$$E=\frac{-G(4a^3-4ab^2-3a^2p+b^2p-6a^2\alpha+2b^2\alpha+4ap\alpha+2a\alpha^2-p\alpha^2+2a\beta^2-p\beta^2)}{Q(-p,a,b).[(b^2+(a-\alpha)^2)^2+2(a-b-\alpha)(a+b-\alpha)\beta^2+\beta^4]}$$