

Supplementary Material

In equation (11)

$$\begin{aligned}
a_{b,13} &= 315 C_3 b^{13} r_0 + 315 C_3 b^{13} t \\
a_{b,12} &= 3735 C_3 L b^{12} r_0 + 3735 C_3 L b^{12} t \\
a_{b,11} &= 280 C_2 L^2 b^{11} r_0 + 18570 C_3 L^2 b^{11} r_0 + 280 C_2 L^2 b^{11} t + 18570 C_3 L^2 b^{11} t \\
a_{b,10} &= 2744 C_2 L^3 b^{10} r_0 + 49866 C_3 L^3 b^{10} r_0 + 2744 C_2 L^3 b^{10} t + 49866 C_3 L^3 b^{10} t \\
a_{b,9} &= 210 C_1 L^4 b^9 r_0 + 11200 C_2 L^4 b^9 r_0 + 76935 C_3 L^4 b^9 r_0 + 210 C_1 L^4 b^9 t + 11200 C_2 L^4 b^9 t \\
&\quad + 76935 C_3 L^4 b^9 t \\
a_{b,8} &= 1610 C_1 L^5 b^8 r_0 + 24640 C_2 L^5 b^8 r_0 + 64875 C_3 L^5 b^8 r_0 + 1610 C_1 L^5 b^8 t + 24640 C_2 L^5 b^8 t \\
&\quad + 64875 C_3 L^5 b^8 t \\
a_{b,7} &= 5320 C_1 L^6 b^7 r_0 + 30800 C_2 L^6 b^7 r_0 + 22740 C_3 L^6 b^7 r_0 + 5320 C_1 L^6 b^7 t + 30800 C_2 L^6 b^7 t \\
&\quad + 22740 C_3 L^6 b^7 t \\
a_{b,6} &= 9800 C_1 L^7 b^6 r_0 + 19600 C_2 L^7 b^6 r_0 + 2100 C_3 L^7 b^6 r_0 + 9800 C_1 L^7 b^6 t + 19600 C_2 L^7 b^6 t \\
&\quad + 2100 C_3 L^7 b^6 t \\
a_{b,5} &= 11690 C_1 L^8 b^5 r_0 - 2296 C_2 L^8 b^5 r_0 + 28770 C_3 L^8 b^5 r_0 + 11690 C_1 L^8 b^5 t - 2296 C_2 L^8 b^5 t \\
&\quad + 28770 C_3 L^8 b^5 t + 840 C_1 L^8 b^5 r_0 \log(L) - 3360 C_2 L^8 b^5 r_0 \log(L) + 12600 C_3 L^8 b^5 r_0 \log(L) \\
&\quad + 840 C_1 L^8 b^5 t \log(L) - 3360 C_2 L^8 b^5 t \log(L) + 12600 C_3 L^8 b^5 t \log(L) - 840 C_1 L^8 b^5 r_0 \sigma_1 \\
&\quad + 3360 C_2 L^8 b^5 r_0 \sigma_1 - 12600 C_3 L^8 b^5 r_0 \sigma_1 - 840 C_1 L^8 b^5 t \sigma_1 + 3360 C_2 L^8 b^5 t \sigma_1 \\
&\quad - 12600 C_3 L^8 b^5 t \sigma_1 \\
a_{b,4} &= 10570 C_1 L^9 b^4 r_0 - 21560 C_2 L^9 b^4 r_0 + 80850 C_3 L^9 b^4 r_0 + 10570 C_1 L^9 b^4 t - 21560 C_2 L^9 b^4 t \\
&\quad + 80850 C_3 L^9 b^4 t + 4200 C_1 L^9 b^4 r_0 \log(L) - 16800 C_2 L^9 b^4 r_0 \log(L) + 63000 C_3 L^9 b^4 r_0 \log(L) \\
&\quad + 4200 C_1 L^9 b^4 t \log(L) - 16800 C_2 L^9 b^4 t \log(L) + 63000 C_3 L^9 b^4 t \log(L) - 4200 C_1 L^9 b^4 r_0 \sigma_1 \\
&\quad + 16800 C_2 L^9 b^4 r_0 \sigma_1 - 63000 C_3 L^9 b^4 r_0 \sigma_1 - 4200 C_1 L^9 b^4 t \sigma_1 + 16800 C_2 L^9 b^4 t \sigma_1 \\
&\quad - 63000 C_3 L^9 b^4 t \sigma_1 \\
a_{b,3} &= 7700 C_1 L^{10} b^3 r_0 - 26320 C_2 L^{10} b^3 r_0 + 98700 C_3 L^{10} b^3 r_0 + 7700 C_1 L^{10} b^3 t \\
&\quad - 26320 C_2 L^{10} b^3 t + 98700 C_3 L^{10} b^3 t + 8400 C_1 L^{10} b^3 r_0 \log(L) - 33600 C_2 L^{10} b^3 r_0 \log(L)
\end{aligned}$$

$$\begin{aligned}
