

$$\begin{aligned}
& \frac{-1/4[35](s_{124}-s_{134})[13](24)(26)s_{56}(3|1+4|3)}{(2|1+4|3)^4\Delta_{23|14|56}} + \\
& \frac{(13)^2[13]^2(26)[35](s_{13}-s_{24})(1/8(14)|14|+1/4(13)|13|+1/8(23)(23))}{(1|2+3|4)(2|1+4|3)^3\Delta_{14|23|56}} + \\
& \frac{[35][13](34)(1/2[12]^2(12)^2(26) \dots \langle 10 \text{ terms} \rangle \dots -1/8(46)[34](13)(24)(14))}{(2|1+4|3)^3\Delta_{14|23|56}} + \\
& \frac{(s_{124}-s_{134})[35][13](1/4(46)(23)^2[23] \dots \langle 6 \text{ terms} \rangle \dots -1/4(14)(36)(24)(14))}{(2|1+4|3)^3\Delta_{14|23|56}} + \\
& \frac{5/64(6|1+4|5)(s_{124}-s_{134})(3|1+4|2)[13](24)s_{56}(3|1+4|3)(s_{25}+s_{26}+s_{35}+s_{36})}{(2|1+4|3)^2\Delta_{23|14|56}} + \\
& \frac{(13)(s_{13}-s_{24})(-1/24(16)(13)^2[13]^3[45]-1/12[35][24](13)^2[13]^2(26)-1/24[35][24]^223(24)(26))}{(1|2+3|4)^2(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{(s_{25}+s_{26}+s_{35}+s_{36})(s_{13}-s_{24})(9/16[35](36)[24]^2[13](24)(34)(12) \dots \langle 30 \text{ terms} \rangle \dots +1/32(46)(23)(13)^2[23][13]^2[45])}{\Delta_{14|23|56}^2(2|1+4|3)^2(1|2+3|4)} + \\
& \frac{(s_{124}-s_{134})(s_{25}+s_{26}+s_{35}+s_{36})(11/48[35](36)[24]^2[13](24)(34)(12) \dots \langle 36 \text{ terms} \rangle \dots -19/192(46)(23)(13)^2[23][13]^2[45])}{\Delta_{14|23|56}^2(2|1+4|3)^2(1|2+3|4)} + \\
& \frac{2543/288[35](36)[24]^2[13](24)(34)(12) \dots \langle 79 \text{ terms} \rangle \dots -4/3[35]23(13)(26)[12]^2(12)}{(1|2+3|4)(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{-1/48[35][24]^2(s_{13}-s_{24})(16)(23)(13)s_{56}}{\Delta_{14|23|56}(1|2+3|4)^3(2|1+4|3)} + \\
& \frac{7/384(6|1+4|5)[23](13)^2(56)[56][14](s_{13}-s_{24})(s_{25}+s_{26}+s_{35}+s_{36})}{\Delta_{14|23|56}^2(2|1+4|3)(1|2+3|4)^2} + \\
& \frac{(s_{25}+s_{26}+s_{35}+s_{36})(s_{123}-s_{234})(1/192[35][24]^3(46)(23)(13)(24) \dots \langle 13 \text{ terms} \rangle \dots +5/192(46)[34](13)^3[13][45][12])}{\Delta_{14|23|56}^2(2|1+4|3)(1|2+3|4)^2} + \\
& \frac{-1/32[35][24]^3(46)(23)(13)(24) \dots \langle 34 \text{ terms} \rangle \dots +1/16(36)[24]23[12][25](12)^2}{(1|2+3|4)^2(2|1+4|3)\Delta_{14|23|56}} + \\
& \frac{-35/768(6|1+4|5)[24](3|1+4|2)(1|2+3|1)s_{56}(s_{25}+s_{26}+s_{35}+s_{36})(12)(4|2+3|1)}{(1|2+3|4)(2|1+4|3)\Delta_{14|23|56}^3} + \\
