

Vac V	Vac +12Vdc	Iac (mA) without gap	L ( Henryes) without gap  $L=V/(I^2*3,14*60)$		Iac (mA) With 0,1mm gap	L ( Henryes) with 0,1mm gap  $L=V/(I^2*3,14*60)$	Iac (mA) With 0,1mm gap  *AND bias of 36mA DC*  Iac was measured with an multimeter in mA ac scale true RMS	L ( Henryes) with 0,1mm gap  *AND bias of 36mA DC* $L=V/(I^2*3,14*60)$
15		1	39,81		1,5	26,54		
30		1,9	41,90		2,9	27,45		
40		2,4	44,23		3,7	28,69		
50		2,9	45,76		4,6	28,85	3,9	34,02
60		3,4	46,83		5,4	29,49		
70		3,8	48,89		6,14	30,26		
80		4,3	49,38		6,9	30,77		
90		4,7	50,82		7,7	31,02		
100		5	53,08		8,3	31,98	6,9	38,46
200		9,1	58,33		15	35,39	12,3	43,15
250		10,8	61,43		18	36,86	14,8	44,83

I made a coil with 3120 turns on a core obtained from a common 60Hz transformer, standard EI84 lamination, sheet thickness of 0.5mm, central leg area of 1200mm<sup>2</sup>.