$$K_{110}^2 = \begin{bmatrix}
\frac{-21\,U}{4\,t} & 4-\frac{U^2}{4\,t^2} & 0 & -\left(\frac{\sqrt{3}\,U}{t}\right) & \frac{-\left(\left(-3\,\mathbf{i}+\sqrt{3}\right)U\right)}{2\sqrt{2}\,t} & 0 & \frac{3\left(\mathbf{i}+\sqrt{3}\right)U}{4\sqrt{2}\,t} & 0 & 0 & \frac{-\left(\left(-3\,\mathbf{i}+\sqrt{3}\right)U\right)}{4\sqrt{2}\,t} & \frac{-\left(\sqrt{3}\,U^2\right)}{4\,t^2} & \frac{\frac{3}{4}\mathbf{i}\,U}{t} \\
4-\frac{U^2}{4\,t^2} & \frac{-27\,U}{4\,t} & 0 & 0 & 0 & \frac{\frac{-3}{2}\mathbf{i}\,U}{\sqrt{2}\,t} & 0 & \frac{-\left(\left(3\,\mathbf{i}+\sqrt{3}\right)U\right)}{4\sqrt{2}\,t} & \frac{\sqrt{\frac{3}{2}}\,U}{2\,t} & 0 & \frac{-\left(\sqrt{3}\,U\right)}{4\,t} & \frac{\frac{-3}{4}\mathbf{i}\,U^2}{t^2} \\
0 & 0 & \frac{-4\,U}{t} & 2+2\,\mathbf{i}\,\sqrt{3} & 0 & \frac{\left(3-\mathbf{i}\,\sqrt{3}\right)U}{2\sqrt{2}\,t} & 0 & \frac{\left(2-\mathbf{i}\,\sqrt{3}\right)U}{\sqrt{2}\,t} & \frac{\left(2+\mathbf{i}\,\sqrt{3}\right)U}{\sqrt{2}\,t} & 0 & 0 & 0 \\
-\left(\frac{\sqrt{3}\,U}{t}\right) & 0 & 2-2\,\mathbf{i}\,\sqrt{3} & \frac{-4\,U}{t} & \frac{\mathbf{i}\left(\mathbf{i}+\sqrt{3}\right)U}{\sqrt{2}\,t} & \frac{-\mathbf{i}\sqrt{\frac{3}{2}}\,U^2}{t^2} & \frac{\left(3+\mathbf{i}\,\sqrt{3}\right)U}{2\sqrt{2}\,t} & 0 & 0 & 0 & 0 & 0 \\
\frac{-\left(\left(3\,\mathbf{i}+\sqrt{3}\right)U\right)}{2\sqrt{2}\,t} & 0 & 0 & \frac{\left(-1-\mathbf{i}\,\sqrt{3}\right)U}{\sqrt{2}\,t} & \frac{-9\,U}{2\,t} & \frac{\left(3-\mathbf{i}\,\sqrt{3}\right)U^2}{4\,t^2} & 0 & -2 & -2 & \frac{U}{t} & -\sqrt{2}-\mathbf{i}\,\sqrt{6} & \frac{\frac{\mathbf{i}}{2}\left(3\,\mathbf{i}+\sqrt{3}\right)U}{\sqrt{2}\,t} \\
0 & \frac{\frac{3}{2}\mathbf{i}\,U}{\sqrt{2}\,t} & \frac{\left(3+\mathbf{i}\,\sqrt{3}\right)U}{2\sqrt{2}\,t} & \frac{\mathbf{i}\,\sqrt{\frac{3}{2}}\,U^2}{t^2} & \frac{\left(3+\mathbf{i}\,\sqrt{3}\right)U^2}{4\,t^2} & \frac{-5\,U}{t} & 2-2\,\mathbf{i}\,\sqrt{3} & \frac{\left(-1+3\,\mathbf{i}\,\sqrt{3}\right)U}{4\,t} & \frac{\left(2-\mathbf{i}\,\sqrt{3}\right)U}{2\,t} & 0 & \frac{\frac{3}{2}\mathbf{i}\,\sqrt{\frac{3}{2}}\,U}{t} & 0 \\
\frac{3\left(-\mathbf{i}+\sqrt{3}\right)U}{4\sqrt{2}\,t} & 0 & 0 & \frac{\left(3-\mathbf{i}\,\sqrt{3}\right)U}{2\sqrt{2}\,t} & 0 & 2+2\,\mathbf{i}\,\sqrt{3} & \frac{-6\,U}{t} & \frac{\frac{-\mathbf{i}}{4}\left(-\mathbf{i}+\sqrt{3}\right)U^2}{t^2} & \frac{\left(1-\mathbf{i}\,\sqrt{3}\right)U^2}{4\,t^2} & \frac{\frac{\mathbf{i}}{2}\sqrt{3}\,U}{t} & 0 & \frac{\sqrt{2}\,U+\mathbf{i}\,\sqrt{6}\,U}{8\,t} \\
