

$$\begin{aligned}
& \frac{(24)[13][35](26)(-3(14)[14]+3(23)(23)-6(34)[34])}{(2|1+4|3)^4} + \\
& \frac{[12](12)[13](s_{124}-s_{134})(24)(26)[35](3(13)[13]+3(23)(23))}{(2|1+4|3)^4\Delta_{14|23|56}} + \\
& \frac{(s_{134}-s_{124})[13][35](-3/2[23](46)(23)^2 \dots \langle 4 \text{ terms} \rangle \dots -3(36)[23](24)(23))}{(2|1+4|3)^3\Delta_{14|23|56}} + \\
& \frac{[13][35](1/2(14)^2[14](26) \dots \langle 5 \text{ terms} \rangle \dots -1(13)[23](26)(24))}{(1|2+4|3)(2|1+4|3)^3} + \\
& \frac{1/2[35](23)[23]^2(26)(24)}{(1|2+4|3)(2|1+4|3)^3} + \\
& \frac{[13][35](-9(34)^2(46)[34]^2(23) \dots \langle 8 \text{ terms} \rangle \dots -9[13][34](23)(34)(13)(46))}{(2|1+4|3)^3\Delta_{23|14|56}} + \\
& \frac{1/2s_{234}[13](46)(26)}{(56)(2|1+4|3)^3} + \\
& \frac{[13][35](-3/2(36)(24)+38(46)(23))}{(2|1+4|3)^3} + \\
& \frac{-1/8[13][35](s_{23}-s_{56})(23)[23](34)(13)(46)(s_{124}-s_{134})}{(14)(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{(46)[35](34)(s_{124}-s_{134})(-1/8(13)[13]+1/8[23](23))}{(14)(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{-1/2[13][35](23)[23](34)(13)(46)}{(14)(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{1/16[35](34)(s_{23}-s_{56})(46)(s_{124}-s_{134})}{(14)(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{(46)[35](s_{23}-s_{56})(34)(-1/8(13)[13]+1/8[23](23))}{(14)(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{(46)(s_{124}-s_{134})(-1/8(36)[13][24](24)-1/8(36)[13][23](23)+1/8[14](34)(46)(34))}{(56)(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{1/16(s_{14}-s_{23})[13](36)(46)(s_{124}-s_{134})}{(56)(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{(s_{14}-s_{23})(46)(-1/8(36)[13][24](24)-1/8(36)[13][23](23)+1/8[14](34)(46)(34))}{(56)(2|1+4|3)^2\Delta_{14|23|56}} + \\
& \frac{1/4[35][23](16)(s_{124}-s_{234})(24)}{(1|2+4|3)^2(2|1+4|3)^2} + \\
& \frac{[35](-1/4(14)(26)[12] \dots \langle 5 \text{ terms} \rangle \dots +1/4(36)[23](24))}{(1|2+4|3)(2|1+4|3)^2} + \\
& \frac{[35](-1/4(14)[45][13](34) \dots \langle 3 \text{ terms} \rangle \dots +1/4[25][23](24)(23))}{[56](1|2+4|3)(2|1+4|3)^2} + \\
& \frac{(3|1+4|2)(4|2+3|1)(33/4[13][35][34](23)(13)(46) \dots \langle 10 \text{ terms} \rangle \dots -45/8(12)^2(26)[12]^2[35])}{(2|1+4|3)^2\Delta_{23|14|56}} + \\
& \frac{(s_{124}-s_{134})(-103/4[35][34](23)(13)(46)[12]^2(24) \dots \langle 25 \text{ terms} \rangle \dots -5/4[13]^2[35](23)[23](34)(36)(13))}{(2|1+4|3)^2\Delta_{23|14|56}} + \\
& \frac{387/8[24][25](26)[12](24)^2 \dots \langle 21 \text{ terms} \rangle \dots -315/8[35](23)(12)(46)[12]^2}{(2|1+4|3)^2\Delta_{23|14|56}} + \\
