

New Factor for Improving Designning D.C Lab Winding

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Abstract: All designning d.c. lap winding machines have standard horse Power (hp.) only (i.e. 0.25, 0.33, 0.5, 1, 2...) but it is impossiple to design these machines in much wide domain (i.e. 0.13, 0.18, 0.27, 1.2......), because the restricting integer result of equation winding refuse to design the machine in that much wide domain leadind to restrict the values of important parameters like slots, coils & bars. The search suggests to add new factor on equation winding to accept any above parameters and to improve commutation, also its effeciency and to make sparklless as possible. Finally this new factor plays alarge important role to cancel the hardly requiements on machine in addion to that improving its specification and its power.

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I. Theory

The designning windings of d.c machine are lab, wave and frog leg types. The difference between them in the way of connecting the finishing coils to the commutator bars [1], and the generation coil rules of all these types and depende on demending design of each one like

and the generar coil rules of all these types are the same and depends on demanding design of each one like (coil span $((Y_s), pole pitch (Y_p), coil pitch (Y_c), number of coils (C).....and so on).$

 $(Y_c) = C/p = 180^\circ$...in full pitch.....(1) used in all types. where C and P are no. of coils and poles respectively. $(Y_s) = (S/p) - K = 180^\circ$ or $\approx 180^\circ$ for full or fractional pitches respectivelly...(2) used in all types

where S is the number of slots, K = 1, 2, 3... to make Ys integer [2].

 $\theta t = 180P$ where θt , P are total angle around the armature and number of poles respectively.

 $(Y_avg.) = (Z/p) \pm m = (Y_B+Y_F)/2 \approx Y_B.....(4)$

where Y_{avg} , Z & m are the avarege pitch & n0. of coil sides and multiplicity factor respectively. + means progressive [i.e back pitch (Y_B) > [front pitch (Y]] _f)] & - is retrogressive [[i.e.Y]] _B < [Y]] _F]

i.e. $Y_(B =) (or \approx) \theta_(t/P)$ or,

 $Y_ave. = (or \approx [])\theta] _(t/P) = Y_B \dots (5)$

m(6) .where + for progressive (Y_(B)> Y_F)& - for retrogressive (Y_(B)< Y_F) Y_(B)= Yf \pm

In lab type winding, the commutator pitch (Y_com) equal to 1 ,2 ,3 ,4i .e. simplex , doublex

triplex, quaderlex and so on depending on the degree of multiplicity factor, so $Y_{com} = \pm (1, 2, 3, 4...)$ where Y_{com} is the commutater pitch, or

 $Y_{com} = \pm m$ where m is the multiplicity factor[3].

If the starting winding starts from bar to bar, so the entire winding must be traced from coil side of one coil to coil side of another befor closure occurs, that is befor the winding reentres [4].

After one complete tracing around the commutator the connection with first bar is after or before it, the after means progressive and before means retrogressive. If the number of bar in after case equal one, two, three, four ...this is mean that we have simplex, doublex, triplex and so on (i.e. clockwise direction) respectively, the same thing happens in retrrogressive case (i.e anticlock- -wise direction) [4]. The simplex, douplex, triplex & quiderlex...act, have one, two, three and four degrees of reentrances (R) respectively [4]. The no. of parallel paths (a) in lab winding is equal to:- a = mp......(7).

In the case of wave type the commutator pitch (Y_com) approximatly equal to 360° (not exact.), because if Y_com equal exact 360° it is impossible to complete the connecting of total windings.

Some times it is better to take more than one group of coils for obtaining more one of reentraces. The reentrancy (R) is the group of coils that consistute to form closed circuit winding.[5]. The coil pitch (Yc) of wave type is calculated as follow:-

 $Y_c = (C \pm m)/(P/2)$(8)

