

Filter type: NTKK CLF D6S - AM filter - JRC NRD-515

incircuit Z = 1K0 measurement (module-4) by removing 2 switch diodes.

BROWN = original, relatively poor stopband suppression by excessive leakage of IF input LC to output LC network. Missing a good L-shielding. Could be improved!

By means a (shielded) IF-transformer, such as used at the SSB filter, would have been better. Shielding caps on the L's (empty electrolytes!) works as short-circuit winding, is also not ideal.

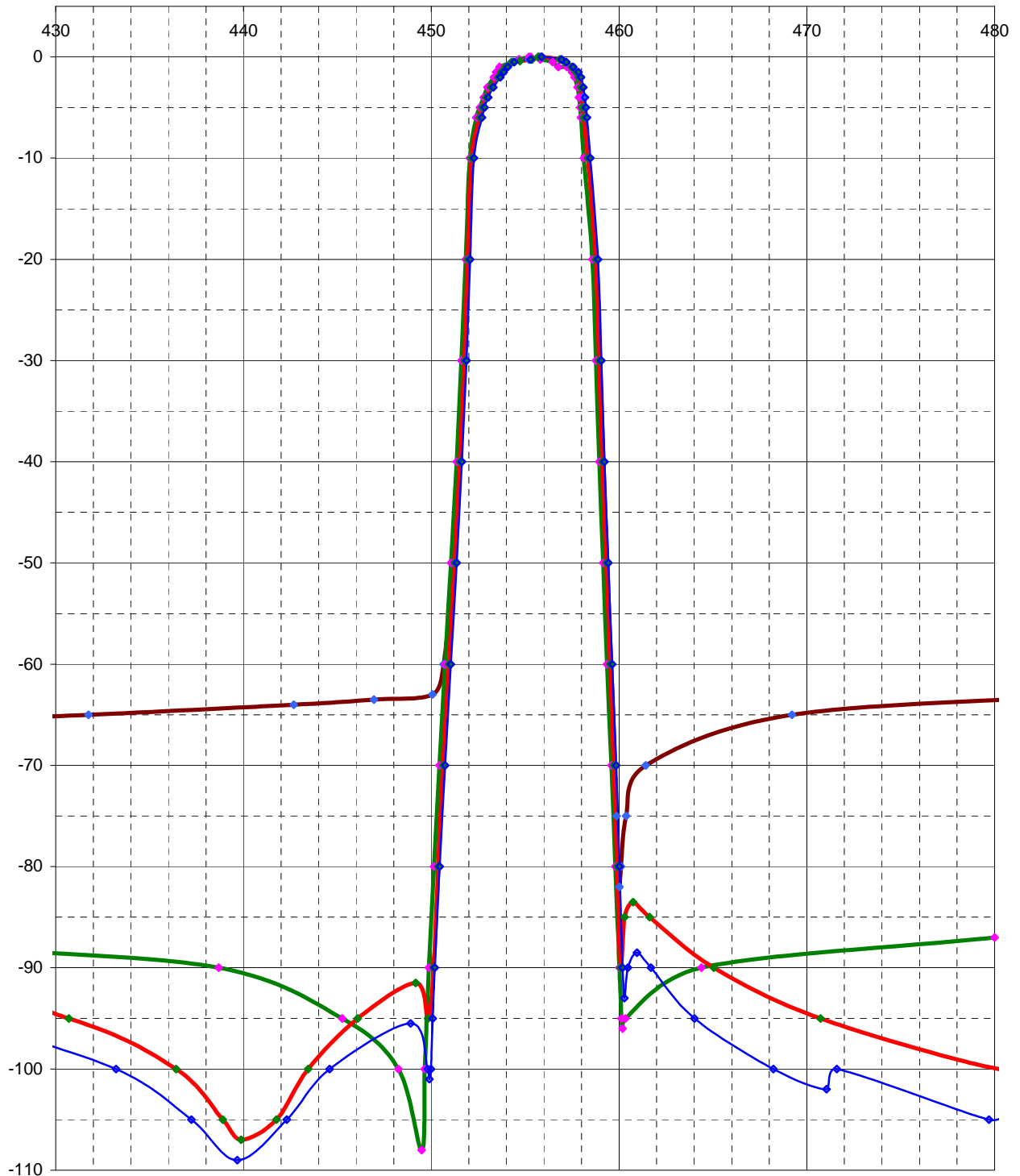
GREEN = same filter, but with the 2x LC networks + 4.7 mH - L replaced by 2x

Z-matching 3E25 1:2 toroid transformer. Also an additional shielding bracket was still necessary.

