

$$\begin{aligned}
& \frac{-702751/72(12)(13)^2(14)(15)^2}{(12)[56](12+31)^2s_{234}} + \\
& \frac{(14)[12][15](13)(-7175526569/2880)(12)[12][45]-702751/36(14)[12](25)-7231746649/2880(35)(13)(14)}{(12)^2[14][23][56](12+31)s_{234}} + \\
& \frac{7175526569/2880(12)(13)^2(24)[15](12+35)}{(12)^2(23)[23][56](12+31)s_{234}} + \\
& \frac{-7199620889/2880(12)^2(13)[15](12+35)}{(12)[14][23][56](12+31)s_{234}} + \\
& \frac{(13)(14)[15](501965/108(26)[23][24]+501965/108(36)[23][34]-702751/36(12)(16)[34]}{(12)^2[23][34][56][56]s_{234}} + \\
& \frac{(26)[24][15](-702751/108(14)[24]+100393/36(13)[23]}{(12)[34]^2(56)[56]s_{234}} + \\
& \frac{[15](100393/12(46)(13)[13][24]^2 \dots (3 \text{ terms}) \dots +100393/12(46)(12)(12)[24]^2)}{(12)[14][23][34][56][56]s_{234}} + \\
& \frac{[15](2509825/72(46)(34)^2(13)[34]^2 \dots (10 \text{ terms}) \dots +7175526569/2880(12)(36)(13)(14)(24)[34]}{(12)(23)[23][24][34][56][56]s_{234}} + \\
& \frac{[15](-501965/72(46)(14)[24]^2-2309039/72(46)(13)[23][24]+2309039/108(23)(36)(14)[24]+501965/36(36)(13)(23)^2)}{(12)(23)[34][56][56]s_{234}} + \\
& \frac{[35][24](36)(100393/2(13)(14)(24)^2[34][13] \dots (3 \text{ terms}) \dots -501965/12(14)(34)[13]^2(12)^2)}{(23)(24)[34](12+43)^2(21+43)(35+63)} + \\
& \frac{[35](36)(13)(1305109/48(13)(14)^2[14][34]-100393/6(12)(14)(24)[34]^2+501965/48(12)(13)(12)^2[23]}{(23)[34](12+43)^2(21+43)(35+63)} + \\
& \frac{(26)(14)(13)(-261223967/2880(13)[23](26)[24]+76366069/320(46)(13)[24][34]-100393/3(12)(26)[23][34]+100393/3(46)(12)[34]^2)}{(12)(13)(23)[34](56)(12+43)^2} + \\
& \frac{(14)(36)(-501965/12(46)(13)(24)[34]^2 \dots (4 \text{ terms}) \dots +152799527/2880(24)(12)[24](26)[23]}{(12)(23)(24)[34][56](12+43)^2} + \\
& \frac{(36)(-501965/12(14)[13]^2(12)[25] \dots (4 \text{ terms}) \dots +100393/3(12)(14)(24)[34][35]}{(13)(23)(24)[34](12+43)^2} + \\
& \frac{-100393/12(s_{124}-s_{234})(s_{14}-s_{23})(16)(14)[24][15]}{\Delta_{13}24[56](12+43)^2(21+34)} + \\
& \frac{-100393/12(s_{124}-s_{234})(s_{14}-s_{23})(36)(14)[35][24]}{\Delta_{13}24[56](12+43)^2(21+34)} + \\
& \frac{501965/12(36)^2[13](14)^2[24]}{(23)(56)(12+43)^2(32+43)} + \\
& \frac{-301179/8(35)^2(31+42)[24]}{[56](12+43)(21+43)^2} + \\
& \frac{100393/4s_{124}(36)^2(41+23)[23]}{(56)(12+43)(21+43)(35+63)^2} + \\
& \frac{(46)(100393/8(12)(16)[14][13](12) \dots (6 \text{ terms}) \dots +100393/6(13)^2(13)(26)[24]}{[13](23)[34][56](12+43)(21+43)} + \\
& \frac{12(26)(-100393/24(12)[13](12)(16) \dots (3 \text{ terms}) \dots -501965/24(13)(14)(26)[24]}{[13](23)[34][56](12+43)(21+43)} + \\
& \frac{[45](100393/6(14)(14)(24)[25][13] \dots (4 \text{ terms}) \dots +100393/6(13)[25](24)^2[24]}{[13](23)[34][56](12+43)(21+43)} + \\