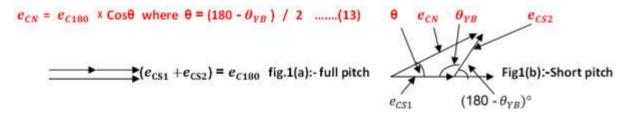
where C, P & m are no. of coils, poles & multiplicity factor respectivelly and $m = \pm (1, 2, 3, 4,)$ where (+, -) means progressive & retrogressive respectivelly. Also (1, 2, 3, 4,) are simplex, douplex,triplex & quaderlex respectivelly and so on. Yc must be integer in equation no. 1 above so there is restrection on selection of bars. By the same way of a lab above the starting wave coils starts from bar to bar, so the entire winding must be traced from coil side of one coil to coil side of another befor closure occurs and the winding return back upon it self. Also after one complete tracing around the commutator the connection with first bar is after or before it, the after means progressive& before means retrogressive[6]. The no. of bars must be selected with relation to the no. of poles, that the commutator pitch Y_c can be made alittle more or less than two pole pitches[7].

The no. of parallel paths (a) in simplex wave winding is only two regardless of poles. The conductors in each of two paths of wave winding are distributed under all the poles, so wave wound need two sets of brushes only .If the brush sets as poles, so one or more of the satisfactrory operation is still possible, that is not true in wound machine [8]. The sparkless commutation of wave wound is more to occur than lab wound. The reason for this that each of two parallel paths in lap winding contains condoctors distributed compeletly around the entire circumferance under two poles only. If fluxes Produced by all the poles are not exactly the same, the voltages generated in both of the paths of the lab type are not the same but wave type are still exactly equal because the two pathes are affacted similarly. The designers have attempted to use multiplex wave winding, such windings have (2*plex) paths in parallel regardless no.of poles[9]. The total electrical angle (θ t) around the armature and the slot angle (θ s) and bar angle (θ c) are equal to:-

 $\theta t = (180P)^{\circ}...(9)$ $\theta s = (\theta t / C)^{\circ}....(10)$ $\theta c = \theta t / C_{om....(11)}$ $e_p = e_CN * C/a = Ip*Zp......(12)$

Where θt , θs and θc are (total, slot and commutator) angles may C, C_om and P are no. of coils, bars and poles also e_p, e_CN are induced emfs around path and coil [10]. If the coils having span which is equal to one pole pitch i.e.spanning over 180° (ele.degree) this is mean that we have full pitched winding and the voltage is max. around the coils. But if the coils have spanning less or more one pole pitch, this is mean that we have short pitch winding and the voltage is less and not max. around the coils. The short case is used to save the copper and to improve the waveform to approximate to sin wave also to reduce the distorting harmonicse and to decrease the iron loss i.e. increasing efficiency.

For full pitch the total voltage around the coil is e_{c180}) and it is equal to algebraic summation of two induced emfs of two coil sides of the same coil (e_{c1}), [[e]] _C2 180 between them), but at short pitch the Y_(B) more or less 180° and the total voltage around this coil is e_{c180}) look equation 13 & fig.1(a,b)...[11].



 $e_c = I_c * Z_c \dots (14)$ $e_p = I_p * Z_p \dots (15)$ $P_t = I_t * e_p \dots (16)$ $e_c S_1 = e_c S_2 \dots (11)$ If all the conditions of coils are same (i.e. size, no.of turns...), the Z_c, Z_p become constants also. [12] It is clear also that when $\theta_Y B = exact 180$ (i.e. $\theta = 0$), so $e_c(CN) = e_c C_{180}$ look equation 13 above [12],

II. The working

 $Y_(f) = [(\theta t/P) \pm K_1 \theta_(S) \pm [m^* \theta] S]^{\circ}...$ for even coils.... (19). where $(Y_(f))$ is front pitch, m is multiplicity factor ,or

Meann	ings of symbols used									
word	meanning	word	meanning	word	meanning	word	meanning			
c	No.of coils	P	No.of poles	a	No.of parallel paths	R	No.of circles(no.of reentrances)			
Zc	Conductors impedance	Zp	Paths impedance	Ycom	Commutator pitch	m	Multiplicity factor			
e _{C190}	coils induced emf e _{clS0} = θ_{YB} = exact 180°	e _{CN}	Coils induced emf at $(\theta_{YB} = or \neq 180^\circ)$	e,	Path emf	I _p	Path current			
P_p	Paths power	Pz	Total power	θγΒ	Back pitch angle	θ_{YF}	Front pitch angle			
8	No.of brushes	Bg	Brush Width	PC	Conductor power	Com	No.of bars			
Kı	new proposed additional factor	0	$(180 - \theta_{YB})/2$	θt	Total angle around armature	θ_S	Angle between two adjacent slots			
YB	Back pitch	YF	Front pitch	Z	No.of coil sides	Yavg	average pitch			

