



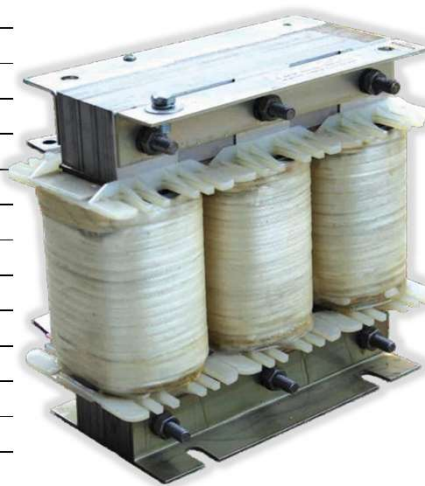
# THE FIRST CHOICE OF ENERGY EFFICIENCY

## ELCO LOW VOLTAGE DETUNED REACTOR

A Series Reactor functions together with a power capacitor to provide a Series Resonance circuit that acts as a sink drawing damaging harmonics, preventing dangerous overloads and increasing the life of the Automatic Power Factor Correction System Components.

### TECHNICAL SPECIFICATION

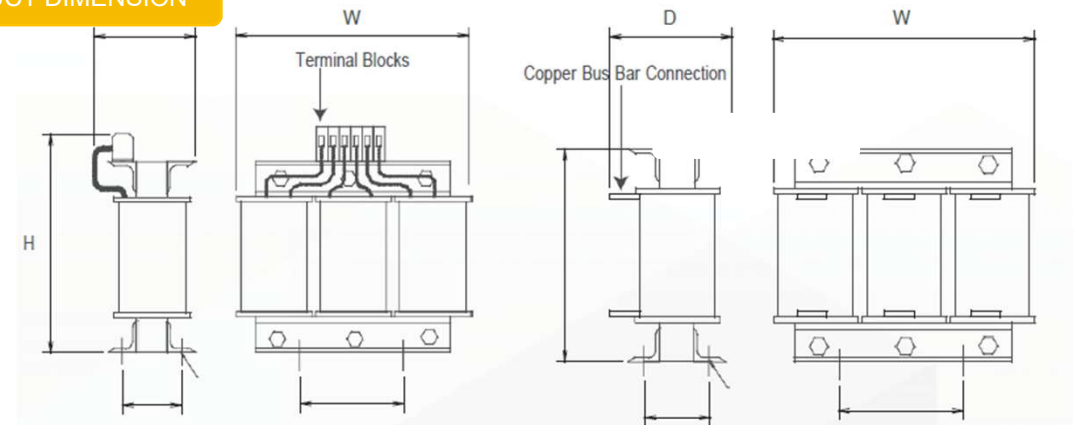
|                                              |                                           |
|----------------------------------------------|-------------------------------------------|
| Maximum Rated Input Voltage                  | Up to 600V                                |
| Frequency                                    | 50 Hz                                     |
| Resonance Frequency                          | 7% - 189 Hz / 6% - 204Hz / 13% - 138Hz    |
| Impedance Ratio / Model                      | P= 7% of Capacitor Value / BR07           |
|                                              | P= 6% of Capacitor Value / BR06           |
|                                              | P= 13% of Capacitor Value / BR13          |
| Coil Winding Material                        | Copper / Aluminium                        |
| Maximum Current Including Harmonics Overload | 1.43In                                    |
| Approximate Losses                           | 15 - 20W / kVAr (Qc)                      |
| Tolerance of Inductance                      | +/- 5%                                    |
| Linearity of Inductance                      | 1.5 x In                                  |
| Designed Limits for Harmonic Currents        | I5 = 50%, I7 = 25%, I11 = 12.5%, I13 = 5% |
| Ventilation / IP Class                       | Air-Cooled / IP 00 [ Indoor ]             |
| Maximum Operating Temperature Rise           | 120°C at ambient temperature 40°C         |
| Thermal Overloads Protection                 | Built-in thermostat cut off at 130°C      |
| Insulation Class                             | Class H (180°C) / Class F (Upon Request)  |
| Vacuum Impregnation                          | Yes                                       |
| Insulation Strength Testing Voltage          | 2.5kV                                     |
| Noise Level                                  | Below 55db                                |
| Installation Mounting & Clearance            | Vertical, Minimum 50mm to adjacent part   |
| Duty Cycle                                   | Continuous                                |
| Compliance Standards                         | IEC60076-6                                |



