

$$\begin{aligned}
& \frac{-12\langle 2|3+4|2\rangle[25]\Delta_{12|34|56}[12]\langle 26\rangle}{[34]\langle 2|5+6|2\rangle^3\langle 2|1+4|3\rangle} + \\
& \frac{-16[25]\Delta_{12|34|56}[12]\langle 2|1+3|4\rangle[35]\langle 24\rangle}{[34][56]\langle 2|5+6|2\rangle^2\langle 2|1+4|3\rangle^2} + \\
& \frac{-2\langle 6|1+5|2\rangle[12]\Delta_{12|34|56}\langle 26\rangle}{[34]\langle 56\rangle\langle 2|5+6|2\rangle^2\langle 2|1+4|3\rangle} + \\
& \frac{[25][12]\Delta_{12|34|56}(-18[35]\langle 23\rangle+10\langle 24\rangle[45]+4[15]\langle 12\rangle)}{[34][56]\langle 2|5+6|2\rangle^2\langle 2|1+4|3\rangle} + \\
& \frac{[25][12](-1\langle 24\rangle^3[24]^2[45]\dots\langle 20\text{ terms}\rangle\dots-2[14]\langle 12\rangle\langle 14\rangle[13]\langle 34\rangle[45])}{[34][56]\langle 2|5+6|2\rangle^2\langle 2|1+4|3\rangle} + \\
& \frac{[25][12][14]\langle 2|34\rangle^2[34]\langle 12\rangle[45]\dots\langle 9\text{ terms}\rangle\dots-2[15][13]\langle 12\rangle\langle 13\rangle^2}{[34][56]\langle 2|5+6|2\rangle^2\langle 2|1+3|4\rangle} + \\
& \frac{\Delta_{12|34|56}(10\langle 14\rangle[15]\langle 26\rangle+8\langle 24\rangle\langle 36\rangle[35]+12\langle 24\rangle[25]\langle 26\rangle-2\langle 46\rangle\langle 24\rangle[45])}{\langle 12\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{[35]\langle 26\rangle\Delta_{12|34|56}(-10\langle 24\rangle[24]-2\langle 14\rangle[14]+2[23]\langle 23\rangle)}{\langle 12\rangle[34]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{[35]\Delta_{12|34|56}(10\langle 24\rangle^2[24][45]+8\langle 24\rangle[23]\langle 23\rangle[45]-2[35][23]\langle 23\rangle^2+2\langle 24\rangle[13]\langle 13\rangle[45])}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{2\Delta_{12|34|56}\langle 14\rangle[13][45]^2\langle 24\rangle}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{\Delta_{12|34|56}\langle 26\rangle\langle 4|46\rangle\langle 24\rangle[24]-4\langle 24\rangle\langle 36\rangle[23]+8\langle 14\rangle\langle 46\rangle[14]}{\langle 12\rangle\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{2[12][35]\Delta_{12|34|56}\langle 26\rangle}{[34]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{\Delta_{12|34|56}\langle 26\rangle\langle 2|36\rangle[23]+7\langle 46\rangle[24]-2[12]\langle 16\rangle)}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{3/2\langle 46\rangle\Delta_{12|34|56}[14]\langle 16\rangle}{\langle 12\rangle[34]\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 26\rangle(-99/8\langle 46\rangle\langle 24\rangle^2[24]^3\dots\langle 23\text{ terms}\rangle\dots+7/4[34]^2\langle 36\rangle\langle 14\rangle[12]\langle 34\rangle)}{\langle 12\rangle[34]\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 36\rangle\langle 7/4\langle 46\rangle\langle 34\rangle^2[34]^3\dots\langle 9\text{ terms}\rangle\dots+21/4[14][24]\langle 12\rangle\langle 14\rangle[13]\langle 46\rangle)}{\langle 12\rangle[34]\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 46\rangle[14]\langle 16\rangle(-7/8\langle 24\rangle^2[24]^2\dots\langle 4\text{ terms}\rangle\dots-7/8[13]^2\langle 13\rangle^2)}{\langle 12\rangle[34]\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{17\langle 24\rangle[25]\Delta_{12|34|56}[45]}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{[35]\langle 7/4[14][34]\langle 14\rangle\langle 34\rangle^2[45]\dots\langle 4\text{ terms}\rangle\dots+8[14][25]\langle 12\rangle\langle 13\rangle[12]\langle 24\rangle)}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{[45]\langle 7/4\langle 13\rangle\langle 14\rangle[13]^2\langle 34\rangle[45]\dots\langle 3\text{ terms}\rangle\dots-1/4\langle 24\rangle[12]^2\langle 12\rangle^2[25])}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{-3\langle 46\rangle\langle 36\rangle\Delta_{12|34|56}}{\langle 12\rangle\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 26\rangle(-39/4\langle 36\rangle\langle 34\rangle[24][23]\dots\langle 3\text{ terms}\rangle\dots-27/2[12]^2\langle 16\rangle\langle 13\rangle)}{\langle 12\rangle[34]\langle 56\rangle\langle 2|5+6|2\rangle} + \\