& \frac{(s_{124}-s_{134})(-259/16(46)[12][35](23)-47/8(13)[15][13](46)-103/2(36)[13](34)[35]-3(34)(46)[14][35])}{(2|1+4|3)^2\Delta_{23|14|56}} + \\
& \frac{1/4(34)(46)[35]}{(14)(2|1+4|3)^2} + \\
& \frac{-1/4(36)[13](46)}{(56)(2|1+4|3)^2} + \\
& \frac{49/8[15](46)}{(2|1+4|3)^2} + \\
& \frac{5/16(s_{23}-s_{56})(6|1+4|5)(4|2+3|1)[23](3|1+4|2)(13)s_{23}(24)}{(14)\Delta_{14|23|56}^3(2|1+4|3)} + \\
& \frac{(6|1+4|5)(3|1+4|2)(4|2+3|1)s_{23}(-15/64(14)[14][24](24) \dots \langle 6 \text{ terms} \rangle \dots -55/64(13)[13][23](23))}{(2|1+4|3)\Delta_{14|23|56}^3} + \\
& \frac{-15/16[24][35](4|2+3|1)(23)[23](34)(3|1+4|2)(12)(6|2+5|1)}{(2|1+4|3)\Delta_{14|23|56}^3} + \\
& \frac{(4|2+3|1)s_{23}(s_{124}-s_{134})(15/16[13][14][25](14)(36)(13) \dots \langle 13 \text{ terms} \rangle \dots +135/32[45][13][23](34)(36)(13))}{(2|1+4|3)\Delta_{14|23|56}^3} + \\
& \frac{(46)[12](s_{123}-s_{234})s_{23}(s_{124}-s_{134})(-15/32(34)[24][35](23)-15/32(12)(23)[12][25]-15/32(14)[45][14](34))}{(2|1+4|3)\Delta_{14|23|56}^3} + \\
& \frac{(s_{14}-s_{56})(4|2+3|1)(s_{124}-s_{134})(15/32[45][34](34)^2[23](36)-15/32[24]^2[25](23)(46)(24))}{(2|1+4|3)\Delta_{14|23|56}^3} + \\
& \frac{-1/16(s_{23}-s_{56})(6|1+4|5)[23]^2(34)^2(13)(24)}{(14)^2\Delta_{14|23|56}^2(2|1+4|3)} + \\
& \frac{(34)(46)(-5/8[13][24]^2[35](34)^2(12) \dots \langle 9 \text{ terms} \rangle \dots -13/16[13]^2[25](23)[23](13)^2)}{(14)\Delta_{14|23|56}^2(2|1+4|3)} + \\
& \frac{(34)(s_{23}-s_{56})(-1/16[13][24][25](34)(12)(46) \dots \langle 12 \text{ terms} \rangle \dots -1/4[35](23)[23](13)(46)(12))}{(14)(2|1+4|3)\Delta_{14|23|56}^2} + \\
& \frac{(46)(-3/32[14][24][34]^2(34)^3(46) \dots \langle 13 \text{ terms} \rangle \dots -3/16[14][34](14)(36)(13)[12]^2(24))}{(56)(2|1+4|3)\Delta_{14|23|56}^2} + \\
& \frac{(s_{14}-s_{23})(46)(-5/32[13][24](23)[23](34)(36) \dots \langle 10 \text{ terms} \rangle \dots -9/16[34](34)(36)(12)[12]^2)}{(56)(2|1+4|3)\Delta_{14|23|56}^2} + \\
& \frac{-1/4[35][23](34)^2(13)(46)}{(14)^2\Delta_{14|23|56}(2|1+4|3)} + \\
& \frac{(34)(3/8(34)(46)[24][35] \dots \langle 5 \text{ terms} \rangle \dots -1/8(12)(46)[12][25])}{(14)(2|1+4|3)\Delta_{14|23|56}} + \\
& \frac{1/8(s_{23}-s_{56})(34)(46)[25]}{(14)(2|1+4|3)\Delta_{14|23|56}} + \\
& \frac{(46)(5/4(36)[23][12](23)+1/8(13)[14](46)[12]-1(36)(13)[13][12]+1/8(34)(46)[24][14])}{(56)(2|1+4|3)\Delta_{14|23|56}} + \\
& \frac{1/8(36)(s_{14}-s_{23})(46)[12]}{(56)(2|1+4|3)\Delta_{14|23|56}} + \\