& + 126000 C_3 L^{10} b^3 r_0 \log(L) + 8400 C_1 L^{10} b^3 t \log(L) - 33600 C_2 L^{10} b^3 t \log(L) \\
& + 126000 C_3 L^{10} b^3 t \log(L) - 8400 C_1 L^{10} b^3 r_0 \sigma_1 + 33600 C_2 L^{10} b^3 r_0 \sigma_1 \\
& - 126000 C_3 L^{10} b^3 r_0 \sigma_1 - 8400 C_1 L^{10} b^3 t \sigma_1 + 33600 C_2 L^{10} b^3 t \sigma_1 \\
& - 126000 C_3 L^{10} b^3 t \sigma_1 \\
a_{b,2} & = 3780 C_1 L^{11} b^2 r_0 - 15120 C_2 L^{11} b^2 r_0 + 56700 C_3 L^{11} b^2 r_0 + 3780 C_1 L^{11} b^2 t \\
& - 15120 C_2 L^{11} b^2 t + 56700 C_3 L^{11} b^2 t + 8400 C_1 L^{11} b^2 r_0 \log(L) - 33600 C_2 L^{11} b^2 r_0 \log(L) \\
& + 126000 C_3 L^{11} b^2 r_0 \log(L) + 8400 C_1 L^{11} b^2 t \log(L) - 33600 C_2 L^{11} b^2 t \log(L) \\
& + 126000 C_3 L^{11} b^2 t \log(L) - 8400 C_1 L^{11} b^2 r_0 \sigma_1 + 33600 C_2 L^{11} b^2 r_0 \sigma_1 - 126000 C_3 L^{11} b^2 r_0 \sigma_1 \\
& - 8400 C_1 L^{11} b^2 t \sigma_1 + 33600 C_2 L^{11} b^2 t \sigma_1 - 126000 C_3 L^{11} b^2 t \sigma_1 \\
a_{b,1} & = 840 C_1 L^{12} b r_0 - 3360 C_2 L^{12} b r_0 + 12600 C_3 L^{12} b r_0 + 840 C_1 L^{12} b t - 3360 C_2 L^{12} b t \\
& + 12600 C_3 L^{12} b t - 4200 C_1 L^{12} b r_0 \sigma_1 + 16800 C_2 L^{12} b r_0 \sigma_1 - 63000 C_3 L^{12} b r_0 \sigma_1 \\
& - 4200 C_1 L^{12} b t \sigma_1 + 16800 C_2 L^{12} b t \sigma_1 - 63000 C_3 L^{12} b t \sigma_1 + 4200 C_1 L^{12} b r_0 \log(L) \\
& - 16800 C_2 L^{12} b r_0 \log(L) + 63000 C_3 L^{12} b r_0 \log(L) + 4200 C_1 L^{12} b t \log(L) - 16800 C_2 L^{12} b t \log(L) \\
& + 63000 C_3 L^{12} b t \log(L) \\
a_{b,0} & = 3360 C_2 L^{13} r_0 \sigma_1 - 840 C_1 L^{13} r_0 \sigma_1 - 12600 C_3 L^{13} r_0 \sigma_1 - 840 C_1 L^{13} t \sigma_1 \\
& + 3360 C_2 L^{13} t \sigma_1 - 12600 C_3 L^{13} t \sigma_1 + 840 C_1 L^{13} r_0 \log(L) - 3360 C_2 L^{13} r_0 \log(L) \\
& + 12600 C_3 L^{13} r_0 \log(L) + 840 C_1 L^{13} t \log(L) - 3360 C_2 L^{13} t \log(L) + 12600 C_3 L^{13} t \log(L) \\
b_{b,7} & = 210 L^6 b^5 \quad b_{b,6} = 1050 L^7 b^4 \quad b_{b,5} = 2100 L^8 b^3 \quad b_{b,4} = 2100 L^9 b^2 \quad b_{b,3} = 1050 L^{10} b \\
b_{b,2} & = 210 L^{11}
\end{aligned}$$

where

$$\sigma_1 = \log(L + b q)$$

$$\begin{aligned}
a_{h,18} & = 2520 C_3 t b^{17} h + 21420 C_3 t b^{16} h^2 + 86940 C_3 t b^{15} h^3 + 223650 C_3 t b^{14} h^4 + 405090 C_3 t b^{13} h^5 \\
& + 540540 C_3 t b^{12} h^6 + 540540 C_3 t b^{11} h^7 + 405405 C_3 t b^{10} h^8 + 225225 C_3 t b^9 h^9 + 90090 C_3 t b^8 h^{10} \\