RED = CLF D6S - AM filter, but with 2x 330uH L replaced by 2x 4A11 - 13 mm toroid (N=32)

thin-**BLUE** curve = 4A11 RED with additional shielding bracket - same shielding as with GREEN

BROWN => -6 dB = 5.587 kHz | -60 dB = 8.927 kHz | shape 60/6 = 1.598 | damping = 2.75 dB
GREEN => -6 dB = 5.575 kHz | -60 dB = 8.620 kHz | shape 60/6 = 1.546 | damping = 4 dB
RED => -6 dB = 5.525 kHz | -60 dB = 8.580 kHz | shape 60/6 = 1.553 | damping = 3.75 dB



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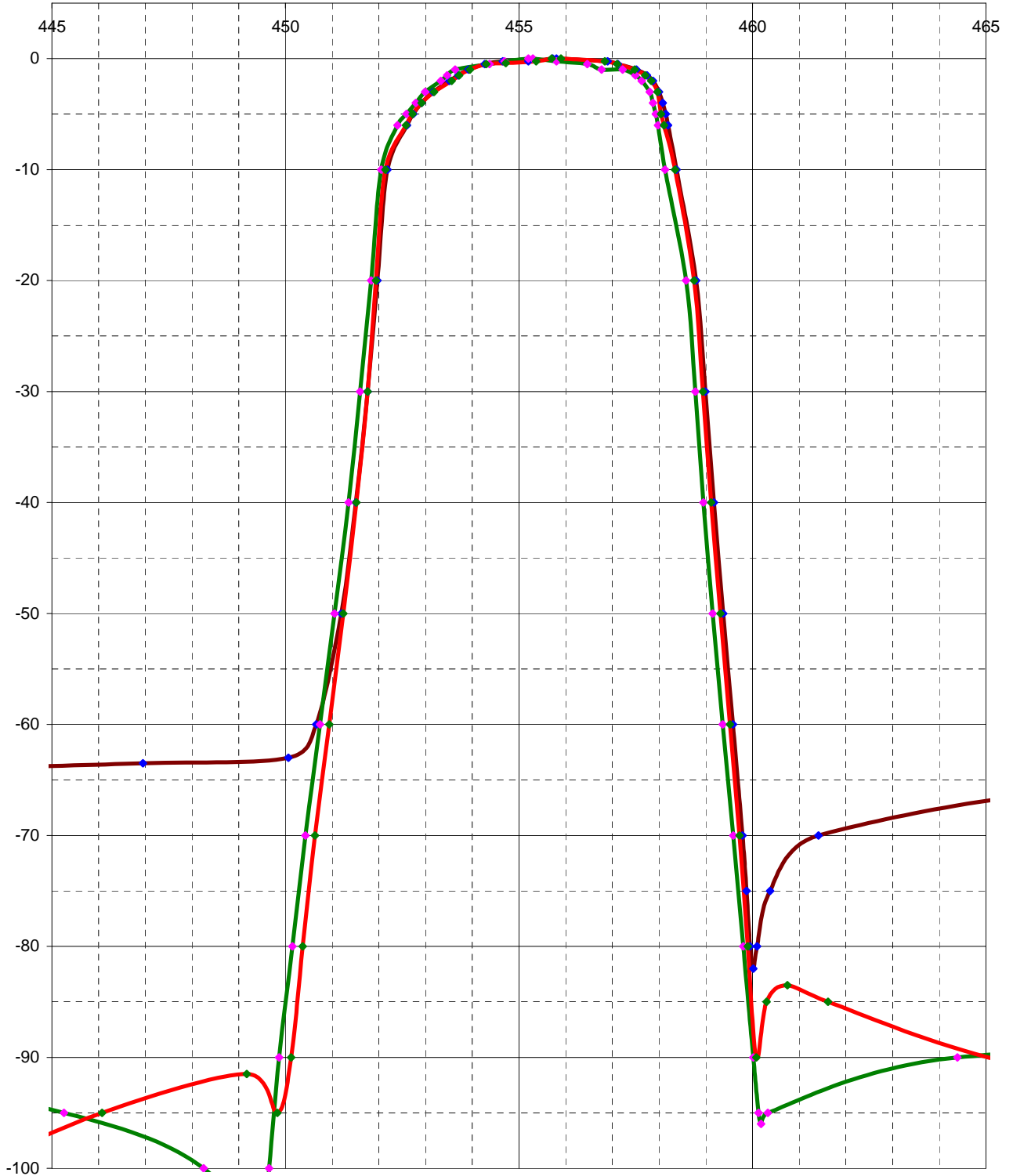
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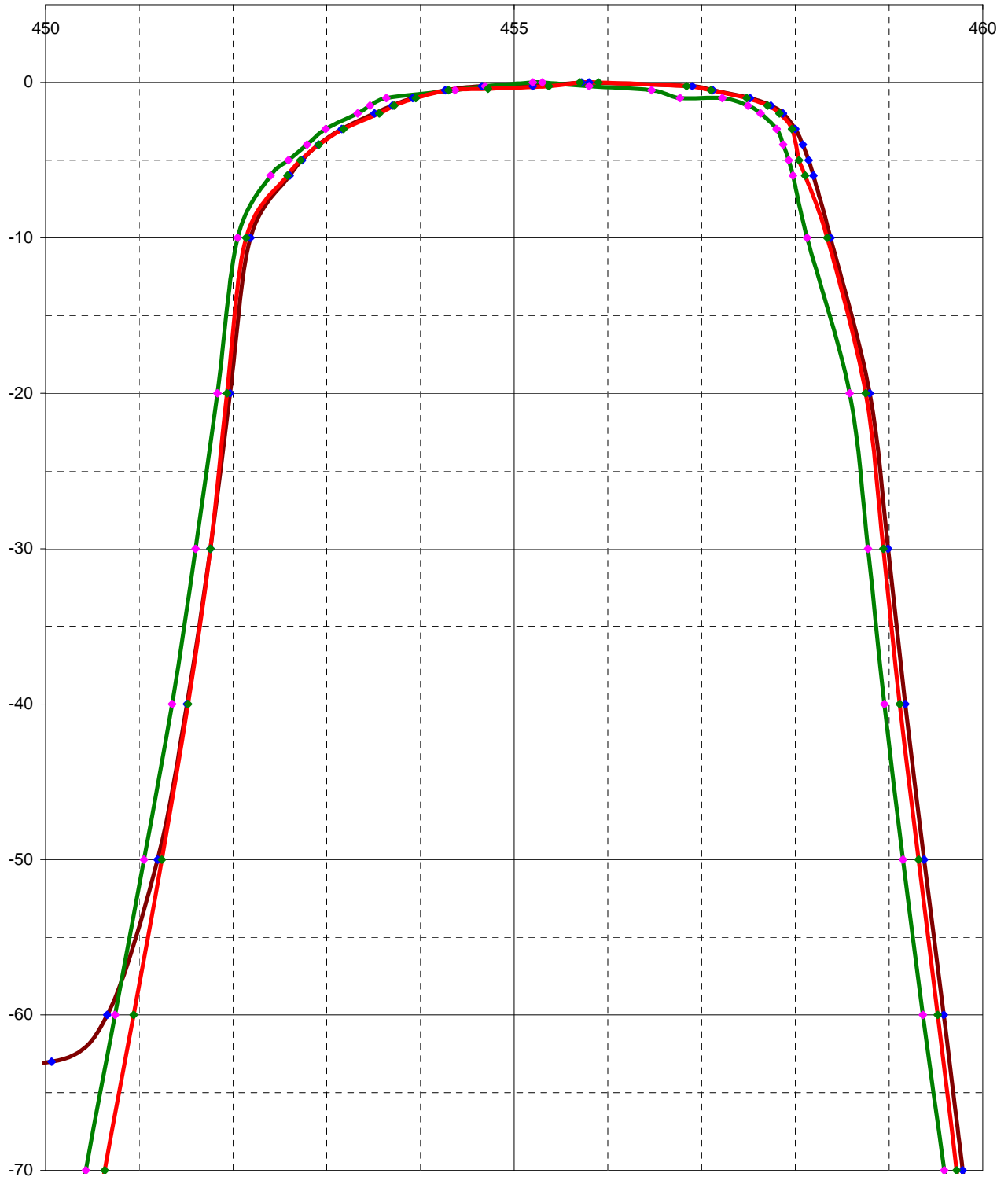
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LEVEL	FILTER-1	FILTER-2	FILTER-3	FILTER-3A	FILTER-4
grafiek	bruin	groen	rood	dun-blauw	groen
-80			324,000		
-88		425,000			
-90		438,685	419,000		
-95				425,000	
-100				433,220	
-105				437,220	
-109				439,670	
-105				442,300	
-100				444,590	
-95.5				448,900	
-95		445,260	430,705		
-100		448,250	436,415		
-105			438,900		
-107			439,875		
-110					425,000
-115					441,590
-120					447,975
-115					448,875
-110					449,300
-108		449,480			
-105			441,750		449,750
-100				449,800	450,185
-101				449,900	
-100		449,650	443,450	449,980	
-95			446,075		450,590
-91.5			449,170		
-95			449,825	450,080	
-90		449,865	450,120	450,180	451,000
-80		450,150	450,370	450,450	451,715
-70		450,430	450,630	450,730	452,225
-65.5	425,000				
-65	431,750				
-64	442,680				
-63.5	446,950				
-63	450,065				
-60	450,658	450,740	450,940	451,040	452,665
-50	451,195	451,050	451,240	451,350	453,020