0 & \frac{-\left(\left(-3\,\mathbf{i}+\sqrt{3}\right)U\right)}{4\sqrt{2}\,t} & \frac{\left(2+\mathbf{i}\,\sqrt{3}\right)U}{\sqrt{2}\,t} & 0 & -2 & \frac{-\left(U+3\,\mathbf{i}\,\sqrt{3}\,U\right)}{4\,t} & \frac{\frac{\mathbf{i}}{4}\left(\mathbf{i}+\sqrt{3}\right)U^2}{t^2} & \frac{-5\,U}{t} & \frac{\left(-1+5\,\mathbf{i}\,\sqrt{3}\right)U}{4\,t} & \frac{-\left(8\,t^2+U^2+\mathbf{i}\,\sqrt{3}\,U^2\right)}{4\,t^2} & \frac{\frac{3}{4}\mathbf{i}\,\left(\mathbf{i}+\sqrt{3}\right)U}{\sqrt{2}\,t} & \sqrt{2}+\mathbf{i}\,\sqrt{6} \\
0 & \frac{\sqrt{\frac{3}{2}}\,U}{2\,t} & \frac{\left(2-\mathbf{i}\,\sqrt{3}\right)U}{\sqrt{2}\,t} & 0 & -2 & \frac{\left(2+\mathbf{i}\,\sqrt{3}\right)U}{2\,t} & \frac{\left(1+\mathbf{i}\,\sqrt{3}\right)U^2}{4\,t^2} & \frac{-\left(U+5\,\mathbf{i}\,\sqrt{3}\,U\right)}{4\,t} & \frac{-5\,U}{t} & \frac{-\left(8\,t^2+U^2-\mathbf{i}\,\sqrt{3}\,U^2\right)}{4\,t^2} & \frac{3\,U}{2\sqrt{2}\,t} & -\sqrt{2}-\mathbf{i}\,\sqrt{6} \\
\frac{-\left(\left(3\,\mathbf{i}+\sqrt{3}\right)U\right)}{4\sqrt{2}\,t} & 0 & 0 & 0 & \frac{U}{t} & 0 & \frac{\frac{-\mathbf{i}}{2}\sqrt{3}\,U}{t} & \frac{-\left(8\,t^2+U^2-\mathbf{i}\,\sqrt{3}\,U^2\right)}{4\,t^2} & \frac{-\left(8\,t^2+U^2+\mathbf{i}\,\sqrt{3}\,U^2\right)}{4\,t^2} & \frac{-7\,U}{t} & \sqrt{2}+\mathbf{i}\,\sqrt{6} & \frac{\frac{\mathbf{i}}{4}\left(3\,\mathbf{i}+\sqrt{3}\right)U}{\sqrt{2}\,t} \\
\frac{-\left(\sqrt{3}\,U^2\right)}{4\,t^2} & \frac{-\left(\sqrt{3}\,U\right)}{4\,t} & 0 & 0 & \mathbf{i}\,\sqrt{2}\,\left(\mathbf{i}+\sqrt{3}\right) & \frac{\frac{-3}{2}\mathbf{i}\,\sqrt{\frac{3}{2}}\,U}{t} & 0 & \frac{\frac{-3}{4}\mathbf{i}\,\left(-\mathbf{i}+\sqrt{3}\right)U}{\sqrt{2}\,t} & \frac{3\,U}{2\sqrt{2}\,t} & \sqrt{2}-\mathbf{i}\,\sqrt{6} & \frac{-21\,U}{4\,t} & \frac{\frac{\mathbf{i}}{4}\sqrt{3}\,U^2}{t^2} \\
\frac{\frac{-3}{4}\mathbf{i}\,U}{t} & \frac{\frac{3}{4}\mathbf{i}\,U^2}{t^2} & 0 & 0 & \frac{\frac{-\mathbf{i}}{2}\left(-3\,\mathbf{i}+\sqrt{3}\right)U}{\sqrt{2}\,t} & 0 & \frac{\sqrt{2}\,U-\mathbf{i}\,\sqrt{6}\,U}{8\,t} & \sqrt{2}-\mathbf{i}\,\sqrt{6} & \mathbf{i}\,\sqrt{2}\,\left(\mathbf{i}+\sqrt{3}\right) & \frac{\frac{-\mathbf{i}}{4}\left(-3\,\mathbf{i}+\sqrt{3}\right)U}{\sqrt{2}\,t} & \frac{\frac{-\mathbf{i}}{4}\sqrt{3}\,U^2}{t^2} & \frac{-21\,U}{4\,t}
\end{bmatrix}$$