& + 24570 C_3 t b^7 h^{11} + 4095 C_3 t b^6 h^{12} + 315 C_3 t b^5 h^{13} \\
a_{h,17} & = 40320 C_3 L t b^{16} h + 322560 C_3 L t b^{15} h^2 + 1228500 C_3 L t b^{14} h^3 + 2954700 C_3 L t b^{13} h^4 \\
& + 4981410 C_3 L t b^{12} h^5 + 6153840 C_3 L t b^{11} h^6 + 5660820 C_3 L t b^{10} h^7 + 3875850 C_3 L t b^9 h^8 \\
& + 1947825 C_3 L t b^8 h^9 + 696960 C_3 L t b^7 h^{10} + 167670 C_3 L t b^6 h^{11} + 24210 C_3 L t b^5 h^{12} \\
& + 1575 C_3 L t b^4 h^{13} \\
a_{h,16} & = 280 C_2 L^2 b^5 h^{11} t + 3080 C_2 L^2 b^6 h^{10} t + 15400 C_2 L^2 b^7 h^9 t + 46200 C_2 L^2 b^8 h^8 t \\
& + 92400 C_2 L^2 b^9 h^7 t + 129360 C_2 L^2 b^{10} h^6 t + 129080 C_2 L^2 b^{11} h^5 t + 91000 C_2 L^2 b^{12} h^4 t \\
& + 43400 C_2 L^2 b^{13} h^3 t + 12600 C_2 L^2 b^{14} h^2 t + 3150 C_3 L^2 b^3 h^{13} t + 59625 C_3 L^2 b^4 h^{12} t \\
& + 488370 C_3 L^2 b^5 h^{11} t + 2337720 C_3 L^2 b^6 h^{10} t + 7382100 C_3 L^2 b^7 h^9 t + 16362225 C_3 L^2 b^8 h^8 t \\
& + 26324100 C_3 L^2 b^9 h^7 t + 31240440 C_3 L^2 b^{10} h^6 t + 27405420 C_3 L^2 b^{11} h^5 t \\
& + 17512950 C_3 L^2 b^{12} h^4 t + 7809900 C_3 L^2 b^{13} h^3 t + 2192400 C_3 L^2 b^{14} h^2 t + 1680 C_2 L^2 b^{15} h t
\end{aligned}$$

$$\begin{aligned}
& + 292320 C_3 L^2 b^{15} h t \\
a_{h,15} = & 1400 C_2 L^3 b^4 h^{11} t + 18144 C_2 L^3 b^5 h^{10} t + 104440 C_2 L^3 b^6 h^9 t + 354480 C_2 L^3 b^7 h^8 t \\
& + 791280 C_2 L^3 b^8 h^7 t + 1223040 C_2 L^3 b^9 h^6 t + 1335544 C_2 L^3 b^{10} h^5 t + 1023120 C_2 L^3 b^{11} h^4 t \\
& + 527240 C_2 L^3 b^{12} h^3 t + 164640 C_2 L^3 b^{13} h^2 t + 3150 C_3 L^3 b^2 h^{13} t + 78300 C_3 L^3 b^3 h^{12} t \\
& + 786750 C_3 L^3 b^4 h^{11} t + 4437216 C_3 L^3 b^5 h^{10} t + 16074660 C_3 L^3 b^6 h^9 t \\
& + 40106520 C_3 L^3 b^7 h^8 t + 71611020 C_3 L^3 b^8 h^7 t + 93285360 C_3 L^3 b^9 h^6 t + 89048316 C_3 L^3 b^{10} h^5 t \\
& + 61510680 C_3 L^3 b^{11} h^4 t + 29514660 C_3 L^3 b^{12} h^3 t + 8890560 C_3 L^3 b^{13} h^2 t \\
& + 23520 C_2 L^3 b^{14} h t + 1270080 C_3 L^3 b^{14} h t \\
a_{h,14} = & 210 C_1 L^4 b^5 h^9 t + 1890 C_1 L^4 b^6 h^8 t + 7560 C_1 L^4 b^7 h^7 t + 17640 C_1 L^4 b^8 h^6 t \\
& + 26250 C_1 L^4 b^9 h^5 t + 25410 C_1 L^4 b^{10} h^4 t + 15540 C_1 L^4 b^{11} h^3 t + 5460 C_1 L^4 b^{12} h^2 t \\
& + 2800 C_2 L^4 b^3 h^{11} t + 44520 C_2 L^4 b^4 h^{10} t + 302400 C_2 L^4 b^5 h^9 t + 1180200 C_2 L^4 b^6 h^8 t \\
& + 2973600 C_2 L^4 b^7 h^7 t + 5115600 C_2 L^4 b^8 h^6 t + 6151040 C_2 L^4 b^9 h^5 t + 5146680 C_2 L^4 b^{10} h^4 t \\