### PRODUCT INFORMATION - ELCO LOW VOLTAGE DETUNED REACTOR

| Product Code    | Capacitor Power | Capacitor Voltage | LC Power at (415/440) | Reactor Inductance | Dimension (mm) |     |     | Weight (kg) +/- 0.2 |
|-----------------|-----------------|-------------------|-----------------------|--------------------|----------------|-----|-----|---------------------|
|                 | kvar            | V                 | kvar                  | mH                 | W              | D   | H   | Weight              |
| BR07ELCO0050ALU | 5.0             | 525.0             | 3.4                   | 12.2827            | 175            | 130 | 170 | 4.5                 |
| BR07ELCO0100ALU | 10.0            | 525.0             | 6.7                   | 6.1413             | 210            | 130 | 230 | 8.1                 |
| BR07ELCO0125ALU | 12.5            | 525.0             | 8.4                   | 4.9131             | 210            | 145 | 230 | 10.2                |
| BR07ELCO0150ALU | 15.0            | 525.0             | 10.1                  | 4.0942             | 210            | 145 | 230 | 10.2                |
| BR07ELCO0200ALU | 20.0            | 525.0             | 13.4                  | 3.0707             | 210            | 150 | 230 | 10.4                |
| BR07ELCO0250ALU | 25.0            | 525.0             | 16.8                  | 2.4565             | 270            | 170 | 230 | 14.6                |
| BR07ELCO0300ALU | 30.0            | 525.0             | 20.2                  | 2.0471             | 270            | 175 | 230 | 15.3                |
| BR07ELCO0400ALU | 40.0            | 525.0             | 26.9                  | 1.5353             | 270            | 185 | 230 | 17.8                |
| BR07ELCO0500ALU | 50.0            | 525.0             | 33.6                  | 1.2282             | 270            | 190 | 230 | 19.7                |
| BR07ELCO0600ALU | 60.0            | 525.0             | 40.3                  | 1.0235             | 270            | 205 | 230 | 22.8                |
| BR07ELCO0700ALU | 70.0            | 525.0             | 47.0                  | 0.8773             | 320            | 200 | 280 | 30.5                |
| BR07ELCO0750ALU | 75.0            | 525.0             | 50.4                  | 0.8818             | 320            | 200 | 280 | 30.5                |
| BR07ELCO0800ALU | 80.0            | 525.0             | 53.8                  | 0.7676             | 320            | 200 | 280 | 30.5                |
| BR07ELCO0900ALU | 90.0            | 525.0             | 60.5                  | 0.6823             | 320            | 215 | 280 | 33.0                |
| BR07ELCO1000ALU | 100.0           | 525.0             | 67.2                  | 0.6141             | 320            | 215 | 280 | 33.0                |
| BR07ELCO1200ALU | 120.0           | 525.0             | 80.6                  | 0.5117             | 320            | 235 | 280 | 35.8                |
| BR07ELCO1500ALU | 150.0           | 525.0             | 100.8                 | 0.4094             | 375            | 270 | 280 | 50.0                |
| BR07ELCO2000ALU | 200.0           | 525.0             | 134.4                 | 0.3070             | 410            | 270 | 320 | 58.0                |
| BR07ELCO2500ALU | 250.0           | 525.0             | 167.9                 | 0.2456             | 435            | 295 | 320 | 76.0                |
| BR07ELCO3000ALU | 300.0           | 525.0             | 201.6                 | 0.2047             | 435            | 295 | 320 | 76.0                |

### PRODUCT DIMENSION



For 5 - 10 KVAR

For 12.5 - 300KVAR