

MV Detuning Reactors



Standard design is intended for detuned capacitor banks. Reactors have high linearity, low losses and minimal noise. Inductance is fixed to the exact value with tolerance of $-1/+3\%$. Reactors are designed for capacitors at 7200 V (grid 6000 V) and 12000 V (grid 10000 V), 50 Hz and tuned to resonance frequency of 189 Hz. Reactors are wound on Fe core with insulation class „B“.

Function of reactors

- Limiting inrush current during switching of capacitors.
- Limiting resonance and protection of capacitor banks against over loading arising from higher harmonics.
- Avoiding loss of power frequency (power remote control) from general power company.
- Getting power resonance circuits tuned to higher harmonic frequencies.

7 200 V, 189 Hz (7 %)

| Type | Capacitor power Q_N (kvar) | Inductance L_N (mH) | Current I_N (A) | Dimensions (WxDxH mm) | Weight (kg) |
|-------------------|------------------------------|-----------------------|-------------------|-----------------------|-------------|
| 150-189/6000/7200 | 150 | 77,0 | 12 | 955 x 425 x 650 | 185 |
| 300-189/6000/7200 | 300 | 38,5 | 24 | 1215 x 475 x 700 | 267 |
| 600-189/6000/7200 | 600 | 19,25 | 48 | 1175 x 500 x 770 | 356 |

12 000 V, 189 Hz (7 %)

| Type | Capacitor power Q_N (kvar) | Inductance L_N (mH) | Current I_N (A) | Dimensions (WxDxH mm) | Weight (kg) |
|---------------------|------------------------------|-----------------------|-------------------|-----------------------|-------------|
| 150-189/10000/12000 | 150 | 213,8 | 6,85 | 845 x 425 x 800 | 194 |
| 300-189/10000/12000 | 300 | 106,9 | 13,7 | 1050 x 500 x 840 | 307 |
| 600-189/10000/12000 | 600 | 53,4 | 27,4 | 1380 x 525 x 890 | 448 |

Other specifications (voltage, power, frequency) are available on request.

MV Inrush Current Reactors



Standard design is intended for high voltage capacitor banks as protection against very high peak currents during switching (inrush current). Max rated voltage 40 kV, max rated current 250 A. Standard rated voltage 7,2 and 12 kV. Insulation class is „F“.

Temperature class: F
Cooling: AN
Protection degree: IP 00

| Type | U_N (kV) | I_N (A) | L_{TL} (mH) | Outer dimensions (mm) | | | Mounting holes span (mm) | | | Weight (kg) |
|-----------------------------------|------------|-----------|---------------|-----------------------|-----|-----|--------------------------|-----|---------------|-------------|
| | | | | A | B | C | D | E | \varnothing | |
| IC reactor 7,2 kV, 50 A, 0,05 mH | 7,2 | 50 | 0,05 | 397 | 400 | 357 | 337 | 349 | 11 | 16,2 |
| IC reactor 7,2 kV, 50 A, 0,1 mH | 7,2 | 50 | 0,1 | 397 | 450 | 390 | 337 | 374 | 11 | 19,3 |
| IC reactor 7,2 kV, 100 A, 0,05 mH | 7,2 | 100 | 0,05 | 465 | 430 | 397 | 405 | 362 | 11 | 22,9 |
| IC reactor 7,2 kV, 100 A, 0,1 mH | 7,2 | 100 | 0,1 | 491 | 500 | 416 | 405 | 386 | 11 | 28,7 |
| IC reactor 7,2 kV, 150 A, 0,05 mH | 7,2 | 150 | 0,05 | 405 | 520 | 450 | 345 | 433 | 11 | 35,4 |
| IC reactor 7,2 kV, 200 A, 0,1 mH | 7,2 | 200 | 0,1 | 473 | 600 | 480 | 413 | 465 | 11 | 57,1 |
| IC reactor 12 kV, 100 A, 0,1 mH | 12 | 100 | 0,1 | 650 | 480 | 447 | 590 | 399 | 11 | 35,4 |
| IC reactor 12 kV, 150 A, 0,1 mH | 12 | 150 | 0,1 | 657 | 520 | 464 | 597 | 411 | 11 | 47,8 |
| IC reactor 12 kV, 200 A, 0,1 mH | 12 | 200 | 0,1 | 650 | 560 | 498 | 590 | 450 | 11 | 57,4 |

Other specifications (voltage, power, frequency) are available on request.