& + 2879520 C_2 L^4 b^{11} h^3 t + 971880 C_2 L^4 b^{12} h^2 t + 57825 C_3 L^4 b^2 h^{12} t + 756750 C_3 L^4 b^3 h^{11} t \\
& + 5207580 C_3 L^4 b^4 h^{10} t + 22126860 C_3 L^4 b^5 h^9 t + 63068040 C_3 L^4 b^6 h^8 t + 126254160 C_3 L^4 b^7 h^7 t \\
& + 181829340 C_3 L^4 b^8 h^6 t + 189849660 C_3 L^4 b^9 h^5 t + 142314480 C_3 L^4 b^{10} h^4 t \\
& + 73737720 C_3 L^4 b^{11} h^3 t + 23931180 C_3 L^4 b^{12} h^2 t + 840 C_1 L^4 b^{13} h t + 149520 C_2 L^4 b^{13} h t \\
& + 1575 C_3 L^4 b h^{13} t + 3681720 C_3 L^4 b^{13} h t \\
a_{h,13} = & 315 C_3 L^5 h^{13} t + 1050 C_1 L^5 b^4 h^9 t + 11060 C_1 L^5 b^5 h^8 t + 50680 C_1 L^5 b^6 h^7 t \\
& + 133280 C_1 L^5 b^7 h^6 t + 220850 C_1 L^5 b^8 h^5 t + 235900 C_1 L^5 b^9 h^4 t + 158060 C_1 L^5 b^{10} h^3 t \\
& + 60480 C_1 L^5 b^{11} h^2 t + 2800 C_2 L^5 b^2 h^{11} t + 58240 C_2 L^5 b^3 h^{10} t + 484400 C_2 L^5 b^4 h^9 t \\
& + 2225440 C_2 L^5 b^5 h^8 t + 6429920 C_2 L^5 b^6 h^7 t + 12449920 C_2 L^5 b^7 h^6 t + 16619680 C_2 L^5 b^8 h^5 t \\
& + 15288000 C_2 L^5 b^9 h^4 t + 9340800 C_2 L^5 b^{10} h^3 t + 3427200 C_2 L^5 b^{11} h^2 t + 434370 C_3 L^5 b^2 h^{11} t \\
& + 3864000 C_3 L^5 b^3 h^{10} t + 19918500 C_3 L^5 b^4 h^9 t + 66256680 C_3 L^5 b^5 h^8 t \\
& + 150818640 C_3 L^5 b^6 h^7 t + 242437440 C_3 L^5 b^7 h^6 t + 278688900 C_3 L^5 b^8 h^5 t \\
& + 227770200 C_3 L^5 b^9 h^4 t + 127937880 C_3 L^5 b^{10} h^3 t + 44936640 C_3 L^5 b^{11} h^2 t \\
& + 10080 C_1 L^5 b^{12} h t + 571200 C_2 L^5 b^{12} h t + 22770 C_3 L^5 b h^{12} t + 7489440 C_3 L^5 b^{12} h t \\
a_{h,12} = & 3735 C_3 L^6 h^{12} t + 2100 C_1 L^6 b^3 h^9 t + 26950 C_1 L^6 b^4 h^8 t + 145320 C_1 L^6 b^5 h^7 t \\
& + 439040 C_1 L^6 b^6 h^6 t + 821800 C_1 L^6 b^7 h^5 t + 979650 C_1 L^6 b^8 h^4 t + 725900 C_1 L^6 b^9 h^3 t \\
& + 304920 C_1 L^6 b^{10} h^2 t + 42840 C_2 L^6 b^2 h^{10} t + 463400 C_2 L^6 b^3 h^9 t + 2597000 C_2 L^6 b^4 h^8 t \\
& + 8803200 C_2 L^6 b^5 h^7 t + 19482400 C_2 L^6 b^6 h^6 t + 29188880 C_2 L^6 b^7 h^5 t \\
& + 29761200 C_2 L^6 b^8 h^4 t + 19996200 C_2 L^6 b^9 h^3 t + 8029560 C_2 L^6 b^{10} h^2 t \\
& + 1766520 C_3 L^6 b^2 h^{10} t + 11684400 C_3 L^6 b^3 h^9 t + 46857300 C_3 L^6 b^4 h^8 t \\
& + 123752160 C_3 L^6 b^5 h^7 t + 224933520 C_3 L^6 b^6 h^6 t + 287075040 C_3 L^6 b^7 h^5 t \\
& + 257210100 C_3 L^6 b^8 h^4 t + 157273200 C_3 L^6 b^9 h^3 t + 60069240 C_3 L^6 b^{10} h^2 t
\end{aligned}$$

$$\begin{aligned}
& + 55440 C_1 L^6 b^{11} h t + 1400 C_2 L^6 b h^{11} t + 1459920 C_2 L^6 b^{11} h t + 137670 C_3 L^6 b h^{11} t \\
