

abc_to_dq_1.xce

Attributes

main_vars: a b c d q cost sint

Description

abc_to_dq_1.xce employs the following equations to relate the variables a, b, c to cost, sint, d, q:

$$\begin{aligned}\alpha &= \frac{3}{2}a, \\ \beta &= \frac{\sqrt{3}}{2}(b-c), \\ v_m &= \sqrt{\alpha^2 + \beta^2}, \\ \cos t &= \alpha/v_m, \\ \sin t &= \beta/v_m, \\ q &= -\alpha \sin t + \beta \cos t, \\ d &= \alpha \cos t + \beta \sin t.\end{aligned}$$

AC behaviour is not implemented.