



# THE FIRST CHOICE OF ENERGY EFFICIENCY

200Q ELCO 0010

Rated Kvar  
0010 – 1.0Kvar  
||  
0400 – 40.0Kvar

## ELCO CYLINDRICAL TYPE POWER CAPACITOR

### 200 SERIES

6/15 KV

Three-phase Cylindrical - Type Power Capacitor is used to correct power factor for motors, low voltage transformer and inside industrial switchboard. It is sometimes used with blocking reactors with harmonics presence.

#### FEATURES

- Dry type, Cylindrical aluminum case
- 3 phase connection
- Rated voltage 440V
- Maximum permissible current 1.43x rated current
- Maximum inrush current 200 x rated current
- Compliance to standard IEC 60831 – 1 & 2
- Equipped with pressure activated series interruptor
- Statistical Life Expectancy > 150,000 operating hours

#### TECHNICAL SPECIFICATION

| Construction                                           |                                            |                                               |
|--------------------------------------------------------|--------------------------------------------|-----------------------------------------------|
| Type                                                   | Dry Metalized Film, Self-Healing           |                                               |
| Casing                                                 | Cylindrical Extruded Aluminium Can         |                                               |
| Dielectric                                             | Bi-Axially Oriented Polypropylene          |                                               |
| Plate                                                  | with Zinc-Aluminium Alloy                  |                                               |
| Encapsulation/Impregnation                             | Polyurethane Resin                         |                                               |
| Electrical Performance                                 |                                            |                                               |
| Rated Voltage (UN)                                     | 440V                                       |                                               |
| Frequency (fN)                                         | 50 / 60 Hz                                 |                                               |
| Connection                                             | Internal Delta                             |                                               |
| Temperature Category                                   | D / -25°C to +55°C                         |                                               |
| Relative Humidity                                      | ≤ 95%                                      |                                               |
| Capacitance Tolerance                                  | -5% / 10%                                  |                                               |
| Dielectric Loss (excluding discharge resistor)         | < 0.2W / kvar                              |                                               |
| Total Losses (Including Discharge Resistor)            | < 0.4W / kvar                              |                                               |
| Total Losses (excluding discharge resistor)            | < 0.3W / kvar                              |                                               |
| Testing Voltage Between Terminals                      | 2.15 UN For 2s                             |                                               |
| Testing Voltage Between Terminals and Container / Time | 3.66 KV / 10s                              | 6.0 KV / 10s                                  |
| Maximum Permissible Current                            | 1.43 IN                                    |                                               |
| Lighting Impulse Test Between Terminal-Container       | 15KV (Peak)                                |                                               |
| Maximum Inrush Current                                 | 200 IN                                     |                                               |
| Discharge Resistor<br>(Discharge time - 3 min to 75V)  | For 1 - 5 kvar                             | Internal / 3 sets of 2 x 6.3mm Double Tags    |
|                                                        | For 10 - 30 kvar                           | External / 3 x M8 Treaded Cu Stud             |
|                                                        | For 35 - 40 kvar                           | External / Internal / 3 x M10 Treaded Cu Stud |
| Capacitor Discharge Time                               | 3 min to 75V                               |                                               |
| Statistical Life Expectancy                            | > 150,000 Operating Hours                  |                                               |
| Standards                                              | IEC 60831-1 & 2                            |                                               |
| Installation                                           |                                            |                                               |
| Terminal Arrangements                                  | Nylon Insulated Top Decks with M8/ M10     |                                               |
| Screw Torque                                           | M8 : ≤ 4 Nm                                |                                               |
|                                                        | M10 : ≤ 10 Nm                              |                                               |
|                                                        | M12 : ≤ 15 Nm                              |                                               |
| Minimum Installation Clearance                         | 50mm Between Top of Capacitor to Enclosure |                                               |
|                                                        | 50mm Between Units                         |                                               |
| Service Condition                                      |                                            |                                               |
| Residual voltage at energization                       | Not exceed 10% rated voltage               |                                               |
| Altitude                                               | Not exceeding 2000 m                       |                                               |
| Maximum Permissible Voltage                            | 1.00 UN - Continuous                       |                                               |
|                                                        | 1.10 UN - 8 H in every 24 H                |                                               |
|                                                        | 1.15 UN - 30 min in every 24 H             |                                               |
|                                                        | 1.20 UN - 5 min                            |                                               |
|                                                        | 1.30 UN - 1 min                            |                                               |
| Safety Features                                        |                                            |                                               |
| Safety Device                                          | Pressure Activated Series Interrupter      |                                               |
| IP Rating                                              | IP54 (With Cable Gland and Cover - SIRIM)  |                                               |
|                                                        | Upside down position                       |                                               |