& + 10921680 C_3 L^6 b^{11} h t \\
a_{h,11} = & 280 C_2 L^7 h^{11} t + 18570 C_3 L^7 h^{11} t + 2100 C_1 L^7 b^2 h^9 t + 35000 C_1 L^7 b^3 h^8 t \\
& + 231000 C_1 L^7 b^4 h^7 t + 823200 C_1 L^7 b^5 h^6 t + 1773800 C_1 L^7 b^6 h^5 t + 2394000 C_1 L^7 b^7 h^4 t \\
& + 1984500 C_1 L^7 b^8 h^3 t + 924000 C_1 L^7 b^9 h^2 t + 264600 C_2 L^7 b^2 h^9 t + 1918000 C_2 L^7 b^3 h^8 t \\
& + 7896000 C_2 L^7 b^4 h^7 t + 20415360 C_2 L^7 b^5 h^6 t + 34829200 C_2 L^7 b^6 h^5 t + 39765600 C_2 L^7 b^7 h^4 t \\
& + 29622600 C_2 L^7 b^8 h^3 t + 13120800 C_2 L^7 b^9 h^2 t + 4284000 C_3 L^7 b^2 h^9 t + 21856800 C_3 L^7 b^3 h^8 t \\
& + 69048000 C_3 L^7 b^4 h^7 t + 144527040 C_3 L^7 b^5 h^6 t + 207076800 C_3 L^7 b^6 h^5 t + 204724800 C_3 L^7 b^7 h^4 t \\
& + 136836000 C_3 L^7 b^8 h^3 t + 57103200 C_3 L^7 b^9 h^2 t + 184800 C_1 L^7 b^{10} h t + 16800 C_2 L^7 b h^{10} t \\
& + 2624160 C_2 L^7 b^{10} h t + 453600 C_3 L^7 b h^{10} t + 11420640 C_3 L^7 b^{10} h t \\
a_{h,10} = & 2744 C_2 L^8 h^{10} t + 49866 C_3 L^8 h^{10} t - 840 C_1 L^8 b^{10} t \sigma_1 + 3360 C_2 L^8 b^{10} t \sigma_1 - 12600 C_3 L^8 b^{10} t \sigma_1 \\
& + 25550 C_1 L^8 b^2 h^8 t + 219800 C_1 L^8 b^3 h^7 t + 960400 C_1 L^8 b^4 h^6 t + 2445100 C_1 L^8 b^5 h^5 t \\
& + 3807300 C_1 L^8 b^6 h^4 t + 3582600 C_1 L^8 b^7 h^3 t + 1871100 C_1 L^8 b^8 h^2 t + 873880 C_2 L^8 b^2 h^8 t \\
& + 4624480 C_2 L^8 b^3 h^7 t + 14433440 C_2 L^8 b^4 h^6 t + 28601888 C_2 L^8 b^5 h^5 t + 37032240 C_2 L^8 b^6 h^4 t \\
& + 30871680 C_2 L^8 b^7 h^3 t + 15218280 C_2 L^8 b^8 h^2 t + 6354795 C_3 L^8 b^2 h^8 t + 25249620 C_3 L^8 b^3 h^7 t \\
& + 62551860 C_3 L^8 b^4 h^6 t + 102203682 C_3 L^8 b^5 h^5 t + 112459410 C_3 L^8 b^6 h^4 t + 82526220 C_3 L^8 b^7 h^3 t \\
& + 37796220 C_3 L^8 b^8 h^2 t + 840 C_1 L^8 b^{10} t \sigma_2 - 3360 C_2 L^8 b^{10} t \sigma_2 + 12600 C_3 L^8 b^{10} t \sigma_2 \\
& + 1050 C_1 L^8 b h^9 t + 415800 C_1 L^8 b^9 h t + 83440 C_2 L^8 b h^9 t + 3381840 C_2 L^8 b^9 h t \\
& + 883335 C_3 L^8 b h^9 t + 8399160 C_3 L^8 b^9 h t + 4200 C_1 L^8 b^9 h t \sigma_2 - 16800 C_2 L^8 b^9 h t \sigma_2 \\
& + 63000 C_3 L^8 b^9 h t \sigma_2 - 4200 C_1 L^8 b^9 h t \sigma_1 + 16800 C_2 L^8 b^9 h t \sigma_1 - 63000 C_3 L^8 b^9 h t \sigma_1 \\
& + 840 C_1 L^8 b^5 h^5 t \sigma_2 + 4200 C_1 L^8 b^6 h^4 t \sigma_2 + 8400 C_1 L^8 b^7 h^3 t \sigma_2 + 8400 C_1 L^8 b^8 h^2 t \sigma_2 \\
