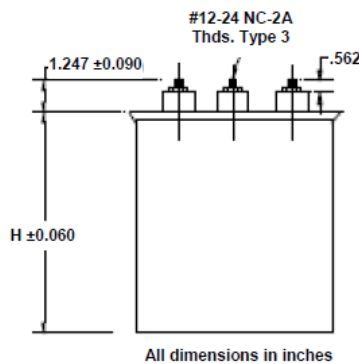
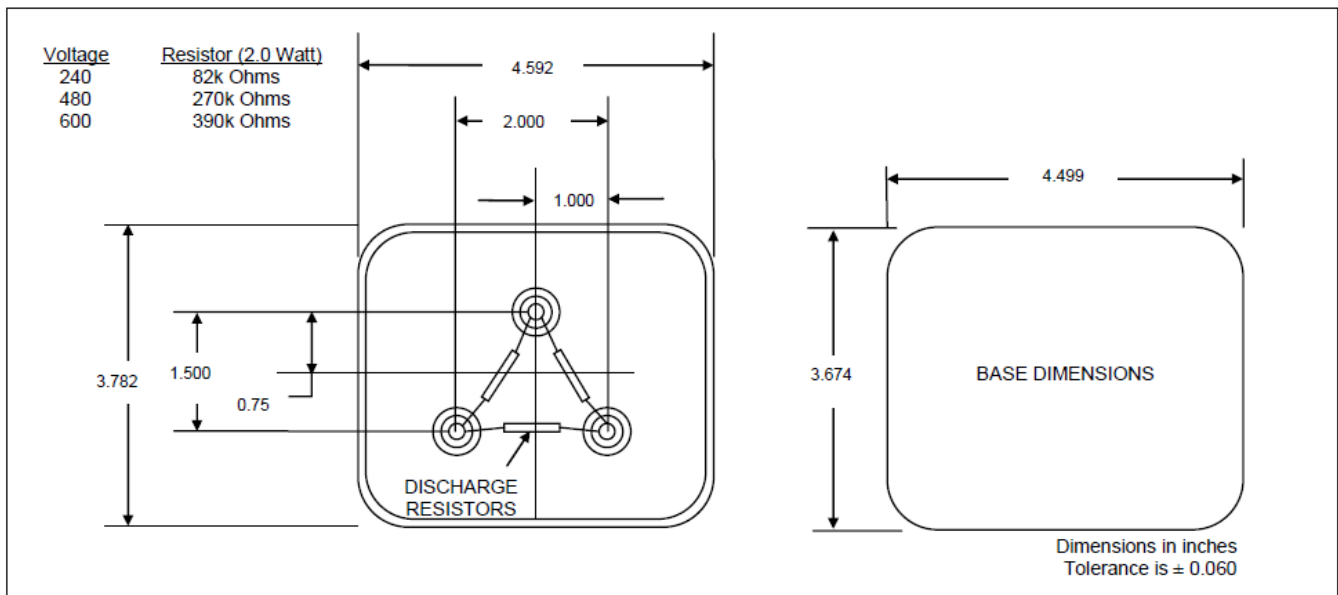
**Over Voltage:**

Standard: 110% x rated voltage continuous

High Harmonic: 120% x rated voltage continuous

**Tolerance:** Capacitor cell KVAR tolerance is -0% to +15%.

**DIMENSIONS**



**MODEL  
SELECTION**

Table 1 (*page 6*) offers a wide array of standard capacitor cells for most Power Factor Correction applications.

Table 2 (*page 7*) should be used to select capacitors for applications requiring “hardened” cells where harmonics are expected. Using these capacitors assures maximum life.

Notes:

1. All capacitor cells are shown as 3 phase units.
2. These capacitors use a dry type thermoplastic medium.
3. CUSTOMER must provide over-current protection as required by code.
4. All units are supplied un-painted.
5. Case material is plated steel approximately 0.017 inches thick.
6. Discharge resistors are included with all capacitor cells.

**TABLE 1: Standard Dry Cell Chart**

<b>Voltage Rating</b>	<b>kVAr</b>	<b>MZI Number</b>	<b>Weight</b>
<b>VAC</b>			<b>Pounds</b>
240	1	CAP4004	2.1
240	1.5	CAP4006	2.1
240	2	CAP4007X	2.1
240	2.5	CAP4010	2.5
240	3	CAP4012X	3.2
240	4	CAP4016S	3.5
240	5	CAP2005	2.8
240	6	CAP2006	3.2
240	7.5	CAP2007X	3.5
240	8.33	CAP2008B	3.5
240	10	CAP2010	3.5
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480	1	CAP4001	2.1
480	1.5	CAP4001X	2.1
480	2	CAP4002	2.1
480	2.5	CAP4002X	2.1
480	3	CAP4003	2.1
480	4	CAP4004	2.1
480	5	CAP4005	2.1
480	6	CAP4006	2.1
480	7.5	CAP4007X	2.1
480	10	CAP4010	2.5
480	12.5	CAP4012X	3.2
480	15	CAP4015	3.2
480	16.67	CAP4016S	3.5
480	17.5	CAP4017X	3.5
480	20	CAP4020	4.2
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600	2	CAP6002	2.1
600	2.5	CAP6002X	2.1
600	3	CAP6003	2.1
600	4	CAP6004	2.1
600	5	CAP6005	2.1
600	7.5	CAP6007X	2.1
600	10	CAP6010	2.6
600	12.5	CAP6012X	3.2
600	15	CAP6015	3.5
600	16.67	CAP6016S	3.5
600	17.5	CAP6017X	3.5
600	20	CAP6020	5

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