



ELECTRICAL COMPONENTS SDN BHD

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Low Voltage Dry Type Power Capacitors

ELCO Box-Type Capacitor Bank

Three-phased Box-Type Capacitor Bank is used to correct Power Factor for Motors, Low Voltage Transformers and inside Industrial Switchboard. It is sometimes used with blocking reactors with harmonics presence.

TECHNICAL CHARACTERISTICS

- Rated Voltage 240 ~ 525 V
- Rated Capacity 5 ~ 50 kvar
- Frequency 50 / 60 Hz
- Insulation Level 3 kV rms / 15 kV crest
- Voltage Test 3 kV / 10 s (terminal-case)
..... 2.15Un / 2 s (terminal-terminal)
- Dielectric Bi-Axially Oriented
Polypropylene film
- Electrode Plates Metalization (self-healing)
- Dielectric Loss < 0.2 W/kvar
- Total Loss < 0.4 W/kvar
- Continuous Overvoltage 1.1Un (up to 8h daily)
..... 1.15Un (up to 30min daily)
..... 1.2Un (up to 5min)
..... 1.3Un (up to 1min)
- Continuous Overcurrent 1.3In (option: 1.7~2.5In)
- Capacitance Tolerance -5 ~ +10%
- Impregnation Dry Type
- Temperature Range -25°C ~ 55°C
..... Max. over 24h = 40°C
..... Max. over 1 year = 30°C
- Installation Indoor
- Wiring Terminals 3 x M8
- Internal Connection Δ(Delta)
- Discharge Resistors < 75 V in 3 minutes
(option: < 50V in 1 min.)
- Protection Level IP41 (Option: IP54)
- Standards IEC 60831-1/2 ed2.1
- Service Life >100,000 Operating Hours

CAPACITOR TECHNOLOGY

Advanced technology of ELCO capacitors is based on construction of all-film capacitor sections, folding foil edge design. ELCO capacitors have very low dielectric losses and are designed for long service life. Capacitors are composed of capacitive elements wound from low loss polypropylene film. This dielectric is vacuum metal-lized, what gives it an excellent self-healing characteristic.

Built in discharge resistor reduces the voltage on a de-energised capacitor from the crest of rated voltage to 75V in 3 minutes or less (discharge to 50V in 1 minutes on demand).

All Elements are covered with a thermohardening resin of high dielectric properties and Elements inside the box are all connected through copper busbar to obtain the required reactive power and are mounted by rack in steel cases.

Void spaces between elements and the case are filled with a non-flammable, inert and non toxic vermiculite. Each element is individually protected.

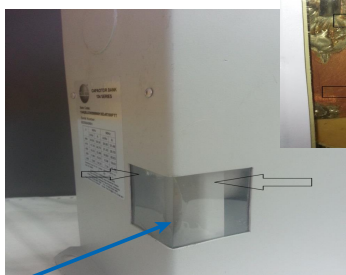
This construction system avoids any risk of explosion of the capacitor and meets all the tests specified in the IEC 60831-1 and IEC 60831-2 standards.

ADVANTAGES

- The connecting terminals are design diagonally and use strong terminals that can guarantee a easy, fast and safe cable connection.
- ELCO uses busbar connection in connecting the individual cells. This format of design reduces the number of wire that goes to the top terminal. Therefore, reduces the chances of hotter resistive cable at the top.
- Capacitors are dry type and consequently ecologically safe: there is no possibility of impregnating liquid leakage.
- Capacitors are a self-healing type: in case of a dielectric breakdown, due for example, to a transient over-voltage, the self-healing mechanism vaporizes the metallic electrode around the breakdown point, allowing the capacitor to go on working normally.
- Capacitors, cover with their different series, a wide range of power and voltages to satisfy the most varied requirements.
- ELCO capacitor uses holding rack to hold down the capacitor cells. The capacitor does not move around during transportation.



ELCO Box type capacitors for the connecting terminals are design diagonally. There is no need to bend the cables within the box to get the cables into the terminal.



Capacitor uses holding rack to hold down the capacitor cells.



Uses busbar connection in connecting the individual cells.

SPECIFICATIONS**ELCO 240V Capacitor Bank 60Hz**

<u>Code</u>	<u>Kvar</u>	<u>Dimension (mm) W x L x H</u>	<u>AMP</u>	<u>Weight (KG)</u>
ECE2405	5	135 x 175 x 260	12.0	4.5
ECE2410	10	135 x 340 x 280	24.0	8.5
ECE2415	15	135 x 340 x 280	36.0	8.5
ECE2420	20	135 x 340 x 380	48.1	12.0
ECE2425	25	135 x 340 x 380	60.1	12.0
ECE2430	30	135 x 340 x 380	72.1	12.0
ECE2440	40	135 x 340 x 480	96.2	15.0
ECE2450	50	135 x 340 x 580	120.2	20.0

ELCO 260V Capacitor Bank 60Hz

<u>Code</u>	<u>Kvar</u>	<u>Dimension (mm) W x L x H</u>	<u>AMP</u>	<u>Weight (KG)</u>
ECE2605	5	135 x 175 x 260	11.1	4.25
ECE2610	10	135 x 175 x 260	22.2	4.5
ECE2615	15	135 x 340 x 280	33.3	8.5
ECE2620	20	135 x 340 x 280	44.4	8.5
ECE2625	25	135 x 340 x 380	55.5	12.0
ECE2630	30	135 x 340 x 380	66.6	12.0
ECE2640	40	135 x 340 x 380	88.8	12.0
ECE2650	50	135 x 340 x 480	111.0	15.0

