

$$\begin{aligned}
& \frac{-35/16\langle 23\rangle[23]\langle 3|1+4|2\rangle\langle 4|2+3|1\rangle\langle 6|1+4|5\rangle(s_{124}+s_{134})}{\Delta_{14|23|56}^3} + \\
& \frac{2/3\langle 13\rangle^2[15]\langle 16\rangle[23]}{\langle 14\rangle\langle 1|2+3|1\rangle\langle 1|2+3|4\rangle^2} + \\
& \frac{4/3\langle 13\rangle[15]\langle 16\rangle\langle 1|3+4|2\rangle}{\langle 14\rangle\langle 1|5+6|1\rangle\langle 1|2+3|4\rangle^2} + \\
& \frac{-1/8[23]\langle 34\rangle^2\langle 6|1+4|5\rangle(s_{23}-s_{56})}{\langle 14\rangle\Delta_{14|23|56}^2} + \\
& \frac{-1\langle 13\rangle^2[15][23]\langle 46\rangle}{\langle 14\rangle\langle 1|2+3|4\rangle\Delta_{14|23|56}} + \\
& \frac{-1/2\langle 13\rangle^2[15]\langle 16\rangle[23]\langle 1|2+3|1\rangle}{\langle 14\rangle\langle 1|2+3|4\rangle^2\Delta_{14|23|56}} + \\
& \frac{-1/8[12]^2\langle 23\rangle\langle 6|1+4|5\rangle(s_{23}-s_{56})}{[14]\Delta_{14|23|56}^2} + \\
& \frac{1/2[12]^2\langle 16\rangle\langle 23\rangle[45]}{[14]\langle 1|2+3|4\rangle\Delta_{14|23|56}} + \\
& \frac{3/8[23]\langle 36\rangle\langle 46\rangle\langle 3|2+4|1\rangle(s_{14}-s_{23})}{\langle 56\rangle\Delta_{14|23|56}^2} + \\
& \frac{-1[12]\langle 36\rangle\langle 46\rangle}{\langle 56\rangle\Delta_{14|23|56}} + \\
& \frac{-1/4[23]\langle 36\rangle^2(s_{14}-s_{23})}{\langle 56\rangle\langle 1|2+3|4\rangle\Delta_{14|23|56}} + \\
& \frac{1/4[23]\langle 36\rangle\langle 46\rangle\langle 3|1+2|4\rangle}{\langle 56\rangle\langle 1|2+3|4\rangle\Delta_{14|23|56}} + \\
& \frac{3/8[15]\langle 23\rangle[25]\langle 4|1+3|2\rangle(s_{14}-s_{23})}{[56]\Delta_{14|23|56}^2} + \\
& \frac{-1[15][25]\langle 34\rangle}{[56]\Delta_{14|23|56}} + \\
& \frac{1/4\langle 23\rangle[25]^2s_{123}}{[56]\langle 1|2+3|4\rangle\Delta_{14|23|56}} + \\
& \frac{1/2\langle 13\rangle\langle 23\rangle[23][24]\langle 6|1+4|5\rangle}{\langle 1|2+3|4\rangle^2\Delta_{14|23|56}} + \\
& \frac{-1/2\langle 16\rangle\langle 23\rangle[23][45]\langle 3|1+4|2\rangle}{\langle 1|2+3|4\rangle^2\Delta_{14|23|56}} + \\
& \frac{1/2\langle 13\rangle\langle 23\rangle[23][24][45]\langle 46\rangle}{\langle 1|2+3|4\rangle^2\Delta_{14|23|56}} + \\
& \frac{7/16\langle 23\rangle[23]\langle 3|1+4|2\rangle\langle 6|1+4|5\rangle(s_{124}+s_{134})}{\langle 1|2+3|4\rangle\Delta_{14|23|56}^2} + \\
& \frac{1/2\langle 16\rangle\langle 23\rangle[24][25](s_{123}-s_{234})}{\langle 1|2+3|4\rangle^2\Delta_{14|23|56}} + \\
& \frac{3/4\langle 13\rangle[24]\langle 4|2+3|1\rangle\langle 6|1+4|5\rangle(s_{123}-s_{234})}{\langle 1|2+3|4\rangle\Delta_{14|23|56}^2} + \\
& \frac{-17/16\langle 23\rangle[23]\langle 3|1+4|2\rangle\langle 6|1+4|5\rangle(s_{123}-s_{234})}{\langle 1|2+3|4\rangle\Delta_{14|23|56}^2} + \\
& \frac{5/4[24]\langle 34\rangle\langle 6|1+4|5\rangle s_{123}(s_{123}-s_{234})}{\langle 1|2+3|4\rangle\Delta_{14|23|56}^2} + \\
& \frac{5/8\langle 13\rangle[23]\langle 36\rangle[45]\langle 4|2+3|1\rangle(s_{123}-s_{234})}{\langle 1|2+3|4\rangle\Delta_{14|23|56}^2} + \\
& \frac{\langle 6|1+4|5\rangle(-1[12]\langle 13\rangle+1[24]\langle 34\rangle)}{\langle 1|2+3|4\rangle\Delta_{14|23|56}} + \\
& \frac{1\langle 13\rangle[25]\langle 6|2+3|1\rangle}{\langle 1|2+3|4\rangle\Delta_{14|23|56}} + \\
& \frac{[23]\langle 36\rangle(-1/2\langle 23\rangle[25]-1/4\langle 34\rangle[45])}{\langle 1|2+3|4\rangle\Delta_{14|23|56}} + \\
& \frac{\langle 6|1+4|5\rangle(-21/8[12]\langle 13\rangle\langle 4|2+3|1\rangle\ldots\langle 4\text{ terms}\rangle\ldots-7/8[12]\langle 24\rangle[24]\langle 34\rangle)}{\Delta_{14|23|56}^2} + \\
& \frac{[25]\langle 4|2+3|1\rangle(3/8\langle 14\rangle[14]\langle 36\rangle\ldots\langle 4\text{ terms}\rangle\ldots+1/2\langle 13\rangle[13]\langle 36\rangle)}{\Delta_{14|23|56}^2} + \\
& \frac{(s_{123}-s_{234})(7/8[15][23]\langle 34\rangle\langle 36\rangle-1/8[12]\langle 34\rangle\langle 6|1+4|5\rangle-1[12]\langle 23\rangle[25]\langle 46\rangle)}{\Delta_{14|23|56}^2}
\end{aligned}$$