 $Y_{f} = ([K_1*\theta t/c]^{\circ} \pm [[m^* \theta]]_S)^{\circ}$. for odd coils.....(20), where θ_t , θ_s are total ,slot angles respectively,

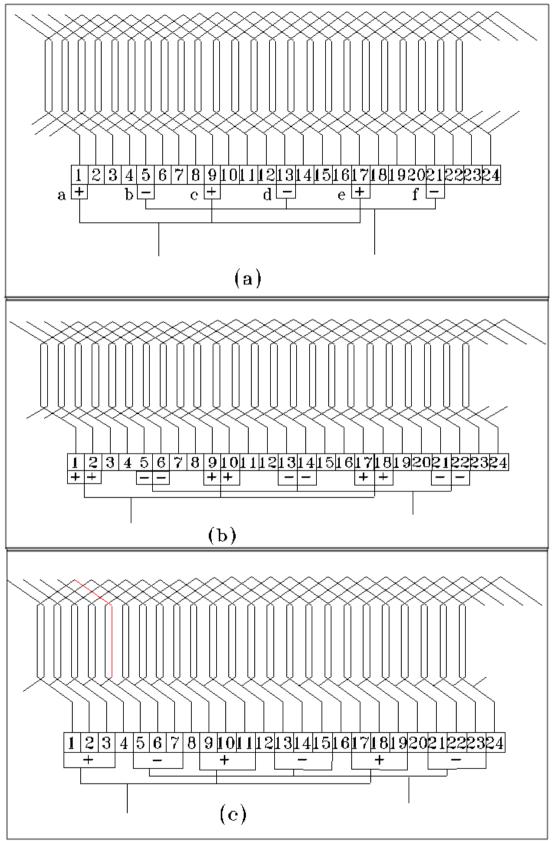
At same coil conditions (size, lenth, type & turns) it is possible to suppose that Z_c , Z_p are unity constants. At $\theta_YB = 180$ exact (since $\theta = 0$ and $e_(CN =) e_C180$), so If we suppose that $e_C180 =$ unity then each one of:-

e_CN, I_CN & P_CN equal unity alsolook equation 13 above.

