

$$\begin{aligned}
& \frac{-2[12]\langle 13\rangle[13]\langle 23\rangle^2[25]^2}{[56]\langle 2|1+3|2\rangle^3\langle 2|1+3|4\rangle} + \\
& \frac{2[12]\langle 23\rangle[45]\langle 3|1+2|4\rangle\langle 2|1+3|5\rangle}{[56]\langle 2|1+3|2\rangle\langle 2|1+3|4\rangle^3} + \\
& \frac{3\langle 13\rangle[13]\langle 23\rangle^2[25]^2}{\langle 12\rangle[56]\langle 2|1+3|2\rangle^2\langle 2|1+3|4\rangle} + \\
& \frac{-2\langle 13\rangle[13]\langle 23\rangle^3[25]^2[34]}{\langle 12\rangle[56]\langle 2|1+3|2\rangle^2\langle 2|1+3|4\rangle^2} + \\
& \frac{-2\langle 13\rangle\langle 23\rangle^2[25][35]}{\langle 12\rangle^2[56]\langle 2|1+3|2\rangle\langle 2|1+3|4\rangle} + \\
& \frac{2\langle 23\rangle^2[25][45]}{\langle 12\rangle[56]\langle 2|1+3|4\rangle^2} + \\
& \frac{\langle 23\rangle^2[25][45](-6s_{123}+2\langle 34\rangle[34]-4\langle 3|5+6|3\rangle)}{\langle 12\rangle[56]\langle 2|1+3|2\rangle\langle 2|1+3|4\rangle^2} + \\
& \frac{\langle 23\rangle^2[25](2[34]\langle 36\rangle[56]+2\langle 23\rangle[24][35])}{\langle 12\rangle[56]\langle 2|1+3|2\rangle\langle 2|1+3|4\rangle^2} + \\
& \frac{5\langle 13\rangle[15]\langle 23\rangle[25]}{\langle 12\rangle[56]\langle 2|1+3|2\rangle\langle 2|1+3|4\rangle}
\end{aligned}$$