#### PRODUCT INFORMATION - 200 SERIES

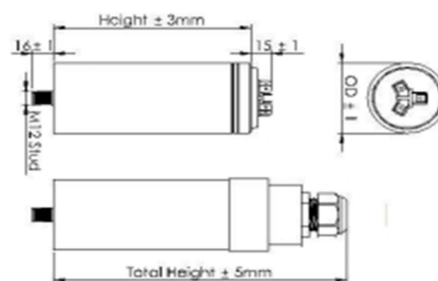
|              | f <sub>N</sub>   | 50Hz           |                |                |                |                |                | Dimension |        |              | Weight (kg) |
|--------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------|--------|--------------|-------------|
|              | U <sub>N</sub>   | 440            |                | 400            |                | 240            |                | (mm)      |        |              | +/- 0.2     |
| Product Code | Capacitance (uF) | Q <sub>N</sub> | I <sub>N</sub> | Q <sub>N</sub> | I <sub>N</sub> | Q <sub>N</sub> | I <sub>N</sub> | OD        | Height | Total Height | Weight      |
| 200QELCO0010 | 3 x 5.5          | 1.0            | 1.3            | 0.8            | 1.2            | 0.3            | 0.7            | 60        | 153    | 225          | 0.5         |
| 200QELCO0015 | 3 x 8.2          | 1.5            | 2.0            | 1.2            | 1.8            | 0.4            | 1.1            | 60        | 153    | 225          | 0.5         |
| 200QELCO0020 | 3 x 11.0         | 2.0            | 2.6            | 1.7            | 2.4            | 0.6            | 1.4            | 60        | 153    | 225          | 0.5         |
| 200QELCO0025 | 3 x 13.7         | 2.5            | 3.3            | 2.1            | 3.0            | 0.7            | 1.8            | 60        | 153    | 225          | 0.5         |
| 200QELCO0030 | 3 x 16.4         | 3.0            | 3.9            | 2.5            | 3.6            | 0.9            | 2.1            | 60        | 153    | 225          | 0.5         |
| 200QELCO0033 | 3 x 18.1         | 3.3            | 4.3            | 2.7            | 3.9            | 1.0            | 2.4            | 60        | 153    | 225          | 0.5         |
| 200QELCO0050 | 3 x 27.4         | 5.0            | 6.6            | 4.1            | 6.0            | 1.5            | 3.6            | 60        | 153    | 225          | 0.5         |
| 200QELCO0075 | 3 x 41.1         | 7.5            | 9.8            | 6.2            | 8.9            | 2.2            | 5.4            | 65        | 206    | 270          | 0.7         |
| 200QELCO0100 | 3 x 54.8         | 10.0           | 13.1           | 8.3            | 11.9           | 3.0            | 7.2            | 75        | 225    | 270          | 1.3         |
| 200QELCO0125 | 3 x 68.5         | 12.5           | 16.4           | 10.3           | 14.9           | 3.7            | 8.9            | 75        | 225    | 270          | 1.3         |
| 200QELCO0150 | 3 x 82.2         | 15.0           | 19.7           | 12.4           | 17.9           | 4.5            | 10.7           | 75        | 225    | 270          | 1.3         |
| 200QELCO0200 | 3 x 109.6        | 20.0           | 26.2           | 16.5           | 23.9           | 6.0            | 14.3           | 75        | 287    | 332          | 1.5         |
| 200QELCO0250 | 3 x 137.0        | 25.0           | 32.8           | 20.7           | 29.8           | 7.4            | 17.9           | 86        | 287    | 332          | 2.0         |
| 200QELCO0300 | 3 x 164.4        | 30.0           | 39.4           | 24.8           | 35.8           | 8.9            | 21.5           | 86        | 329    | 374          | 2.5         |
| 200QELCO0350 | 3 x 191.8        | 35.0           | 45.9           | 28.9           | 41.8           | 10.4           | 25.1           | 120       | 287    | 332          | 3.0         |
| 200QELCO0400 | 3 x 219.2        | 40.0           | 52.5           | 33.1           | 47.7           | 11.9           | 28.6           | 120       | 287    | 332          | 3.0         |

