

Basic-program for beregning av LC verdier, inkludert spoleberegning  
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10 ' LC forhold
20 JA$="j":NEI$="n"
30 CLS
40 PRINT" Skriv 1 for frekvens"
50 PRINT" Skriv 2 for induktans"
60 PRINT" Skriv 3 for kapasitans"
70 PRINT" Skriv 4 for spoleberegning"
80 INPUT NR
90 IF NR = 1 GOTO 310
100 IF NR=2 GOTO 490
110 IF NR=4 GOTO 720
120 INPUT "Vil du skrive Herz (H), kiloHz (K), megaHz (M) eller gigaHz (G)";HZ$
130 IF HZ$="H" OR HZ$="h" THEN FUDGE =.001
140 IF HZ$="M" OR HZ$="m" THEN FUDGE =1000!
150 IF HZ$="G" OR HZ$="g" THEN FUDGE =1000000#
160 IF HZ$="K" OR HZ$="k" THEN FUDGE =1!
170 IF HZ$<>"H" AND HZ$<>"h" AND HZ$<>"M" AND HZ$<>"m" AND HZ$<>"G"
AND HZ$<>"g" AND HZ$<>"K" AND HZ$<>"k" THEN BEEP: GOTO 120
180 INPUT "input frekvens";F
190 F=F*FUDGE
200 INPUT "Vil du skrive Henry (H), mH, (M), mikroH (mi) eller nanoH (n)";L$
210 IF L$="MI" OR L$="mi" THEN FUDGE =1!
220 IF L$="M" OR L$="m" THEN FUDGE =1000!
230 IF L$="N" OR L$="n" THEN FUDGE =.001
240 IF L$="H" OR L$="h" THEN FUDGE =1000000#
250 IF L$<>"MI" AND L$<>"mi" AND L$<>"M" AND L$<>"m" AND L$<>"N" AND
L$<>"n" AND L$<>"H" AND L$<>"h" THEN BEEP: GOTO 200
260 INPUT "input induktansverdien";L
270 L=L*FUDGE
280 C=25330/(F*F*L):C=C*1000000#
290 PRINT USING"C = ####.## picofarad";C
300 GOTO 680
310 INPUT "Vil du skrive mikroF (m), nanoF, (n), eller picoF (p)";C$
320 IF C$="M" OR C$="m" THEN FUDGE =1000000#
330 IF C$="N" OR C$="n" THEN FUDGE =1000#
340 IF C$="P" OR C$="p" THEN FUDGE =1
350 IF C$<>"M" AND C$<>"m" AND C$<>"N" AND C$<>"n" AND C$<>"P" AND
C$<>"p" THEN BEEP: GOTO 310
360 INPUT"input kapasitansverdi";C:C=C/1000000#
370 C=C*FUDGE
380 INPUT "Vil du skrive Henry (H), mH, (M), mikroH (mi) eller nanoH (n)";L$
390 IF L$="MI" OR L$="mi" THEN FUDGE =1!
400 IF L$="M" OR L$="m" THEN FUDGE =1000!
410 IF L$="N" OR L$="n" THEN FUDGE =.001
420 IF L$="H" OR L$="h" THEN FUDGE =1000000#
430 IF L$<>"MI" AND L$<>"mi" AND L$<>"M" AND L$<>"m" AND L$<>"N" AND
L$<>"n" AND L$<>"H" AND L$<>"h" THEN BEEP: GOTO 380
440 INPUT "input induktansverdien";L
450 L=L*FUDGE
460 F=1000/(2*3.141592#*SQR(L*C))
470 PRINT USING"FREQ = #####.## KHZ";F
480 GOTO 680
490 INPUT "Vil du skrive mikroF (m), nanoF, (n), eller picoF (p)";C$
500 IF C$="M" OR C$="m" THEN FUDGE =1000000#
510 IF C$="N" OR C$="n" THEN FUDGE =1000#
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Kapasitans