& \frac{(s_{25}+s_{26}+s_{35}+s_{36})(3|1+4|2)(s_{123}-s_{234})(35/384[35](36)[24]^2[13](24)(34)(12) \dots \langle 37 \text{ terms} \rangle \dots -25/384[35](13)^3(13)^2(26)[12])}{\Delta_{14|23|56}^3(1|2+3|4)(2|1+4|3)} + \\
& \frac{125/48(36)(13)[13][14]^3(14)^3[25] \dots \langle 202 \text{ terms} \rangle \dots -9827/576[35](36)23(13)[34]^2(34)^2[12]}{\Delta_{14|23|56}^3(2|1+4|3)(1|2+3|4)} + \\
& \frac{85452851/9216(36)[45][14][12](14)^2 \dots \langle 26 \text{ terms} \rangle \dots -141097459/13824[35](36)(13)[12]^2(12)}{(1|2+3|4)(2|1+4|3)\Delta_{14|23|56}} + \\
& \frac{(s_{25}+s_{26}+s_{35}+s_{36})(3|1+4|2)(7525/4608[35](46)(23)(13)(34)(24)[12]^2 \dots \langle 32 \text{ terms} \rangle \dots +95/384[35](36)23(13)[13]^2(34))}{\Delta_{14|23|56}^3(2|1+4|3)} + \\
& \frac{(s_{124}-s_{134})(s_{25}+s_{26}+s_{35}+s_{36})(1775/4608[35](36)[24][34][13](34)^3 \dots \langle 38 \text{ terms} \rangle \dots +6415/2304(46)(13)^2[13][15][14][12](14))}{\Delta_{14|23|56}^3(2|1+4|3)} + \\
& \frac{-1/128(6|1+4|5)s_{56}[13](34)^2[12](s_{25}+s_{26}+s_{35}+s_{36})}{\Delta_{14|23|56}^2(2|1+4|3)(4|2+3|1)} + \\
& \frac{-1/128[35](46)(3|2+4|1)(s_{123}-s_{234})(34)[12](s_{25}+s_{26}+s_{35}+s_{36})}{\Delta_{14|23|56}^2(2|1+4|3)(4|2+3|1)} + \\
& \frac{-13/192(46)(3|1+4|2)[13][15](34)}{\Delta_{14|23|56}(2|1+4|3)(4|2+3|1)} + \\
& \frac{-1/48[24]^2(16)(23)(13)s_{56}[25]}{\Delta_{14|23|56}(1|2+3|4)^3} + \\
& \frac{(s_{25}+s_{26}+s_{35}+s_{36})(3|1+4|2)(50115/2048[35][24](46)(23)(34)(12) \dots \langle 20 \text{ terms} \rangle \dots +17015/4608[35](36)23(34)[12])}{\Delta_{14|23|56}^3} + \\
& \frac{(34)(s_{124}-s_{134})(s_{25}+s_{26}+s_{35}+s_{36})(-325/576[24](46)[45](34)[12] \dots \langle 5 \text{ terms} \rangle \dots +18155/18432(36)23[12][25])}{\Delta_{14|23|56}^3} + \\
& (123456 \rightarrow -432165) + \\
& \frac{1[35]s_{56}[13](24)(26)}{(2|1+4|3)^4} + \\
& \frac{(24)(26)(-4[35]24 \dots \langle 5 \text{ terms} \rangle \dots +9/2(14)[13][45])}{(12)(2|1+4|3)^3} + \\
& \frac{-3/2(36)[34][13](24)(26)(14)}{(12)(56)(2|1+4|3)^3} + \\
& \frac{3/32(s_{124}+s_{134})[35](s_{124}-s_{134})(3|1+4|2)[13](24)(26)(s_{25}+s_{26}+s_{35}+s_{36})}{(2|1+4|3)^3\Delta_{14|23|56}^2} + \\
& \frac{3/2(36)[23][13](24)(26)}{(56)(2|1+4|3)^3} + \\
& \frac{-10/9(36)[23][13][45](34)(12)^2 \dots \langle 85 \text{ terms} \rangle \dots -1/2[35]23^2(13)[34](46)}{(12)(56)[56](1|2+3|4)(2|1+4|3)^2} + \\