|              | f <sub>N</sub>   | 60Hz           |                |                |                |                |                | Dimension |        |              | Weight (kg) |
|--------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------|--------|--------------|-------------|
|              | U <sub>N</sub>   | 440            |                | 400            |                | 240            |                | (mm)      |        |              | +/- 0.2     |
| Product Code | Capacitance (uF) | Q <sub>N</sub> | I <sub>N</sub> | Q <sub>N</sub> | I <sub>N</sub> | Q <sub>N</sub> | I <sub>N</sub> | OD        | Height | Total Height | Weight      |
| 200QELCO0010 | 3 x 5.5          | 1.2            | 1.6            | 1.0            | 1.4            | 0.4            | 0.9            | 60        | 153    | 225          | 0.5         |
| 200QELCO0015 | 3 x 8.2          | 1.8            | 2.4            | 1.5            | 2.1            | 0.5            | 1.3            | 60        | 153    | 225          | 0.5         |
| 200QELCO0020 | 3 x 11.0         | 2.4            | 3.1            | 2.0            | 2.9            | 0.7            | 1.7            | 60        | 153    | 225          | 0.5         |
| 200QELCO0025 | 3 x 13.7         | 3.0            | 3.9            | 2.5            | 3.6            | 0.9            | 2.1            | 60        | 153    | 225          | 0.5         |
| 200QELCO0030 | 3 x 16.4         | 3.6            | 4.7            | 3.0            | 4.3            | 1.1            | 2.6            | 60        | 153    | 225          | 0.5         |
| 200QELCO0033 | 3 x 18.1         | 4.0            | 5.2            | 3.3            | 4.7            | 1.2            | 2.8            | 60        | 153    | 225          | 0.5         |
| 200QELCO0050 | 3 x 27.4         | 6.0            | 7.9            | 5.0            | 7.2            | 1.8            | 4.3            | 60        | 153    | 225          | 0.5         |
| 200QELCO0075 | 3 x 41.1         | 9.0            | 11.8           | 7.4            | 10.7           | 2.7            | 6.4            | 65        | 206    | 270          | 0.7         |
| 200QELCO0100 | 3 x 54.8         | 12.0           | 15.7           | 9.9            | 14.3           | 3.6            | 8.6            | 75        | 225    | 270          | 1.3         |
| 200QELCO0125 | 3 x 68.5         | 15.0           | 19.7           | 12.4           | 17.9           | 4.5            | 10.7           | 75        | 225    | 270          | 1.3         |
| 200QELCO0150 | 3 x 82.2         | 18.0           | 23.6           | 14.9           | 21.5           | 5.4            | 12.9           | 75        | 225    | 270          | 1.3         |
| 200QELCO0200 | 3 x 109.6        | 24.0           | 31.5           | 19.8           | 28.6           | 7.1            | 17.2           | 75        | 287    | 332          | 1.5         |
| 200QELCO0250 | 3 x 137.0        | 30.0           | 39.4           | 24.8           | 35.8           | 8.9            | 21.5           | 86        | 287    | 332          | 2.0         |
| 200QELCO0300 | 3 x 164.4        | 36.0           | 47.2           | 29.8           | 42.9           | 10.7           | 25.8           | 86        | 329    | 374          | 2.5         |
| 200QELCO0350 | 3 x 191.8        | 42.0           | 55.1           | 34.7           | 50.1           | 12.5           | 30.1           | 120       | 287    | 332          | 3.0         |
| 200QELCO0400 | 3 x 219.2        | 48.0           | 63.0           | 39.7           | 57.3           | 14.3           | 34.4           | 120       | 287    | 332          | 3.0         |

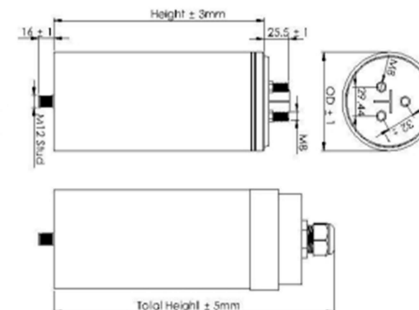
Q<sub>N</sub> = kVAR ; I<sub>N</sub> = Amps

#### PRODUCT DIMENSION

##### 1.0 KVAR to 7.5 KVAR



##### 10.0 KVAR to 30.0 KVAR



##### 35.0 KVAR to 40.0 KVAR

