$$U(1+1+2, \varepsilon_3) := \begin{pmatrix} 0 & a_{12} & a_{13} & -a_{13}0 \\ 0 & a_{23} & -a_{23}a_{31} & a_{32} \\ a_{33} & -a_{33}a_{31} & a_{32} & a_{33} \\ -a_{33} & & & \end{pmatrix}.$$