& \frac{14(24)[35](-2509825/24(35)(34)[24]+100393/12(13)(13)[25]-301179/4(35)(12)(13))}{[13](23)[34][56](12+43)(21+43)} + \\
& \frac{(36)(702751/16(12)[13](12)(16) \dots (6 \text{ terms}) \dots +1505895/16(13)(14)(26)[24]}{(23)(34)(56)(12+43)(21+43)} + \\
& \frac{501965/12(34)(36)(12)(13)(31+65)[23]}{(23)(24)[34](12+43)(32+43)(35+63)} + \\
& \frac{-100393/24(36)[23]^2(31+65)}{[34](12+43)(32+43)(35+63)} + \\
& \frac{(36)(100393/12(34)[13]^2(14)[45] \dots (4 \text{ terms}) \dots -702751/24(25)(24)[13](23)[23]}{[13](23)(24)[34](12+43)(35+63)} + \\
& \frac{[35](13)(26)[24](-261223967/2880(23)(23)+261223967/1440(24)[24]}{(12)(23)[34]^2(56)[56](12+43)} + \\
& \frac{7328689/48(12)^2(13)(14)(24)[34][35](26) \dots (67 \text{ terms}) \dots -501965/6(46)(34)(13)(24)[34][35][13][24]}{(12)(13)(23)[23](24)[34][56][56](12+43)} + \\
& \frac{-556379387/2880(36)(14)(13)[24][23] \dots (22 \text{ terms}) \dots +251184667/960(12)(13)(35)(26)[23]^2}{(12)(13)[23][34][56][56](12+43)} + \\
& \frac{(13)[35][13][24](100393/2(36)[23]+100393/2(24)(46))}{(12)[14][23][34][56][56](12+43)} + \\
& \frac{100393/3(12)(13+42)(14)[35][15]}{(12)[13][23][56](15+61)(12+43)} + \\
& \frac{-100393/2(12)(16)(61+52)(13+41)}{(12)[14][23][56](15+61)(12+43)} + \\
& \frac{-2309039/24(13)[25](26)[24] \dots (7 \text{ terms}) \dots +100393(12)[13][45](16)}{[13][34](12+43)(21+34)} + \\
& \frac{(36)[23](-100393/8(36)[13][34]+702751/24(13)(26)[24]-702751/24(12)(26)[34]}{[13][34][56](12+43)(21+34)} + \\
& \frac{[24](26)(46)(-702751/24(12)[34]-301179/8(13)[24]}{[13][34][56](12+43)(21+34)} + \\
& \frac{25(100393/24(35)[12](23)[34]-100393/2(35)(13)(23)[24]+200786/3(13)(12)[14][25]-501965/6(13)^2(13)(45))}{[13][34][56](12+43)(21+34)} + \\
& \frac{[35][12](-100393/24(35)(23)[24]-100393/8(12)(12)(45)}{[13][34][56](12+43)(21+34)} + \\
& \frac{(34)(36)(-702751/24(13)(14)[45] \dots (5 \text{ terms}) \dots -501965/12(35)(34)[34]}{(23)(24)[34](12+43)(32+43)} + \\
& \frac{(36)(501965/12(13)(13)(23)(46)[23] \dots (5 \text{ terms}) \dots -1706681/24(12)(36)[23](24)(12)}{(23)(24)[34][56](12+43)(32+43)} + \\
& \frac{-100393/192(41+312)(12)(61+35)(32+41)[24](s_{12}+s_{14}+s_{23}+s_{34})}{\Delta_{13}^2[24][56](12+43)(21+34)} + \\
& \frac{-100393/96(13)(24)(61+35)[34](32+41)[24](41+312)}{\Delta_{13}^2[24][56](12+43)(21+34)} + \\
& \frac{-501965/96(12)^2(s_{23}-s_{14})(13)[35](26)}{[13]\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{[12](s_{24}-s_{56})(-301179/32(12)(16)(12)[15] \dots (3 \text{ terms}) \dots +100393/16(35)(34)(36)[34]}{[13]\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{-100393/96(46)^2(31+24)s_{124}[24]}{(56)\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{-1104323/48(31+24)(36)(s_{13}-s_{24})(46)[23]}{(56)\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{-1907467/96(36)(31+42)[34](s_{13}-s_{24})(46)}{(56)\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{-100393/6(s_{14}-s_{23})(36)[24](s_{13}-s_{24})(46)}{(56)\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{100393/96[35][45](24)(31+42)^2}{[56]\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{-100393/6(41+65)(34)(s_{13}-s_{24})[24][45]}{[56]\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{-501965/24(34)(s_{13}-s_{24})(31+65)[23][45]}{[56]\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{-100393/24(12)(13)(14)[45](s_{13}-s_{24})[15]}{[56]\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{-100393/24(31+42)[25][35](s_{13}-s_{24})(23)}{[56]\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{9135763/192(36)(14)^2[14]^2[25] \dots (52 \text{ terms}) \dots -501965/96(12)(13)[25](23)(26)[23]}{\Delta_{13}24[56](12+43)(21+34)} + \\
& \frac{-501965/96[35][12]^2(13)(46)}{[13]\Delta_{13}24[56](12+43)} + \\
& \frac{301179/8(31+42)(26)^2(24)}{(12)(23)(56)(21+43)^2} + \\
& \frac{(36)(-1305109/48(34)[13](12)[15]+1305109/48(34)[13](24)[45]-100393/4(13)[25](23)(24)+501965/48(35)(12)(23)(24))}{(23)(24)[34](21+43)(35+63)} + \\
& \frac{-100393/8(12)[13](26)[45] \dots (3 \text{ terms}) \dots -1104323/12(26)[13][25][14]}{[13][34](21+43)(21+34)} + \\
& \frac{(36)(-702751/24(13)[14](16)-100393/8(36)[13][34]+100393/6(46)(14)[34]}{[34](56)(21+43)(21+34)} + \\
& \frac{(23)[25](100393/8(13)[45]+100393/6(35)[14]}{[34][56](21+43)(21+34)} + \\
& \frac{(36)(-100393/8(13)^2(13)[14](16)-100393/4(36)(24)[34][13][24]-100393/4(12)(24)[34][24](26)+100393/4(24)[34][13](23)(46))}{[13](23)[34][56](12+43)(21+43)} + \\
& \frac{24(46)(-100393/4(13)(13)(26)[24]-100393/4(13)(13)(36)[34]+100393/4(46)[34](23)[24]}{(23)[23][34][56](12+43)(21+43)} + \\
& \frac{100393/4(13)(14)[24](46)(26)}{(23)[34][56](12+43)(21+43)} + \\
& \frac{(24)[45](100393/8(34)[45][24]-100393/8(13)[25][14]+100393/8(12)(13)[45]}{(23)[34][56](12+43)(21+43)} + \\
& \frac{-100393/24(12)[45][15](24)}{[13](23)[34][56](21+43)} + \\
& \frac{-100393/12(35)[12][15]}{[13][34][56](21+43)} + \\
& \frac{100393/4(46)(36)[13][24]}{(23)[23][34][56](21+43)} + \\
& \frac{(36)(2911397/48(12)(26)+1305109/48(14)(46))}{(23)[34][56](21+43)} + \\
& \frac{-100393/16(31+42)(13)(26)[15](s_{12}+s_{13}+s_{24}+s_{34})}{(23)\Delta_{14}23[56](12+34)(21+43)} + \\
& \frac{100393/16(31+42)[24][35](46)(s_{12}+s_{13}+s_{24}+s_{34})}{[23]\Delta_{14}23[56](12+34)(21+43)} + \\
& \frac{100393/32(31+42)(s_{15}+s_{16}+s_{45}+s_{46})(63-24)(46)}{(56)\Delta_{14}23[56](12+34)(21+43)} + \\
& \frac{100393/16(31+42)(36)(s_{15}+s_{16}+s_{45}+s_{46})(26)[23]}{(56)\Delta_{14}23[56](12+34)(21+43)} + \\
