$$\sum_{\nu_3, T_3, T_4} \begin{array}{c} \nu_1 \xrightarrow{\ T_1\ } T_1 \qquad \nu_2 \\ {\scriptstyle T_3}\downarrow \qquad\quad {\scriptstyle T_2}\downarrow \ {\searrow}^{T_4} \\ \nu_3 \qquad\quad T_3 \qquad \nu_4 \end{array} \quad \begin{array}{c} \nu_1 \xrightarrow{\ \overline{T_1'}\ } \overline{T_1'} \qquad \nu_2' \\ {\scriptstyle T_3}\downarrow \qquad\quad {\scriptstyle T_2'}\downarrow \ {\searrow}^{T_4} \\ \nu_3 \qquad\quad T_3 \qquad \nu_4 \end{array} = \delta_{T_1, T_1'}\delta_{T_2, T_2'}$$