$$\mathscr{C}_3 = Tr(\mathbf{T}^{a_1}\mathbf{T}^{a_4}\mathbf{T}^{a_2}\mathbf{T}^{a_3}) \ + \ Tr(\mathbf{T}^{a_3}\mathbf{T}^{a_2}\mathbf{T}^{a_4}\mathbf{T}^{a_1})$$