-40	451,510	451,350	451,520	451,630	453,310
-30	451,760	451,600	451,760	451,870	453,530
-20	451,968	451,835	451,935	452,070	453,710
-10	452,185	452,050	452,140	452,280	453,860
-6	452,605	452,400	452,580	452,700	453,925
-5	452,735	452,590	452,720	452,840	453,945
-4	452,912	452,790	452,915	453,030	453,965
-3	453,160	452,990	453,180	453,300	454,000
-2	453,510	453,330	453,560	453,680	454,050
-1.5	453,700	453,460	453,720	453,850	454,125
-1	453,917	453,635	453,950	454,075	454,315
-0.5	454,265	454,370	454,300	454,410	454,470
-0.25	454,655	454,690		455,280	454,550
-0.4			454,720		
-0.25	455,200		455,370		
0	455,720	455,200	455,700	455,875	455,160
0	455,800	455,300	455,900		455,250
-0.25	456,900	455,800	456,840	456,940	455,460
-0.5	457,120	456,465	457,100	457,185	455,725
-1	457,515	456,770	457,480	457,560	455,810
-1		457,220			
-1.5	457,740	457,495	457,705	457,840	455,860
-2	457,868	457,630	457,830	457,970	455,910
-2.5					456,015
-3	458,000	457,800	457,965	458,100	456,040
-4	458,080	457,870		458,180	456,065
-5	458,142	457,930	458,040	458,235	456,075
-6	458,192	457,975	458,105	458,285	456,090
-10	458,375	458,125	458,340	458,470	456,130
-20	458,795	458,580	458,750	458,875	456,240
-30	458,990	458,775	458,940	459,060	456,380
-40	459,173	458,950	459,115	459,225	456,548
-50	459,375	459,150	459,315	459,425	456,750
-60	459,585	459,360	459,520	459,635	456,990
-70	459,785	459,590	459,720	459,845	457,275
-75	459,870				
-80	459,950	459,800	459,900	460,025	457,595
-82	460,015				
-80	460,100				
-75	460,375				
-70	461,415				
-65	469,200				