& - 3360 C_2 L^8 b^5 h^5 t \sigma_2 - 16800 C_2 L^8 b^6 h^4 t \sigma_2 - 33600 C_2 L^8 b^7 h^3 t \sigma_2 - 33600 C_2 L^8 b^8 h^2 t \sigma_2 \\
& + 12600 C_3 L^8 b^5 h^5 t \sigma_2 + 63000 C_3 L^8 b^6 h^4 t \sigma_2 + 126000 C_3 L^8 b^7 h^3 t \sigma_2 + 126000 C_3 L^8 b^8 h^2 t \sigma_2 \\
& - 840 C_1 L^8 b^5 h^5 t \sigma_1 - 4200 C_1 L^8 b^6 h^4 t \sigma_1 - 8400 C_1 L^8 b^7 h^3 t \sigma_1 - 8400 C_1 L^8 b^8 h^2 t \sigma_1 \\
& + 3360 C_2 L^8 b^5 h^5 t \sigma_1 + 16800 C_2 L^8 b^6 h^4 t \sigma_1 + 33600 C_2 L^8 b^7 h^3 t \sigma_1 + 33600 C_2 L^8 b^8 h^2 t \sigma_1 \\
& - 12600 C_3 L^8 b^5 h^5 t \sigma_1 - 63000 C_3 L^8 b^6 h^4 t \sigma_1 - 126000 C_3 L^8 b^7 h^3 t \sigma_1 - 126000 C_3 L^8 b^8 h^2 t \sigma_1 \\
a_{h,9} = & 210 C_1 L^9 h^9 t + 11200 C_2 L^9 h^9 t + 76935 C_3 L^9 h^9 t - 8400 C_1 L^9 b^9 t \sigma_1 + 33600 C_2 L^9 b^9 t \sigma_1 \\
& - 126000 C_3 L^9 b^9 t \sigma_1 + 125160 C_1 L^9 b^2 h^7 t + 713440 C_1 L^9 b^3 h^6 t + 2230340 C_1 L^9 b^4 h^5 t \\
& + 4113480 C_1 L^9 b^5 h^4 t + 4479720 C_1 L^9 b^6 h^3 t + 2664480 C_1 L^9 b^7 h^2 t + 1696800 C_2 L^9 b^2 h^7 t \\
& + 6742400 C_2 L^9 b^3 h^6 t + 15964480 C_2 L^9 b^4 h^5 t + 23795520 C_2 L^9 b^5 h^4 t + 22404480 C_2 L^9 b^6 h^3 t \\
& + 12405120 C_2 L^9 b^7 h^2 t + 5592060 C_3 L^9 b^2 h^7 t + 17157840 C_3 L^9 b^3 h^6 t + 32823210 C_3 L^9 b^4 h^5 t \\
& + 40926060 C_3 L^9 b^5 h^4 t + 33363540 C_3 L^9 b^6 h^3 t + 16904160 C_3 L^9 b^7 h^2 t + 8400 C_1 L^9 b^9 t \sigma_2 \\
& - 33600 C_2 L^9 b^9 t \sigma_2 + 126000 C_3 L^9 b^9 t \sigma_2 + 9940 C_1 L^9 b h^8 t + 666120 C_1 L^9 b^8 h t \\
& + 224000 C_2 L^9 b h^8 t + 3101280 C_2 L^9 b^8 h t + 1016790 C_3 L^9 b h^8 t + 4226040 C_3 L^9 b^8 h t
\end{aligned}$$

$$\begin{aligned}
& + 37800 C_1 L^9 b^8 h t \sigma_2 - 151200 C_2 L^9 b^8 h t \sigma_2 + 567000 C_3 L^9 b^8 h t \sigma_2 \\
& - 37800 C_1 L^9 b^8 h t \sigma_1 + 151200 C_2 L^9 b^8 h t \sigma_1 - 567000 C_3 L^9 b^8 h t \sigma_1 \\
& + 4200 C_1 L^9 b^4 h^5 t \sigma_2 + 25200 C_1 L^9 b^5 h^4 t \sigma_2 + 58800 C_1 L^9 b^6 h^3 t \sigma_2 \\
& + 67200 C_1 L^9 b^7 h^2 t \sigma_2 - 16800 C_2 L^9 b^4 h^5 t \sigma_2 - 100800 C_2 L^9 b^5 h^4 t \sigma_2 \\
& - 235200 C_2 L^9 b^6 h^3 t \sigma_2 - 268800 C_2 L^9 b^7 h^2 t \sigma_2 + 63000 C_3 L^9 b^4 h^5 t \sigma_2 \\
& + 378000 C_3 L^9 b^5 h^4 t \sigma_2 + 882000 C_3 L^9 b^6 h^3 t \sigma_2 + 1008000 C_3 L^9 b^7 h^2 t \sigma_2 \\
& - 4200 C_1 L^9 b^4 h^5 t \sigma_1 - 25200 C_1 L^9 b^5 h^4 t \sigma_1 - 58800 C_1 L^9 b^6 h^3 t \sigma_1 \\