Frekvens

Induktans

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520 IF C$="P" OR C$="p" THEN FUDGE =1
530 IF C$<>"M" AND C$<>"m" AND C$<>"N" AND C$<>"n" AND C$<>"P" AND
C$<>"p" THEN BEEP: GOTO 490
540 INPUT"input kapasitansverdi";C:C=C/1000000#
550 C=C*FUDGE
560 INPUT "Vil du skrive Herz (H), kiloHz (K), megaHz (M) eller gigaHz (G)";HZ$
570 IF HZ$="H" OR HZ$="h" THEN FUDGE =.001
580 IF HZ$="M" OR HZ$="m" THEN FUDGE =1000!
590 IF HZ$="G" OR HZ$="g" THEN FUDGE =1000000#
600 IF HZ$="K" OR HZ$="k" THEN FUDGE =1!
610 IF HZ$<>"H" AND HZ$<>"h" AND HZ$<>"M" AND HZ$<>"m" AND HZ$<>"G"
AND HZ$<>"g" AND HZ$<>"K" AND HZ$<>"k" THEN BEEP: GOTO 560
620 INPUT"input frekvensen";F
630 F=F*FUDGE
640 L=25330/(F*F*C)
650 PRINT USING"L = ###.### mikrohenry";L
660 INPUT"Vil du beregne spolen? (J/N)";SVAR$
670 IF SVAR$=JA$ GOTO 810
680 INPUT"Vil du regne mer? (J/N)";SVAR$
690 IF SVAR$="J" OR SVAR$="j" THEN CLS: GOTO 30
700 IF SVAR$="N" OR SVAR$="n" THEN CLS: GOTO 1170
710 CLS:BEEP: GOTO 680
720 CLS:A$="JAN"
730 INPUT "Vil du skrive Henry (H), mH, (M), mikroH (mi) eller nanoH (n)";L$
740 IF L$="MI" OR L$="mi" THEN FUDGE =1!
750 IF L$="M" OR L$="m" THEN FUDGE =1000!
760 IF L$="N" OR L$="n" THEN FUDGE =.001
770 IF L$="H" OR L$="h" THEN FUDGE =1000000#
780 IF L$<>"MI" AND L$<>"mi" AND L$<>"M" AND L$<>"m" AND L$<>"N" AND
L$<>"n" AND L$<>"H" AND L$<>"h" THEN BEEP: GOTO 730
790 INPUT "input induktansverdien";L
800 L=L*FUDGE
810 INPUT "Circular or square coil former (c/s)";Q$
820 IF Q$="c" OR Q$="C" OR Q$="s" OR Q$="S" THEN 840
830 BEEP:GOTO 810
840 IF Q$="S" OR Q$="s" THEN 930
850 INPUT "coil diameter (mm) =";A
860 A=A/2
870 GOSUB 1000
880 N=SQR(L/(.0000004*PI*A*(LOG(1+PI*V)+1/(2.3+1.6/V+.44/(V*V))))))
890 IF S<>1 THEN 1070
900 GOSUB 1180
910 IF Z<>0 THEN 880
920 GOTO 1070
930 INPUT "side of the square (mm) =";A
940 GOSUB 1000
950 N=SQR(L*PI/(.0000004*PI*A*(LOG(1+PI*V)+1/(3.64+2/V+.51/(V*V))))))
960 IF S<>1 THEN 1070
970 GOSUB 1180
980 IF Z<>0 THEN 950
990 GOTO 1070
1000 INPUT "Space between turns (Y/N)";S$
1010 S=0
1020 IF S$="n" OR S$="N" THEN B=A:S=1:INPUT "wire diameter (mm)
=";D:D=D/1000:GOTO 1040

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1030 INPUT "coil length (mm) =";B
1040 INPUT "L (uH) =";L
1050 B=B/1000:A=A/1000:L=L/1000000!:V=A/B:PI=3.14159
1060 RETURN
1070 R=N-INT(N):NAKK=N
1080 IF R<.5 THEN N=INT(N) ELSE N=INT(N)+1
1090 PRINT USING "antall viklinger =##.# eller ## hele viklinger";NAKK,N
1100 GOSUB 1200
1110 IF S=1 THEN 1130
1120 PRINT "maximum wire diameter =";1000*(B/N);"mm"
1130 FOR X=0 TO 69:PRINT "-";:NEXT:PRINT
1140 INPUT "Vil du regne mer (J/N)";A$
1150 IF A$="J" OR A$="j" THEN CLS:GOTO 10
1160 IF A$="N" OR A$="n" THEN CLS:GOTO 1170
1170 END
1180 Z=1:K=N*D:IF ABS((K-B)/B)<.00003 THEN Z=0:RETURN
1190 B=(K+B)/2:V=A/B:RETURN
1200 FOR I=N-1 TO N+1
1210 L=I*I*(.0000004*PI*A*(LOG(1+PI*V)+1/(3.64+2/V+.51/(V*V))))
1220 L=L*1000000#
1230 PRINT USING "For n= ##, L= ###.### uH";I,L
1240 NEXT I
1250 RETURN
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