& \frac{\langle 36\rangle\langle 15/4\langle 46\rangle\langle 24\rangle[24]^2\dots\langle 11\text{ terms}\rangle\dots-23/4[12]^2\langle 12\rangle\langle 16\rangle)}{\langle 12\rangle[34]\langle 56\rangle\langle 2|5+6|2\rangle} + \\
& \frac{-29/4[14]\langle 13\rangle[12]\langle 46\rangle\langle 16\rangle}{\langle 12\rangle[34]\langle 56\rangle\langle 2|5+6|2\rangle} + \\
& \frac{[35](-69/8[25]\langle 34\rangle[24]\langle 23\rangle+15/4\langle 34\rangle^2[24][45]-2[25]\langle 34\rangle[14]\langle 13\rangle+61/4[25][12]\langle 23\rangle\langle 13\rangle)}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle} + \\
& \frac{[45]\langle 133/8\langle 24\rangle[25]\langle 34\rangle[24]+7/4\langle 34\rangle^2[23][45]+137/8[25]\langle 34\rangle\langle 23\rangle[23]-11/2\langle 14\rangle[15][12]\langle 13\rangle)}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle} + \\
& \frac{-39/4[25]^2[23]\langle 23\rangle^2}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle} + \\
& \frac{24\Delta_{12|34|56}[13]\langle 34\rangle[35]\langle 26\rangle}{\langle 2|1+4|3\rangle^3\langle 3|5+6|3\rangle} + \\
& \frac{2\Delta_{12|34|56}\langle 24\rangle[15]^2}{[56]\langle 2|3+4|1\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{8[35]\langle 34\rangle\Delta_{12|34|56}\langle 16\rangle}{\langle 12\rangle\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle\langle 3|5+6|3\rangle} + \\
& \frac{\langle 34\rangle\Delta_{12|34|56}\langle 16\rangle(-4[23]\langle 26\rangle+8\langle 46\rangle[34])}{\langle 12\rangle\langle 56\rangle\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle\langle 3|5+6|3\rangle} + \\
& \frac{[35]\langle 34\rangle\Delta_{12|34|56}(-8[35][24]+4[23][45])}{[34][56]\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle\langle 3|5+6|3\rangle} + \\
& \frac{\langle 36\rangle[35]\langle 34\rangle(-8\langle 14\rangle[13][24]+8\langle 14\rangle[12][34]-4[23]^2\langle 23\rangle-4\langle 24\rangle[23][24])}{\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle\langle 3|5+6|3\rangle} + \\
& \frac{[34]\langle 36\rangle\langle 34\rangle\langle 16\rangle\langle 4|14\rangle^2[13][14]-2\langle 14\rangle[13]^2\langle 13\rangle+8\langle 14\rangle\langle 24\rangle[13][24]+2\langle 24\rangle[23]^2\langle 23\rangle)}{\langle 12\rangle\langle 56\rangle\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle\langle 3|5+6|3\rangle} + \\
& \frac{[34]^2\langle 36\rangle\langle 14\rangle\langle 34\rangle\langle 46\rangle(-2[23]\langle 23\rangle-4\langle 24\rangle[24])}{\langle 12\rangle\langle 56\rangle\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle\langle 3|5+6|3\rangle} + \\
& \frac{-5/9[12]^2(s_{234}-s_{134})\langle 26\rangle^2}{[34]\langle 56\rangle\langle 2|3+4|1\rangle\langle 2|1+4|3\rangle} + \\
& \frac{-20/9[15]^2\Delta_{12|34|56}}{[34][56]\langle 2|3+4|1\rangle\langle 2|1+4|3\rangle} + \\
& \frac{[15]^2(s_{234}-s_{134})(-19/18\langle 34\rangle[34]+5/9[12]\langle 12\rangle)}{[34][56]\langle 2|3+4|1\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 26\rangle\langle 99/8\langle 46\rangle\langle 24\rangle[24]^2\dots\langle 13\text{ terms}\rangle\dots+95/36[12]^2\langle 12\rangle\langle 16\rangle)}{\langle 12\rangle[34]\langle 56\rangle\langle 2|1+4|3\rangle} + \\
& \frac{391/36[14][24]\langle 46\rangle\langle 24\rangle\langle 16\rangle}{\langle 12\rangle[34]\langle 56\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 36\rangle(-193/36\langle 46\rangle\langle 34\rangle[34]\dots\langle 3\text{ terms}\rangle\dots+265/36\langle 14\rangle\langle 46\rangle[14])}{\langle 12\rangle\langle 56\rangle\langle 2|1+4|3\rangle} + \\
& \frac{-8\langle 34\rangle\Delta_{12|34|56}\langle 16\rangle^2[23]}{\langle 12\rangle\langle 56\rangle\langle 1|2+4|3\rangle^2\langle 3|5+6|3\rangle} + \\
& (123456 \rightarrow \overline{432165})
\end{aligned}$$