& - 67200 C_1 L^9 b^7 h^2 t \sigma_1 + 16800 C_2 L^9 b^4 h^5 t \sigma_1 + 100800 C_2 L^9 b^5 h^4 t \sigma_1 \\
& + 235200 C_2 L^9 b^6 h^3 t \sigma_1 + 268800 C_2 L^9 b^7 h^2 t \sigma_1 - 63000 C_3 L^9 b^4 h^5 t \sigma_1 \\
& - 378000 C_3 L^9 b^5 h^4 t \sigma_1 - 882000 C_3 L^9 b^6 h^3 t \sigma_1 - 1008000 C_3 L^9 b^7 h^2 t \sigma_1 \\
a_{h,8} = & 1610 C_1 L^{10} h^8 t + 24640 C_2 L^{10} h^8 t + 64875 C_3 L^{10} h^8 t - 37800 C_1 L^{10} b^8 t \sigma_1 + 151200 C_2 L^{10} b^8 t \sigma_1 \\
& - 567000 C_3 L^{10} b^8 t \sigma_1 + 329280 C_1 L^{10} b^2 h^6 t + 1345960 C_1 L^{10} b^3 h^5 t + 3059700 C_1 L^{10} b^4 h^4 t \\
& + 3963960 C_1 L^{10} b^5 h^3 t + 2740080 C_1 L^{10} b^6 h^2 t + 1963920 C_2 L^{10} b^2 h^6 t + 5793200 C_2 L^{10} b^3 h^5 t \\
& + 10071600 C_2 L^{10} b^4 h^4 t + 10720080 C_2 L^{10} b^5 h^3 t + 6691440 C_2 L^{10} b^6 h^2 t + 2633400 C_3 L^{10} b^2 h^6 t \\
& + 6335700 C_3 L^{10} b^3 h^5 t + 9780750 C_3 L^{10} b^4 h^4 t + 9733500 C_3 L^{10} b^5 h^3 t \\
& + 5821200 C_3 L^{10} b^6 h^2 t + 37800 C_1 L^{10} b^8 t \sigma_2 - 151200 C_2 L^{10} b^8 t \sigma_2 + 567000 C_3 L^{10} b^8 t \sigma_2 \\
& + 39480 C_1 L^{10} b h^7 t + 782880 C_1 L^{10} b^7 h t + 351120 C_2 L^{10} b h^7 t + 1911840 C_2 L^{10} b^7 h t \\
& + 632700 C_3 L^{10} b h^7 t + 1663200 C_3 L^{10} b^7 h t + 151200 C_1 L^{10} b^7 h t \sigma_2 - 604800 C_2 L^{10} b^7 h t \sigma_2 \\
& + 2268000 C_3 L^{10} b^7 h t \sigma_2 - 151200 C_1 L^{10} b^7 h t \sigma_1 + 604800 C_2 L^{10} b^7 h t \sigma_1 - 2268000 C_3 L^{10} b^7 h t \sigma_1 \\
& + 8400 C_1 L^{10} b^3 h^5 t \sigma_2 + 63000 C_1 L^{10} b^4 h^4 t \sigma_2 + 176400 C_1 L^{10} b^5 h^3 t \sigma_2 + 235200 C_1 L^{10} b^6 h^2 t \sigma_2 \\
& - 33600 C_2 L^{10} b^3 h^5 t \sigma_2 - 252000 C_2 L^{10} b^4 h^4 t \sigma_2 - 705600 C_2 L^{10} b^5 h^3 t \sigma_2 - 940800 C_2 L^{10} b^6 h^2 t \sigma_2 \\
& + 126000 C_3 L^{10} b^3 h^5 t \sigma_2 + 945000 C_3 L^{10} b^4 h^4 t \sigma_2 + 2646000 C_3 L^{10} b^5 h^3 t \sigma_2 \\
& + 3528000 C_3 L^{10} b^6 h^2 t \sigma_2 - 8400 C_1 L^{10} b^3 h^5 t \sigma_1 - 63000 C_1 L^{10} b^4 h^4 t \sigma_1 \\
& - 176400 C_1 L^{10} b^5 h^3 t \sigma_1 - 235200 C_1 L^{10} b^6 h^2 t \sigma_1 + 33600 C_2 L^{10} b^3 h^5 t \sigma_1 + 252000 C_2 L^{10} b^4 h^4 t \sigma_1 \\
& + 705600 C_2 L^{10} b^5 h^3 t \sigma_1 + 940800 C_2 L^{10} b^6 h^2 t \sigma_1 - 126000 C_3 L^{10} b^3 h^5 t \sigma_1 \\
& - 945000 C_3 L^{10} b^4 h^4 t \sigma_1 - 2646000 C_3 L^{10} b^5 h^3 t \sigma_1 - 3528000 C_3 L^{10} b^6 h^2 t \sigma_1 \\
