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FORMULEBLAD

DRIEFASE-WS-OPWEKKING	RLC-KRINGBANE
STER $V_L = \sqrt{3} V_F$ en $V_F = I_F \times Z_F$ $I_L = I_F$ DELTA $V_L = V_F$ en $I_L = \sqrt{3} \times I_F$ $V_F = I_F \times Z_F$ DRYWING $S(P_a) = \sqrt{3} \times V_L \times I_L$ $Q(P_r) = \sqrt{3} \times V_L \times I_L \times \sin \theta$ $\cos \theta = \frac{P}{S}$ $P = \sqrt{3} \times V_L \times I_L \times \cos \theta$ TWEEWATTMETERMETODE $P = P_1 + P_2$	$X_L = 2\pi fL$ en $X_C = \frac{1}{2\pi fC}$ $F_o = \frac{1}{2\pi\sqrt{LC}}$ SERIE $I_T = I_R = I_C = I_L$ $Z = \sqrt{R^2 + (X_L - X_C)^2}$ $V_L = IX_L$ en $V_C = IX_C$ $V_T = IZ$ en $V_T = \sqrt{V_R^2 + (V_L - V_C)^2}$ $I_T = \frac{V_T}{Z}$ $\cos \theta = \frac{R}{Z}$ $\cos \theta = \frac{V_R}{V_T}$ $Q = \frac{X_L}{Z} = \frac{X_C}{Z} = \frac{V_L}{V_T} = \frac{V_C}{V_T} = \frac{1}{R} \sqrt{L/C}$
DRIEFASETRANSFORMATORS	
STER $V_L = \sqrt{3} V_F$ en $I_L = I_F$ DELTA $I_L = \sqrt{3} I_F$ en $V_L = V_F$ DRYWING $S(P_a) = \sqrt{3} \times V_L \times I_L$ $Q(P_r) = \sqrt{3} \times V_L \times I_L \times \sin \theta$ $\cos \theta = \frac{P}{S}$	PARALLEL $V_T = V_R = V_C = V_L$ $I_R = \frac{V_R}{R}$ en $I_C = \frac{V_C}{X_C}$ $I_L = \frac{V_L}{X_L}$ $I_T = \sqrt{I_R^2 + (I_L - I_C)^2}$ $\cos \theta = \frac{I_R}{I_T}$ $Q = \frac{X_L}{Z} = \frac{X_C}{Z} = \frac{V_L}{V_T} = \frac{V_C}{V_T} = \frac{1}{R} \sqrt{L/C}$

$P = \sqrt{3} \times V_L \times I_L \times \cos \theta$ $S(P_a) = \sqrt{3} \times V_L \times I_L$ $\frac{V_{F(p)}}{V_{F(s)}} = \frac{N_p}{N_s} = \frac{I_{F(s)}}{I_{F(p)}}$	MOTORSPOED $n_s = \frac{60 \times f}{p}$ $\text{Glip} = \frac{n_s - n_r}{n_s}$
DRIEFASEMOTORS EN -AANSITTERS	
STER $V_L = \sqrt{3} V_F \quad \text{en} \quad I_L = I_F$ DELTA $I_L = \sqrt{3} I_F \quad \text{en} \quad V_L = V_F$ DRYWING $S(P_a) = \sqrt{3} \times V_L \times I_L$ $Q(P_r) = \sqrt{3} \times V_L \times I_L \times \sin \theta$ $\cos \theta = \frac{P}{S}$ $P = \sqrt{3} \times V_L \times I_L \times \cos \theta$ $\text{Rendement}(\eta) = \frac{P_{in} - \text{verliese}}{P_{in}}$	