& \frac{100393/32(31+42)(s_{15}+s_{16}+s_{45}+s_{46})[45](43-25)}{[56]\Delta_{14}23[56](12+34)(21+43)} + \\
& \frac{100393/16(s_{23}-s_{56})(31+42)(61+35)}{\Delta_{14}23[56](12+34)(21+43)} + \\
& \frac{100393/16(31+42)(61+35)s_{14}}{\Delta_{14}23[56](12+34)(21+43)} + \\
& \frac{-100393/16(31+42)s_{14}(62-35)}{\Delta_{14}23[56](12+34)(21+43)} + \\
& \frac{7344186809/8640(12)(13)^2(15)^2}{(12)[14][56](12+31)^2} + \\
& \frac{[15](13)(7199620889/4320(35)[12][14]-7223715209/2880(12)[13][45]+7271903849/8640(13)[25][14]}{(12)[13][14][34][56](12+31)} + \\
& \frac{-7127337929/4320(12)(13)[25][15]}{(12)[14][23][56](12+31)} + \\
& \frac{-7271903849/8640(13)[15]^2[24]^2}{[14][34][56](12+31)(12+34)} + \\
& \frac{-100393/12(35)(34)^2(36)[14]}{(23)(24)[34](35+63)(32+43)} + \\
& \frac{-2911397/48(34)(36)[15]}{(23)(24)[34](35+63)} + \\
& \frac{-501965/108(35)(13)(26)[24]}{(12)^2(34)^2(56)[56]} + \\
& \frac{[35](13)(-7115290769/4320(46)[13][24]-7135369369/4320(36)[13][23]+7199620889/4320(46)[12][34]-7199620889/4320(12)(26)[23]}{(12)^2(13)[23][34][56][56]} + \\
& \frac{823829101/2880(16)[35][13](23)[24]^3}{(12)[14][23][34]^2(56)[56](12+34)} + \\
& \frac{823829101/2880(35)(36)(23)[24] \dots (4 \text{ terms}) \dots +702751/12(12)(13)(26)[45]}{(12)(23)[34]^2(56)[56]} + \\
& \frac{[24](23)(7271903849/2880(12)[35][24](26)[23] \dots (9 \text{ terms}) \dots +7271903849/2880(12)(36)[34][35][23]}{(12)(13)[14][23][34][56][56](12+34)} + \\
& \frac{[24](100393/8(13)^2(13)^2[25](26) \dots (13 \text{ terms}) \dots -100393/4(12)(34)[34](46)(12)(45)}{(12)(13)(23)[23][34][56](12+34)} + \\
& \frac{-7368281129/2880(14)[25][13][24]^2(26) \dots (18 \text{ terms}) \dots -7344186809/2880(12)^2(16)[35][24](12)}{(12)(13)(23)[34][56][56](12+34)} + \\
& \frac{100393/4(12)[35][24][15](13+41)}{(12)(13)[14][23][34][56](15+61)} + \\
& \frac{-100393/3(12)[45][15](13+41)}{(12)[13][14][34][56](15+61)} + \\
& \frac{12(-7320092489/2880(13)[25](26)[24]-7199620889/8640(35)(36)[13][24]-7320092489/2880(46)[12][45][34]-100393/12(36)[13][23][45])}{(12)(13)[14][23][34][56][56]} + \\
& \frac{100393/4(12)[25](24)^2[24](26) \dots (45 \text{ terms}) \dots +702751/8(34)(14)(24)[35](46)}{(12)(13)(23)[23](24)[34][56][56]} + \\
& \frac{-4278168017/1728(36)[13][23][25] \dots (5 \text{ terms}) \dots -7621271489/2880(12)[23][45](46)}{(12)(23)[33][34][56][56]} + \\
& \frac{100393/3(35)[12]^2(13)[15]}{(12)[13][14][23][56](15+61)} + \\
& \frac{100393/12(12)(13+42)[15][24][45]}{[14][23][34][56](15+61)(12+34)} + \\
& \frac{7344186809/2880(12)^2(16)[45][24]}{[14][23][34][56][56](12+34)} + \\
& \frac{-501965/96(26)(12)^2(13)[15]}{[13]\Delta_{13}24[56](21+34)} + \\
& \frac{301179/32(s_{24}-s_{56})(12)(36)[15]}{[13]\Delta_{13}24[56](21+34)}
\end{aligned}$$