

$$\begin{aligned}
& \frac{24(24)^2[34][13][35](26)s_{56}(s_{124}-s_{134})}{(2|1+4|3|^5)} + \\
& \frac{-12(24)^2\langle 3|1+4|2[34][13](s_{14}-s_{23}-s_{134}-s_{134})[35](26)(s_{124}-s_{134})}{(2|1+4|3|^4\Delta_{14|23|56}} + \\
& \frac{18[12](24)\langle 3|1+4|2(12)(13)[13]^2[35](26)s_{56}(s_{124}-s_{134})}{(2|1+4|3|^3\Delta_{14|23|56}^2)} + \\
& \frac{-12[12](4|2+3|1(12)(13)[13][35](26)(s_{124}-s_{134})}{(2|1+4|3|^3\Delta_{14|23|56}} + \\
& \frac{[13](32[25](23)(46)(12)[13]\dots\langle 6 \text{ terms} \rangle\dots+4(23)(46)(34)(34)[35])}{(2|1+4|3|^3)} + \\
& \frac{-15/8(s_{123}-s_{234})(24)(6|1+4|5)(s_{25}+s_{26}+s_{35}+s_{36})(3|1+4|2[13](3|1+4|3)s_{56}(s_{124}-s_{134})}{(2|1+4|3|^2\Delta_{14|23|56}^3)} + \\
& \frac{(4|2+3|1)(3|1+4|2)(s_{25}+s_{26}+s_{35}+s_{36})(-45/2(13)^2[35](26)[13]^2\dots\langle 8 \text{ terms} \rangle\dots+15/2[12](46)(12)^2[14][35])}{(2|1+4|3|^2\Delta_{14|23|56}^2)} + \\
& \frac{(s_{124}-s_{134})(3|1+4|2)(24[24](24)(46)(12)[13][14](34)[35]\dots\langle 17 \text{ terms} \rangle\dots-15(23)^2(46)(13)[13]^2[23][35])}{(2|1+4|3|^2\Delta_{14|23|56}^2)} + \\
& \frac{2[12](23)[35](46)\dots\langle 5 \text{ terms} \rangle\dots+132[13][15](36)(14)}{(2|1+4|3|^2)} + \\
& \frac{(s_{124}-s_{134})(122[24][12][25](24)^2(26)\dots\langle 9 \text{ terms} \rangle\dots-20[12]^2(24)(13)[35](26))}{(2|1+4|3|^2\Delta_{14|23|56}} + \\
& \frac{(3|1+4|2(48(23)^2(46)[13][23][35]\dots\langle 6 \text{ terms} \rangle\dots+168(12)[13]^2[15](36)(14))}{(2|1+4|3|^2\Delta_{14|23|56}} + \\
& \frac{(s_{123}-s_{234})(3|1+4|2)(s_{25}+s_{26}+s_{35}+s_{36})(315/32[12]^2(24)(23)(46)[34](13)[35]\dots\langle 23 \text{ terms} \rangle\dots+15/16[12]^2(24)(13)[13](14)[45](26))}{(2|1+4|3|^3\Delta_{14|23|56}} + \\
& \frac{(13)(4|2+3|1)(3|1+4|2)(s_{25}+s_{26}+s_{35}+s_{36})(-15/8(46)[14]^2[13](14)^2[45]-15/8[12][14]^2(14)^2[35](26)+15/8(46)[14](13)^2[13]^2[35]-15/8[12](13)^2[13]^2[35](26))}{(2|1+4|3|^3\Delta_{14|23|56}^3)} + \\
& \frac{(s_{123}-s_{234})(s_{124}-s_{134})(s_{25}+s_{26}+s_{35}+s_{36})(15/2[24][34][13](36)(34)^3[35]\dots\langle 32 \text{ terms} \rangle\dots+45/32[12](46)[14](13)^2[13](15)(14))}{(2|1+4|3|^3\Delta_{14|23|56}^3)} + \\