ELCO 415V Capacitor Bank 60Hz

<u>Code</u>	<u>Kvar</u>	<u>Dimension (mm) W x L x H</u>	<u>AMP</u>	<u>Weight (KG)</u>
ECE4105	5	135 x 175 x 260	6.9	4.25
ECE4110	10	135 x 175 x 260	13.9	4.25
ECE4115	15	135 x 175 x 260	20.8	4.5
ECE4120	20	135 x 340 x 280	27.8	8.5
ECE4125	25	135 x 340 x 280	34.7	8.5
ECE4130	30	135 x 340 x 280	41.7	8.5
ECE4140	40	135 x 340 x 380	55.6	12.5
ECE4150	50	135 x 340 x 380	69.5	12.5

ELCO 440V Capacitor Bank 60Hz

<u>Code</u>	<u>Kvar</u>	<u>Dimension (mm) W x L x H</u>	<u>AMP</u>	<u>Weight (KG)</u>
ECE4405	5	135 x 175 x 260	6.5	4.25
ECE4410	10	135 x 175 x 260	13.1	4.25
ECE4415	15	135 x 175 x 260	19.6	4.5
ECE4420	20	135 x 340 x 280	26.2	8.5
ECE4425	25	135 x 340 x 280	32.8	8.5
ECE4430	30	135 x 340 x 280	39.3	8.5
ECE4435	35	135 x 340 x 380	45.9	12.0
ECE4440	40	135 x 340 x 380	52.5	12.0
ECE4450	50	135 x 340 x 380	65.6	12.5

SPECIFICATIONS

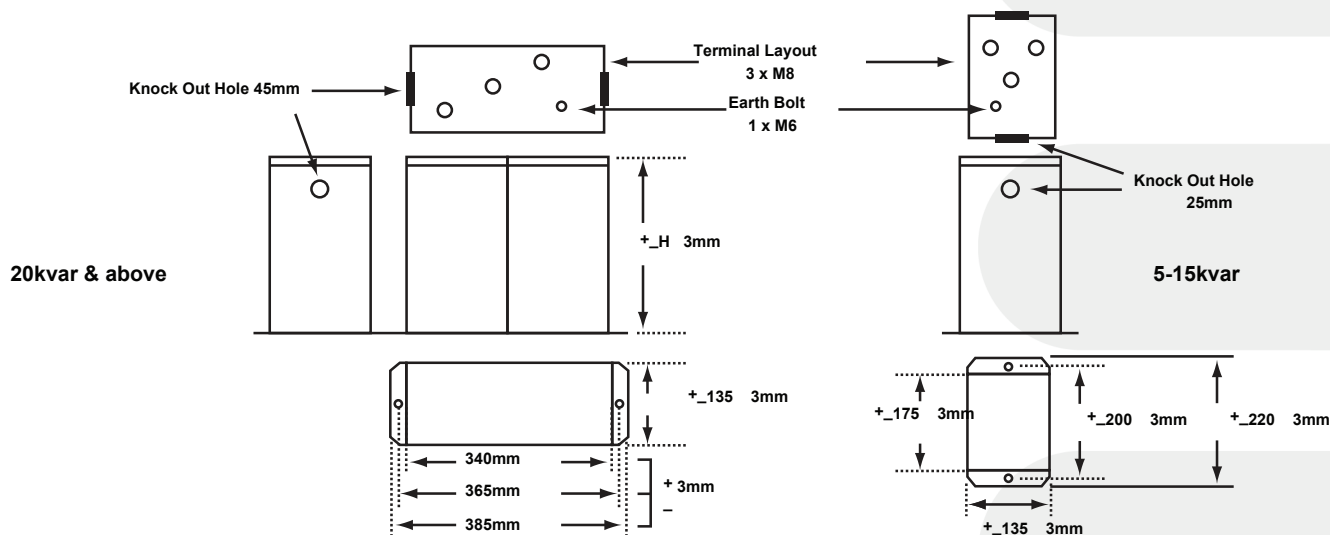
ELCO 480V Capacitor Bank 60Hz

Code	Kvar	Dimension (mm) W x L x H	AMP	Weight (KG)
ECE4805	5	135 x 175 x 260	6.0	4.25
ECE4810	10	135 x 175 x 260	12.0	4.25
ECE4815	15	135 x 175 x 260	18.0	4.5
ECE4820	20	135 x 175 x 260	24.0	4.5
ECE4825	25	135 x 340 x 280	30.0	8.5
ECE4830	30	135 x 340 x 280	36.1	8.5
ECE4840	40	135 x 340 x 280	48.1	8.5
ECE4850	50	135 x 340 x 380	60.1	12.5

ELCO Capacitor Bank 525V 60Hz

Code	Kvar	Dimension (mm) W x L x H	AMP	Weight (KG)
ECE5205	5	135 x 175 x 260	5.4	4.25
ECE5210	10	135 x 175 x 260	10.9	4.25
ECE5215	15	135 x 175 x 260	16.4	4.5
ECE5220	20	135 x 340 x 280	21.9	8.5
ECE5225	25	135 x 340 x 280	27.5	8.5
ECE5230	30	135 x 340 x 280	32.9	8.5
ECE5235	35	135 x 340 x 380	38.4	12.0
ECE5240	40	135 x 340 x 380	43.9	12.0
ECE5250	50	135 x 340 x 380	54.9	12.5

Product Dimension



Certificate No.: 601128

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