& \frac{[35](26)(1/2(14)^2|14|-1/2(14)(13)|13+1(14)24-1/2[23](13)(24))}{(12)(1|2+4|3)(2|1+4|3)^2} + \\
& \frac{-1/2(14)(6|1+5|3)(s_{13}-s_{24})(26)}{(12)(56)(1|2+4|3)(2|1+4|3)^2} + \\
& \frac{1/2(14)(4|1+2|3)(24)[45]^2}{(12)[56](1|2+4|3)(2|1+4|3)^2} + \\
& \frac{(24)(26)(-1/2[13][12][25](12)^2(14) \dots \langle 3 \text{ terms} \rangle \dots +1/2[35][23](13)^2(13)(24))}{(12)^2(56)[56](2|1+4|3)^2(4|1+2|3)} + \\
& \frac{35/256(6|1+4|5)s_{14}(s_{124}-s_{134})(3|1+4|2)s_{56}s_{23}(s_{25}+s_{26}+s_{35}+s_{36})(4|2+3|1)}{(2|1+4|3)\Delta_{23|14|56}^4} + \\
& \frac{(13)(-1/3[12](16)(12)[45] \dots \langle 5 \text{ terms} \rangle \dots +5/24[23](36)(12)[45])}{(12)(1|2+3|4)^2(2|1+4|3)} + \\
& \frac{(13)(-1/6(13)^2[35][13](26) \dots \langle 8 \text{ terms} \rangle \dots +1/224[45](26)(14))}{(12)^2(56)[56](1|2+3|4)(2|1+4|3)} + \\
& \frac{8863/108(36)(13)^2[35][13] \dots \langle 28 \text{ terms} \rangle \dots -3[35][24](46)(23)(13)}{(12)(56)[56](1|2+3|4)(2|1+4|3)} + \\
& \frac{1/2[35]s_{234}(16)[34](14)^2}{(12)(1|2+4|3)^3(2|1+4|3)} + \\
& \frac{-1/3(46)(13)[35] \dots \langle 3 \text{ terms} \rangle \dots +1/3(46)[25](12)}{(12)(1|2+4|3)(2|1+4|3)} + \\
& \frac{(46)(-1/2[34](13)(46)-1/2(46)[24](12)+2/3(14)[34](36))}{(12)(56)(1|2+4|3)(2|1+4|3)} + \\
& \frac{-2/3(14)(36)[23](26)}{(12)(56)(1|2+4|3)(2|1+4|3)} + \\
& \frac{(14)[45](-2/3(14)[15]-1[35](34))}{(12)[56](1|2+4|3)(2|1+4|3)} + \\
& \frac{1/2[35][34](46)(13)^2(24)^2}{(12)^3(56)[56](2|1+4|3)(4|1+2|3)} + \\
& \frac{1/3(13)[13](26)[15](14)^2 \dots \langle 24 \text{ terms} \rangle \dots +1/3[35][34](46)(34)^2(12)}{(12)^2(56)[56](2|1+4|3)(4|1+2|3)} + \\
& \frac{13/96(46)(s_{123}-s_{234})[15](34)[12]}{\Delta_{14|23|56}(2|1+4|3)(4|2+3|1)} + \\
& \frac{-3/2(13)^3[35](26)}{(12)^3(56)[56](1|2+3|4)} + \\
& \frac{(14)[23](16)(-1/2(14)^2(26)[14] \dots \langle 7 \text{ terms} \rangle \dots -1/3[12](46)(12)^2)}{(12)^2(56)(1|2+4|3)^2(4|1+2|3)} + \\
& \frac{1/3[35](46)[23](1|3+4|2)(24)(14)}{(12)(1|2+4|3)^2(4|1+2|3)^2} + \\
& \frac{5/6(14)(16)(36)[23]}{(12)(56)(1|2+4|3)^2} + \\
& \frac{1/3[35](46)(13)[13](14)^2}{(12)^2(1|2+4|3)(4|1+2|3)^2} + \\
& \frac{2/3[35][23](46)(34)(14)}{(12)(1|2+4|3)(4|1+2|3)^2} + \\
& \frac{1(13)^2(2|1+3|5)(26)}{(12)^3(56)[56](2|1+3|4)} + \\
& \frac{-1/2(23)(13)(2|1+3|5)[45]}{(12)^2[56](2|1+3|4)^2} + \\
& \frac{1/2(13)(3|1+2|5)(26)}{(12)^2(56)[56](2|1+3|4)}
\end{aligned}$$