& \frac{3223/32[13][24][35][34](34)^3(36) \dots \langle 39 \text{ terms} \rangle \dots -5/4[15][13][14](14)(13)^2(46)[12]}{(2|1+4|3)\Delta_{23|14|56}^2} + \\
& \frac{(s_{124}-s_{134})(175/16[24][35](23)(34)(46)[12] \dots \langle 15 \text{ terms} \rangle \dots +33/4[35](23)[23](34)(36)[12])}{(2|1+4|3)\Delta_{23|14|56}^2} + \\
& \frac{(34)(-201/4(36)[13][25]+47/4[14](46)[25]+195/2(36)[12][35])}{(2|1+4|3)\Delta_{23|14|56}} + \\
& \frac{(3|1+4|2)(4|2+3|1)s_{23}(-135/32(36)(14)[14][25] \dots \langle 6 \text{ terms} \rangle \dots -255/32(13)[45](46)[12])}{\Delta_{14|23|56}^3} + \\
& \frac{(34)(s_{123}-s_{234})(3|1+4|2)s_{23}(-15/32(36)[13][25]-15/16[45](46)[12])}{\Delta_{14|23|56}^3} + \\
& \frac{(3|1+4|2)(4|2+3|1)(s_{14}-s_{56})(-15/8(36)(14)[45][12] \dots \langle 3 \text{ terms} \rangle \dots -15/8(13)[45](46)[12])}{\Delta_{14|23|56}^3} + \\
& \frac{-15/32[13](s_{14}-s_{56})[25](34)(3|1+4|2)(36)(s_{123}-s_{234})}{\Delta_{14|23|56}^3} + \\
& \frac{-15/8[25](4|2+3|1)s_{23}(36)(13)[12](s_{124}-s_{134})}{\Delta_{14|23|56}^3} + \\
& \frac{-15/16(s_{14}-s_{56})[25](4|2+3|1)(36)(13)[12](s_{124}-s_{134})}{\Delta_{14|23|56}^3} + \\
& \frac{(3|1+4|2)(4|2+3|1)(15/4[45](14)(13)(26)[12]^2 \dots \langle 5 \text{ terms} \rangle \dots -15/4[45][13][24](14)(34)(36))}{\Delta_{14|23|56}^3} + \\
& \frac{(3|1+4|2)(-15/4[13][24][35][34](34)^3(36)-15/4[24]^2[25](36)[12](24)^3-15/4[13]^2[25](23)(13)^2(46)[12])}{\Delta_{14|23|56}^3} + \\
& \frac{[24][35](34)^3(36)(s_{124}-s_{134})(15/8[13][24]-15/8[12][34])}{\Delta_{14|23|56}^3} + \\
& \frac{(34)(46)(-5/8[13][24][25](34)(13) \dots \langle 4 \text{ terms} \rangle \dots -5/8(13)^2[12]^2[35])}{(14)\Delta_{14|23|56}^2} + \\
& \frac{(34)(46)[25](s_{23}-s_{56})(3/16(34)[24]-1/4(13)[12])}{(14)\Delta_{14|23|56}^2} + \\
& \frac{(46)(3/32[24]^2(23)(34)(46)[12] \dots \langle 5 \text{ terms} \rangle \dots -3/32(36)[13](34)^2[24]^2)}{(56)\Delta_{14|23|56}^2} + \\
& \frac{(36)[12](s_{14}-s_{23})(46)(-3/16(34)[24]-3/8(13)[12])}{(56)\Delta_{14|23|56}^2} + \\
& \frac{(34)(-165/64[45][24](34)(46)[12] \dots \langle 8 \text{ terms} \rangle \dots -681/64(36)(13)[12]^2[35])}{\Delta_{23|14|56}^2} + \\
& (123456 \rightarrow 432165) + \\
& \frac{-9/4[13](s_{134}-s_{124})(6|1+4|5)(s_{13}-s_{24})s_{23}(24)s_{56}}{\Delta_{14|23|56}^2(2|1+4|3)^3} + \\
& \frac{-15/32(s_{12}+s_{13}+s_{24}+s_{34})(s_{134}-s_{124})(6|1+4|5)(4|2+3|1)(s_{123}-s_{234})s_{23}s_{56}}{\Delta_{14|23|56}^3(2|1+4|3)^2} + \\
& \frac{-105/256(s_{12}+s_{13}+s_{24}+s_{34})(s_{134}-s_{124})(6|1+4|5)(4|2+3|1)(3|1+4|2)(s_{123}-s_{234})s_{23}s_{56}}{\Delta_{14|23|56}^4(2|1+4|3)}
\end{aligned}$$