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| Komponen | Skematik | Lib File |
|-----------------------------|---|---|
| Step Function | U1 | .subckt step out V1 out 0 PULSE(0 {A} {td} {1/SR} {1/SR} lmeg l0meg) .ends step |
| CT (Current Transformer) | Unnn Logical State of the Control of | .subckt CT in+ in- out V1 in+ in- 0 El out 0 value = {k*i(V1)} .ends CT |
| ABC to DQ | alpha B1 V=(2/3)*V(a)-(1/3)*V(b)-(1/3)*V(c) beta B2 V=(sqrt(3)/3)*V(b)-(sqrt(3)/3)*V(c) V=cos(V(theta))*V(beta)-sin(V(theta))*V(alpha) | .subckt abctodq a b c theta D Q Bl alpha O V=(2/3)*V(a) -(1/3)*V(b) -(1/3)*V(c) B2 beta O V=(sqrt(3)/3)*V(b) -(sqrt(3)/3)*V(c) B3 D O V=cos(V(theta))*V(alpha)+sin(V(theta))*V(beta) B4 Q O V=cos(V(theta))*V(beta)-sin(V(theta))*V(alpha) .ends abctodq |
| DQ to ABC | B1 -cos(V(theta))*V(d)-sin(V(theta))*V(q) -cos(V(theta))*V(d)+(sqrt(3)/2)*sin(V(theta))*V(d)+(1/2)*sin(V(theta))*V(q)+(sqrt(3)/2)*cos(V(theta))*V(q) -cos(V(theta))*V(d)+(sqrt(3)/2)*sin(V(theta))*V(d)+(1/2)*sin(V(theta))*V(q)-(sqrt(3)/2)*cos(V(theta))*V(q) -cos(V(theta))*V(d)-(sqrt(3)/2)*sin(V(theta))*V(d)+(1/2)*sin(V(theta))*V(q)-(sqrt(3)/2)*cos(V(theta))*V(q) | .subckt dqtoabc d q theta a b c B1 a 0 V=cos(V(theta))*V(d)-sin(V(theta))*V(q) B2 b 0 V=(-1/2)*cos(V(theta))*V(d)+(sqrt(3)/2)*sin(V(theta))*V(d)+(sqrt(3)/2)*cos(V(theta))*V(q) *V(d)+(1/2)*sin(V(theta))*V(d)+(sqrt(3)/2)*sin(V(theta))*V(q) B3 c 0 V=(-1/2)*cos(V(theta))*V(d)-(sqrt(3)/2)*sin(V(theta))*V(q) *V(d)+(1/2)*sin(V(theta))*V(q)-(sqrt(3)/2)*cos(V(theta))*V(q) .ends dqtoabc |
| PLL | alpha B1 V=(2/3)*V(a)-(1/3)*V(b)-(1/3)*V(c) beta V=(eqrt(3)/3)*V(b)-(eqrt(3)/3)*V(c) | .subckt PLL a b c theta 31 alpha 0 V=(2/3)*V(a)-(1/3)*V(b)-(1/3)*V(c) 32 beta 0 V=(sgtt(3)/3)*V(b)-(sgtt(3)/3)*V(c) 33 theta 0 V=atan2(V(beta),V(alpha)) .ends PLL |
| Integral | R1 B2 1n L1 V={V(1)} 1 V={I(L1)} | (generate symbol secara langsung) |
| Gain | DE | (generate symbol secara langsung) |
| Adder | | (generate symbol secara langsung) |

| | 1 B1 V=V(1)+V(2) | |
|-------------|---|-----------------------------------|
| Subctractor | 1 B1 V=V(1)-V(2) | (generate symbol secara langsung) |
| PWM | V=if(V(com)<=V(tri),12,0) V=if(V(com)>=V(tri),12,0) V=if(V(com)>=V(tri),12,0) V1-tri PULSE(0 12 0 {0.5/Fs} {0.5/Fs} 0 {1/Fs}) | (generate symbol secara langsung) |