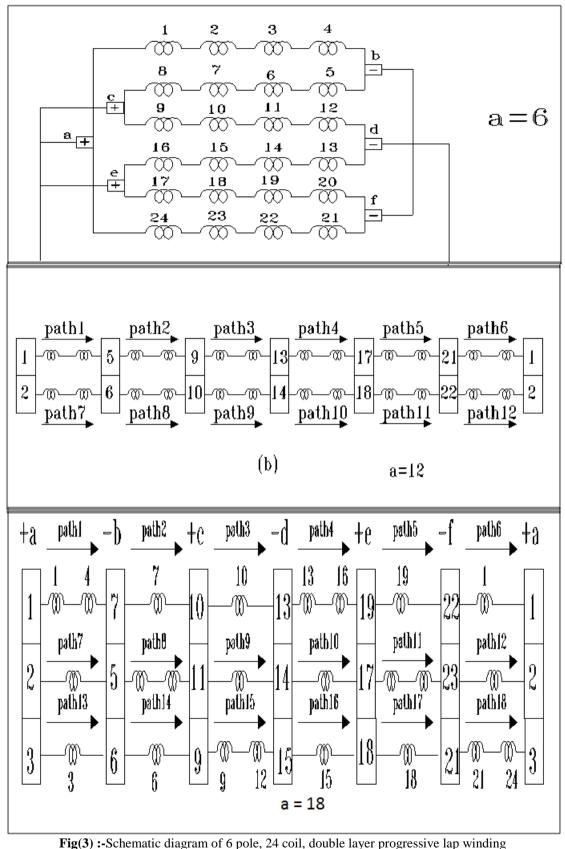
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			C=25(i.€	e.odd coils)	P=4	θt=180P=72	20° θs=θt/	C=28.8°	$Y_B = K_1 * \frac{\theta t}{c}$		
<i>K</i> ₁	0	1	2	3	4	5	6	7	8	9	10
Y_B		28.8°	57.6°	86.4°	115.2°	144°	172.8°	201.6°	230.4°	259.2	288°
			C=24(i.e.e	ven coils)	P=4	θt=180P=720)° θs=θt/C=	30° $Y_B =$	$=\left(\frac{\theta t}{P}\right) \pm K_1 * \theta$)s	
<i>K</i> ₁	0	-5	-4	-3	-2	-1	0	+1	+2	+3	+4
Y_B	180°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
				C=	25 P=	6 θt=180P	=1080° θs=θ)t/C=43.2°			
<i>K</i> ₁	0	1	2	3	4	5	6	7	8	9	10
Y_B		43.2°	86.4°	129.6°	172.8°	216°	259.2°	302.4°	345.6°	28.8°	72°
				C=24	P=6	θt=180P=108	BO° θs=θt/C=	=45°	•	•	
<i>K</i> ₁	0	-3	-2	-1	0	+1	+4	+5	+6	+7	+8
Y_B	180	45°	90°	135°	180°	225°	360°	405°=45°	450°=90°	495°=135°	540°=180°
				C=	25 P=	8 θt=180P	=1440° θs=θ)t/C=57.6°			
<i>K</i> ₁	0	1	2	3	4	5	6	7	8	9	10
Y_B		57.6°	115.2°	172.8°	230.4°	288°	345.6°	43.2°	100.8°	158.4°	216°
				C=24	P=8	θt=180P=144	0° θs=θt/C=	60°	•	•	
<i>K</i> ₁	0	-2	-1	0	+1	+2	+3	+4	+5	+6	+7
Y_B	180	60°	120°	180°	240°	300°	360°	420°=60°	480°=120°	540°=180°	600°=240°
				C=	25 P=3	12 θt=180P	=2160° θs=θ	9t/C=86.4°			
<i>K</i> ₁	0	1	2	3	4	5	6	7	8	9	10
Y_B		86.4°	172.8°	259.2°	345.6°	72°	158.4°	244.8°	331.2°	57.6°	144°
				C=24	P=12 (Ət=180P=2160	O° θs=θt/C=	90°			
<i>K</i> ₁	0	-1	0	+1	+2	+3	+4	+1 or +5	+2 or +6	-1 or +7	0 or +8
Y_B	180	90°	180°	270°	360°	450°=90°	540°=180°	270°	360°	90°	180°

Table (1) shows K_1 against back pitch (Y_(B)) at specified number of coils and pols

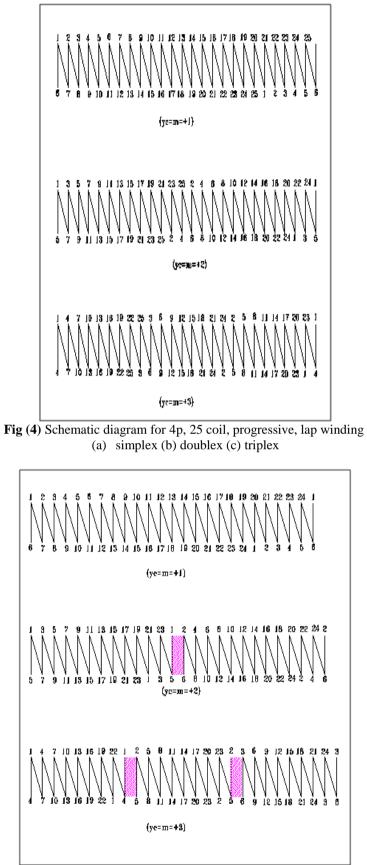
For each item of table above we take $Y_{com} = \pm (1, 2, 3, 4, 5..)$ for satisfying simplex, doublex, triplex... where (+) & (-) for progressive & retrogressive respectively



Fig(2) -: 6p, 24 Coil , double layer progressive, lap Winding (a)simplex, (b) doublex, (c) triplex design



(a) simplex (b) doublex (c) triplex



Fig(5) Schematic diagram for 4p , 24 coil , progressive , (a) simplex (b) doublex (c) triplex

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Table (2) shows affecting	K_	1 on active	elements of machine.
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Tables(2,3) gave 320 diagrams but it is impossible to Show all them in this search ,so only two are shown infig.() and the others are saved in index.