& \frac{(13)(s_{124}-s_{134})(4|2+3|1)(s_{25}+s_{26}+s_{35}+s_{36})(15/16[12](16)[14]^2[15](14)^2\dots\langle 4 \text{ terms} \rangle\dots-15/4[12]^2(13)^2[13][35](26))}{(2|1+4|3|^3\Delta_{14|23|56}^3)} + \\
& \frac{-63/2[24]^3(24)(23)(46)[13](34)^2[35]\dots\langle 151 \text{ terms} \rangle\dots+135/4[24][25](23)^2(46)(13)[13]^2(34)[23]}{(2|1+4|3|^3\Delta_{14|23|56}^2)} + \\
& \frac{(34)(s_{123}-s_{234})(s_{124}-s_{134})(s_{25}+s_{26}+s_{35}+s_{36})(-255/128[24][12](46)(34)[45]\dots\langle 8 \text{ terms} \rangle\dots-405/64(13)[12]^2[35](36))}{\Delta_{14|23|56}^3} + \\
& \frac{(s_{124}-s_{134})(4|2+3|1)(s_{25}+s_{26}+s_{35}+s_{36})(45/16[24][25](23)(36)(34)[23]\dots\langle 9 \text{ terms} \rangle\dots-45/32[24][12][25](12)(36)(34))}{\Delta_{14|23|56}^3} + \\
& \frac{(s_{123}-s_{234})(3|1+4|2)(s_{25}+s_{26}+s_{35}+s_{36})(1095/32[24][12](23)(46)(34)[35]\dots\langle 17 \text{ terms} \rangle\dots-45/32[12](23)(36)(34)[23][35])}{\Delta_{14|23|56}^3} + \\
& \frac{(4|2+3|1)(3|1+4|2)(s_{25}+s_{26}+s_{35}+s_{36})(15/16[25](36)(14)^2[14]^2\dots\langle 11 \text{ terms} \rangle\dots-135/16[12](23)(46)(13)[23][45])}{\Delta_{14|23|56}^3} + \\
& \frac{(s_{123}-s_{234})(s_{124}-s_{134})(15/16[24]^2[13](36)(34)^3[35]\dots\langle 30 \text{ terms} \rangle\dots+15/128[12]^2[34](13)(36)(34)^2[35])}{\Delta_{14|23|56}^3} + \\
& \frac{(4|2+3|1)(s_{124}-s_{134})(15/16[24][12][14](36)(34)(14)^2[45]\dots\langle 6 \text{ terms} \rangle\dots+15/16[12][25][14](13)^2[13](36)(14))}{\Delta_{14|23|56}^3} + \\
& \frac{[12](s_{123}-s_{234})(3|1+4|2)(15/16(23)^2(36)(34)[23]^2[35]\dots\langle 5 \text{ terms} \rangle\dots-15/16(46)[14](13)^2[13](15)(14))}{\Delta_{14|23|56}^3} + \\
& \frac{[12](13)(14)[14]^2[35](4|2+3|1)(3|1+4|2)(-15/8(36)(14)+15/8(13)(46))}{\Delta_{14|23|56}^3} + \\
& \frac{-4341/8[24]^2[13](36)(34)^3[35]\dots\langle 43 \text{ terms} \rangle\dots+1371/8[12]^2[25](23)^2(46)(13)[23]}{\Delta_{14|23|56}^2} + \\
& (123456 \rightarrow 432165) + \\
& \frac{-12(s_{123}-s_{234})(24)[13][35](26)(s_{124}-s_{134})}{(2|1+4|3|^4)} + \\
& \frac{-105/32(s_{123}-s_{234})(6|1+4|5)(s_{25}+s_{26}+s_{35}+s_{36})s_{23}(4|2+3|1)(3|1+4|2)s_{56}s_{14}(s_{124}-s_{134})}{\Delta_{14|23|56}^4(2|1+4|3)}
\end{aligned}$$