

Data Sheet no. 8.12/3

High-Power Tank-Type Reactors, Types DE

Description:

High-Power Tank-Type Reactors have been developed for use in Resonant Test Systems with variable frequency for the on-site testing of HV cables or GIL. They are also suited for the HV-side compensation of capacitive test objects to be tested with conventional HV transformers or reactors with tuneable inductance.

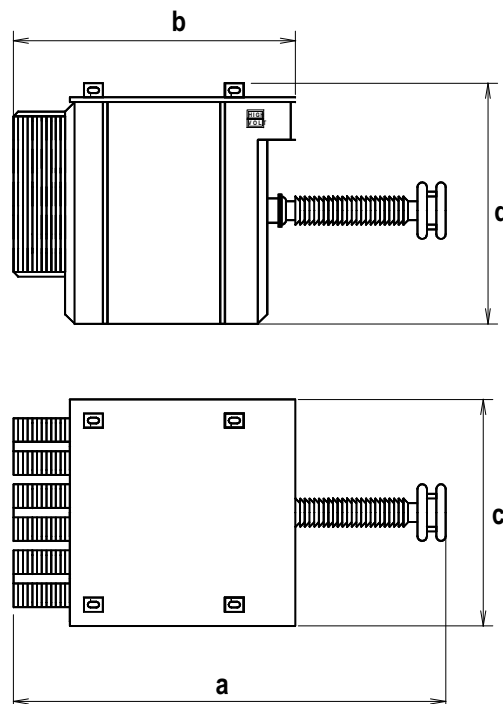
These resonant reactors are realised in conventional tank-type design with oil-paper insulation and natural oil cooling and forced air cooling by fans if necessary. Insulating oil is a mineral transformer oil according to IEC 60296.

The reactors are especially designed for cable on-site testing including frequent truck transportation and outdoor operation. The multi-gap core is made of high-quality grain-oriented transformer sheet and enables together with the layer-type winding a high quality factor of the resonant circuit.

The internal partial discharge (PD) level is lower than 10 pC.

The high voltage is led out through a condenser bushing to the open air or optionally through a SF₆-immersed cable termination.

The reactors may also be used at lower frequencies than at maximum voltages. In this case the voltage is reduced to avoid that the current exceeds its rated value. The maximum current is available down to the lowest specified frequency (e.g. 20 Hz).



Type		DE 30000/110-190	DE 20000/150-90	DE 12000/160-50	DE 30000/230-83	DE 30000/260-83
Voltage	kV	110	150	160	230	260
Inductance	H	2.56	8,9	17	16.2	16.2
Current	A	190	90	50	83	83
Duty cycle	min	1 hr ON-2 hr OFF, 3 cycles per day	1 hr ON-1 hr OFF 3 cycles per day			
Load capacitance at max. voltage	nF	110 - 8080	31 - 3150	17 - 1660	18 - 1600	18 - 1600
Frequency range	Hz	20-300				
Lowest frequency at max. voltage	Hz	36	30	30	27	31
Length (a)	mm	3 770	5 500	5 000	6 000	6 000
Partial length (b)	mm	2 800	2 800	2 500	3 000	3 000
Width (c)	mm	2 100	2 100	2 000	2 250	2 250
Height (d)	mm	2 450	2 450	2 200	2 450	2 450
Total Weight	kg	19 200	20 000	14 000	23 000	23 000
Weight of oil	kg	4 900	4 800	4 000	5 800	5 800

Realised examples, modification of the technical data on request.

For further information please contact:

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