-63	486,150				
-90		460,015	460,080	460,190	458,010
-93				460,275	
-90				460,475	
-88.5				460,950	
-85			460,300		
-83.5			460,750		
-85			461,620		
-90			465,050	461,700	
-95		460,130	470,725	464,015	458,250
-100			480,250	468,215	458,565
-98			480,890		
-104			481,515		
-102				471,050	
-100			481,940	471,600	
-105			489,185	479,700	459,030
-104.5				481,070	
-110					460,015
-112				481,700	461,260
-115					462,650
-120					463,290
-110					466,380
-115					474,000
-113					490,000
-107				482,095	
-109				500,000	
-108			494,000		
-100			512,000		
-96		460,185			
-95		460,330			
-90		464,390			
-87		480,000			
-6 dB punt	5,587 kHz	5,575 kHz	5,525	5,585	2,165
-60 dB punt	8,927 kHz	8,620 kHz	8,580	8,595	4,325
shape 60/6	1,598	1,546	1,553	1,539	1,998
demping	2,75 dB	4 dB	3,75 dB	3,75 dB	4,5 dB
afsluit Z = 1000 OHM (Z-in = serie voeding via 950 ohm uit 50 ohm bron)					
ingangsspanning filter tot 100 mV UIT = 0 dB op SPM-3					
meetspanning 200 - 250 millivolt uit generator PS-3 naar 950 ohm serie-R					
Filter Z origineel 2K0					
filtertype	CLF-D6S	CLF-D6S	CLF-D6S	CLF-D6S	KOKUSAI (SSB)
	origineel incircuit	incircuit met 2 toroids 1K0 ==> 2K0	incircuit met 4A11	incircuit met 4A11	incircuit SSB filter
	LC-Filter-CL	en tevens extra afscherm schotje	LC filter	LC filter	
	netwerk		geen extra schotje!	WEL extra schotje!	module-4
	teveel HF LEK!!				
datum meting	25-5-2012	25-5-2012		28-5-2012	30-5-2012
grafiek	bruin	groen	rood	dun-blauw	groen
trafo op 3E25 toroid: 24 op 34 windingen op 14 mm kern			4A11 toroid: 32 of 33 windingen op 13 / 14 mm kern		