

고급전력전자공학 정오표

(작성일: 2022.06.27)

위치	기존	수정
식 (3.2)	$V_{as} = \frac{2S_a - S_b - S_c}{3} V_{dc}$ $V_{bs} = \frac{-S_a + 2S_b - S_c}{3} V_{dc}$ $V_{cs} = \frac{-S_a + S_b - 2S_c}{3} V_{dc}$	$V_{as} = \frac{2S_a - S_b - S_c}{3} V_{dc}$ $V_{bs} = \frac{-S_a + 2S_b - S_c}{3} V_{dc}$ $V_{cs} = \frac{-S_a - S_b + 2S_c}{3} V_{dc}$
식 (3.3)	$V_s = \frac{2}{3} V_{ac} \left[S_a + S_b e^{j\frac{2\pi}{3}} + S_c e^{j\frac{4\pi}{3}} \right]$	$V_s = \frac{2}{3} V_{dc} \left[S_a + S_b e^{j\frac{2\pi}{3}} + S_c e^{j\frac{4\pi}{3}} \right]$
[그림 7.9]		
150p 10줄	“임의의 차단 주파수를 갖는 전역통과필터의 ...”	“90° 지연 신호 발생을 위한 임의의 차단 주파수를 갖는 전역통과필터의...”
식 (7.23)	$H(s) = \frac{s - \omega}{s + \omega}$	$H(s) = -\frac{s - \omega}{s + \omega}$
식 (7.24)	$E_{qs}(s) = \frac{s - \omega}{s + \omega} \cdot E_{ds}(s) = \left(1 - 2 \frac{\omega}{s + \omega} \right) \cdot E_{ds}(s)$	$E_{qs}(s) = \left(-\frac{s - \omega}{s + \omega} \right) \cdot E_{ds}(s) = \left(\frac{2\omega}{s + \omega} - 1 \right) \cdot E_{ds}(s)$
식 (7.26)	$E_{qs}(s) = \left(1 - 2 \frac{\omega}{s + \omega} \right) \cdot \left(\frac{E_m \cdot \omega}{s^2 + \omega^2} \right)$ $= \frac{E_m \cdot \omega}{s^2 + \omega^2} - 2 \cdot E_m \frac{\omega}{s + \omega} \frac{\omega}{s^2 + \omega^2}$	$E_{qs}(s) = \left(\frac{2\omega}{s + \omega} - 1 \right) \cdot \left(\frac{E_m \cdot \omega}{s^2 + \omega^2} \right)$ $= \frac{2\omega}{s + \omega} \frac{E_m \cdot \omega}{s^2 + \omega^2} - \frac{E_m \cdot \omega}{s^2 + \omega^2}$
식 (7.27)	$E_{qs}(s) = \frac{E_m \cdot \omega}{s^2 + \omega^2} + E_m \left(-\frac{1}{s + \omega} + \frac{s}{s^2 + \omega^2} - \frac{\omega}{s^2 + \omega^2} \right)$	$E_{qs}(s) = E_m \left(\frac{1}{s + \omega} - \frac{s}{s^2 + \omega^2} + \frac{\omega}{s^2 + \omega^2} \right) - \frac{E_m \cdot \omega}{s^2 + \omega^2}$
식 (7.28)	$E_{qs}(s) = \frac{E_m \cdot \omega}{s^2 + \omega^2} - \frac{E_m}{s + \omega}$	$E_{qs}(s) = \frac{E_m}{s + \omega} - \frac{E_m \cdot s}{s^2 + \omega^2}$
151p 11줄	“단상 계통 전압의 위상보다 90° 앞서는 신호를 얻을 수 있다.”	“단상 계통 전압의 위상보다 90° 지연된 신호를 얻을 수 있다.”
식 (7.30)	$e^{\omega t} = \frac{1}{s - \omega}$	$e^{-\omega t} = \frac{1}{s + \omega}$
식 (7.31)	$E_{qs}(t) = E_m \cdot e^{\omega t} + E_m \cdot \cos \omega t = E_m \cdot \cos \omega t$	$E_{qs}(t) = E_m \cdot e^{-\omega t} - E_m \cdot \cos \omega t \approx -E_m \cdot \cos \omega t$
식 (8.1)	$E_d^\omega = R I_d^\omega + L \frac{dI_d^\omega}{dt} - \omega L I_q^\omega + V_d^\omega$ $E_q^\omega = R I_q^\omega + L \frac{dI_q^\omega}{dt} - \omega L I_d^\omega + V_q^\omega$	$E_d^\omega = R I_d^\omega + L \frac{dI_d^\omega}{dt} - \omega L I_q^\omega + V_d^\omega$ $E_q^\omega = R I_q^\omega + L \frac{dI_q^\omega}{dt} + \omega L I_d^\omega + V_q^\omega$

식 (8.2)	$V_d^\omega = V_{d_fb}^\omega + V_{d_ff}^\omega$ $= K_p(I_d^* - I_d) + K_i \int (I_d^* - I_d) dt + E_d^\omega + \omega L I_q^\omega$ $V_q^\omega = V_{q_fb}^\omega + V_{q_ff}^\omega$ $= K_p(I_q^* - I_q) + K_i \int (I_q^* - I_q) dt + E_q^\omega + \omega L I_d^\omega$	$V_d^\omega = V_{d_fb}^\omega + V_{d_ff}^\omega$ $= K_p(I_d^* - I_d) + K_i \int (I_d^* - I_d) dt + E_d^\omega - \omega L I_q^\omega$ $V_q^\omega = V_{q_fb}^\omega + V_{q_ff}^\omega$ $= K_p(I_q^* - I_q) + K_i \int (I_q^* - I_q) dt + E_q^\omega + \omega L I_d^\omega$
식 (8.6)	$I(s) = \frac{\alpha \frac{K_p}{L} s + \frac{K_i}{L}}{s^2 + \frac{K_p + R}{L} s + \frac{K_i}{L}} I^*(s)$ $\rightarrow \frac{I(s)}{I^*(s)} = \frac{\omega_n^2}{s^2 + \zeta \omega_n s + \omega_n^2}$	$V_{dc}(s) = \frac{\frac{K_i}{C}}{s^2 + \frac{K_p}{C} s + \frac{K_i}{C}} V_{dc}^*(s)$ $\rightarrow \frac{V_{dc}(s)}{V_{dc}^*(s)} = \frac{\omega_n^2}{s^2 + \zeta \omega_n s + \omega_n^2}$