 Table (4) shows effecting of K1 on brushes (1- numbers 2- their widths 3- their distributions)

	P, iş total power measuring in p.µ, 1,2						1,2,323 are commutator bars						C=	25 (o	dd nur	nber)	P=	10.0f	poles								
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5	=	±3	16.3																								6
7	201°	±1	139																								4
7	=	±2	31																								4
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III. Discussion

Table (2,3) showed the great effectiveness of using the variable factor to the equation of winding at even and odd coils and showig the following achievements:-

- 1. K1 is much active for producing different powers to machine, for example item P_(t) shows that there are several values of P_t against different values of K1, at the same time there are several channes in other active elements like e_(CN), I_CN, e_P, I_P, P_CN, P_P and this is mean that the machine have different specifications (i.e. different applications), indicating the success of using the veraible factor of K1
- 2. It shows also that the ability to harvest them is well sequenced, not large distances, but very close, and this is a very good Indicator which supports the use of the variable factor K1.
- 3. The laying of brushes on the front side of the commutator to any scheme was very smooth indicating to sparkless (at even or odd coils) leading to success of using the variable factor K1 (look table.4)
- 4. The variable values of the multiplicity factor m (for the same Y_B) giving variable values for the P_t, & specifications which is a good indicator of the use of the K1.
- 5. It shows also that at same no. of poles and multiplicity factor with different (Y_B) giving different powers and Specifications (tables above).
- 6. It shows also that at same poles & $\theta_{-}(YB^{\circ})$ with different plex we can also obtain different powers & specifications.
- 7. it shows also that at same plex , poles & $[\theta] (YB^{\circ})$, we can obtain same power.
- 8. it shows that at different poles we can obtain different powers.
- 9. at same plex with different poles & $[\theta] _(YB^{\circ})$ we can obtain different powers & specifications.
- 10. Finally at using veraible factor above we have wide domaine for controlling power and specification of machine.

IV. Conclusions

The new K factor plays alarge important role to produce different types of d.c. Lab windings which is Produce new perfect cases that are shown as follow:-

- 1. It cancels the hardly requirements on the equation of winding so it is possible to use any number of segments and coils in it because befor adding (k) the equation not accept all values (i.e. the domain of design and application are improved.
- 2. It makes the machine as sparkless as possible to improve its commutation and charactiristics.
- 3. It gives different specifications to machine which leading to different applications.

References

- [1]. M.Aydin,"Axial flux surface mounted P_m machines for smooth torqe traction drive applications ' ",phD Thesis, University of Wisconsin-Medison,2004.
- N.L.Broun and L.Haydock, "New brushless synchronous alternater". IEE proceeding of electric power Applications, Vol, 150, No.6, November 2008.
- [3]. M.L.Anwani"Basic electrical engineering"published by J.C. Kapur for dhapat pai & sons 2006.
- [4]. Peter F. Ryff "electric machanary" 1998
- [5]. A.D.moore"theorly of action equalizer connections in wave windings" J,23,624,1998.
- [6]. a.k.sawheny"Acours in electrical machines desigh "published by J. C. Apur, B.A. for Ra 2002.
- [7]. Chand & company Ltd,Ram Nagar new delhi 1997.
- [8]. Forums .mikehoit.com/showthread.php.t117969.
- [9]. http://www four electronics com /armachure- windings 10042584 htmi Armachure winding.
- [10]. http://www.Repp.org/ discution /ev / 200201 / msg885.htmi Er archire for januart 2002.
- [11]. Testing commissioning operation & maintenance of electrical equipment ,khamna tej Publications, delhi
- [12]. F. Profumo, A. Tenconi, Z. Zhang and A. Caagnino, "Noel axial flux interior PM synchronous motor with powdered soft magnetic material," IEEE Industry Applications Society Annual Meeting, 1998, pp.152-158