

CP CR500 compensating reactor

Accessory for the CP TD1

The CP CR500 compensating reactor is used together with the CPC 100 multifunctional primary testing system and the CP TD1 for testing the insulation quality of rotating machines, cables and other assets with high capacitances.

For dissipation factor ($\tan \delta$) / power factor testing and tip-up testing several CP CR500 units can be connected in parallel. Capacitances of up to $1 \mu\text{F}$ (4 A) can be compensated with 12 kV test voltage and at mains frequency¹ (50 Hz / 60 Hz). The system can also be used as high-voltage source to provide compensation of up to $2 \mu\text{F}$, for example when performing partial discharge measurements. The frequency can also be varied (15 Hz ... 400 Hz) to facilitate optimum compensation during long-time tests.



Advantages

- > Portable: compact dimensions and low weight
- > Flexible: can be used as high-voltage source, as well as for dissipation factor ($\tan \delta$) / power factor testing and tip-up testing
- > Extendable: several units can be connected in parallel
- > Long test times: maximum output duration with optimal compensation by adjusting the frequency

Specifications ²	2 × 40 H	1 × 40 H + 1 × 80 H	2 × 80 H
Maximum test voltage	12 kV _{rms} (≥ 50 Hz)		
Inductance	2 × 40 H	1 × 40 H + 1 × 80 H	2 × 80 H
Current compensation	2 × 1 A (50 Hz) 2 × 0.8 A (60 Hz)	1 × 1 A + 1 × 0.5 A (50 Hz) 1 × 0.8 A + 1 × 0.4 A (60 Hz)	2 × 0.5 A (50 Hz) 2 × 0.4 A (60 Hz)
Capacitance compensation	2 × 250 nF (50 Hz) 2 × 180 nF (60 Hz)	1 × 250 nF + 1 × 125 nF (50 Hz) 1 × 180 nF + 1 × 90 nF (60 Hz)	2 × 125 nF (50 Hz) 2 × 90 nF (60 Hz)
On/off times at 25 °C			
0.3 A	Continuous (> 1 h)	Continuous (> 1 h)	Continuous (> 1 h)
0.5 A	Initial output time: 40 min On/off times: 6 min/6 min	Initial output time: 40 min On/off times: 6 min/6 min	Initial output time: 40 min On/off times: 6 min/6 min
1 A	Initial output time: 7 min On/off times: 2 min/6 min	1 × 40 H: see "2 × 40 H" 1 × 80 H: see "2 × 80 H" 1 × 40 H + 1 × 80 H: see "2 × 40 H"	Maximum current is 0.5 A at 12 kV and 50 Hz
Dimensions (W × H × D), with handles	455 mm × 275 mm × 220 mm / 17.9 × 10.8 × 8.7 in		
Weight	36 kg / 79.4 lbs		
Order No.	VEHZ0602	VEHZ0605	VEHZ0604

¹ To achieve the best possible compensation at mains frequency, an 80 H reactor should be made available.

² Specifications with one CP CR500.

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Customers in more than 140 countries rely on the company's ability to supply leading edge technology of excellent quality. Service centers on all continents provide a broad base of knowledge and extraordinary customer support. All of this together with our strong network of sales partners is what has made our company a market leader in the electrical power industry.