

Decade Inductance Box MA 2705



User Manual

Code No. 20 750 138

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Technical Data

Inductance range: 0 mH to 999 mH
- sub ranges:
 x 1 mH 0 mH to 9 mH
 x 10 mH 0 mH to 90 mH
 x 100 mH 0 mH to 900 mH

Accuracy within temperature range from 15 °C to 40 °C: $\pm 5\%$ at $I_N/2$

Increase of inductance at I_N : 2 %

Capacitance between coils and housing: <50 pF

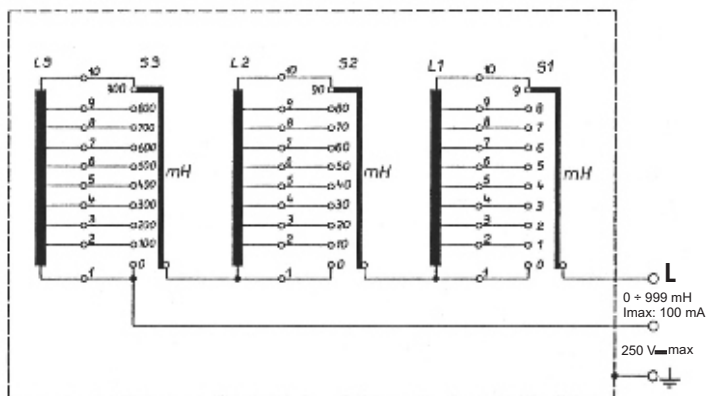
Test voltage against housing: 1.5 kV

Current load (continuous): max. 100 mA

Overtoltage category: II

Dimensions 190 x 90 x 175 mm

Mass: 1.15 kg



1. General

The MA 2705 decade inductance box is comprised of three decades which consist of coils in ferrite pots mounted on PCB. Inductance on output terminals is set by means for three switches from 0 mH to 999 mH in 1 mH steps. The values in mH are directly indicated on the front panel.

The table illustrates the current load allowed for particular ranges, diagrams show Q curves as a function of frequency. The MA 2705 decade inductance box is incorporated in a shield for inbuilt decade coils as well.

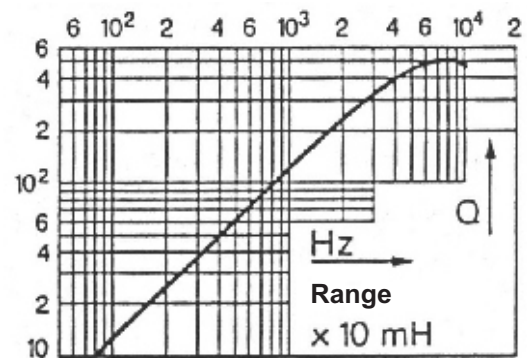
NOTE! When using dangerous voltages (usually above 60 V \sim or 30 V \sim), the earthing rocket must be earthed properly.

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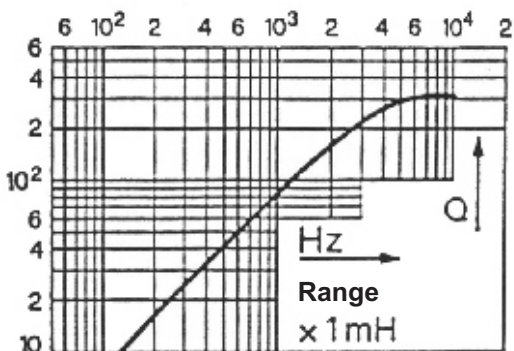
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Current load table

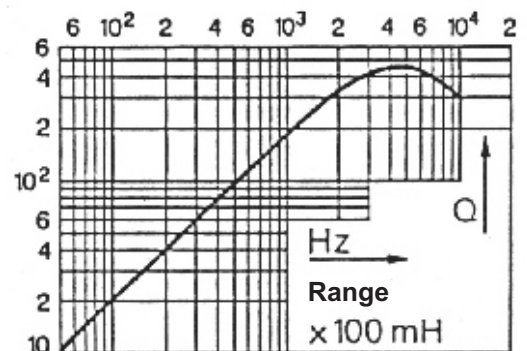
		I_N (mA)		
Range		x 1mH	x 10mH	x 100mH
Switch position	1	80	55	13.7
	2	80	53	12.4
	3	80	47	10
	4	80	40	8.6
	5	85	38	6.5
	6	80	36	6.0
	7	85	34	5.3
	8	80	30	5.0
	9	80	27.5	4.4



Typical Q curve as a function of frequency



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