a_{h,7} = & 5320 C_1 L^{11} h^7 t + 30800 C_2 L^{11} h^7 t + 22740 C_3 L^{11} h^7 t - 100800 C_1 L^{11} b^7 t \sigma_1 \\
& + 403200 C_2 L^{11} b^7 t \sigma_1 - 1512000 C_3 L^{11} b^7 t \sigma_1 + 518840 C_1 L^{11} b^2 h^5 t \\
& + 1554000 C_1 L^{11} b^3 h^4 t + 2499000 C_1 L^{11} b^4 h^3 t + 2066400 C_1 L^{11} b^5 h^2 t \\
& + 1226960 C_2 L^{11} b^2 h^5 t + 2424800 C_2 L^{11} b^3 h^4 t + 2707600 C_2 L^{11} b^4 h^3 t \\
& + 1794240 C_2 L^{11} b^5 h^2 t + 771540 C_3 L^{11} b^2 h^5 t + 2423400 C_3 L^{11} b^3 h^4 t \\
& + 4260900 C_3 L^{11} b^4 h^3 t + 3659040 C_3 L^{11} b^5 h^2 t + 100800 C_1 L^{11} b^7 t \sigma_2 \\
& - 403200 C_2 L^{11} b^7 t \sigma_2 + 1512000 C_3 L^{11} b^7 t \sigma_2 + 86240 C_1 L^{11} b h^6 t \\
& + 688800 C_1 L^{11} b^6 h t + 313600 C_2 L^{11} b h^6 t + 598080 C_2 L^{11} b^6 h t
\end{aligned}$$

$$\begin{aligned}
& + 169680 C_3 L^{11} b h^6 t + 1219680 C_3 L^{11} b^6 h t + 352800 C_1 L^{11} b^6 h t \sigma_2 - 1411200 C_2 L^{11} b^6 h t \sigma_2 \\
& + 5292000 C_3 L^{11} b^6 h t \sigma_2 - 352800 C_1 L^{11} b^6 h t \sigma_1 + 1411200 C_2 L^{11} b^6 h t \sigma_1 \\
& - 5292000 C_3 L^{11} b^6 h t \sigma_1 + 8400 C_1 L^{11} b^2 h^5 t \sigma_2 + 84000 C_1 L^{11} b^3 h^4 t \sigma_2 \\
& + 294000 C_1 L^{11} b^4 h^3 t \sigma_2 + 470400 C_1 L^{11} b^5 h^2 t \sigma_2 \\
& - 33600 C_2 L^{11} b^2 h^5 t \sigma_2 - 336000 C_2 L^{11} b^3 h^4 t \sigma_2 - 1176000 C_2 L^{11} b^4 h^3 t \sigma_2 \\
& - 1881600 C_2 L^{11} b^5 h^2 t \sigma_2 + 126000 C_3 L^{11} b^2 h^5 t \sigma_2 + 1260000 C_3 L^{11} b^3 h^4 t \sigma_2 \\
& + 4410000 C_3 L^{11} b^4 h^3 t \sigma_2 + 7056000 C_3 L^{11} b^5 h^2 t \sigma_2 - 8400 C_1 L^{11} b^2 h^5 t \sigma_1 \\
& - 84000 C_1 L^{11} b^3 h^4 t \sigma_1 - 294000 C_1 L^{11} b^4 h^3 t \sigma_1 - 470400 C_1 L^{11} b^5 h^2 t \sigma_1 \\
& + 33600 C_2 L^{11} b^2 h^5 t \sigma_1 + 336000 C_2 L^{11} b^3 h^4 t \sigma_1 + 1176000 C_2 L^{11} b^4 h^3 t \sigma_1 \\
& + 1881600 C_2 L^{11} b^5 h^2 t \sigma_1 - 126000 C_3 L^{11} b^2 h^5 t \sigma_1 - 1260000 C_3 L^{11} b^3 h^4 t \sigma_1 \\
& - 4410000 C_3 L^{11} b^4 h^3 t \sigma_1 - 7056000 C_3 L^{11} b^5 h^2 t \sigma_1 \\
a_{h,6} = & 9800 C_1 L^{12} h^6 t + 19600 C_2 L^{12} h^6 t + 2100 C_3 L^{12} h^6 t - 176400 C_1 L^{12} b^6 t \sigma_1 \\
& + 705600 C_2 L^{12} b^6 t \sigma_1 - 2646000 C_3 L^{12} b^6 t \sigma_1 + 521850 C_1 L^{12} b^2 h^4 t + 1119300 C_1 L^{12} b^3 h^3 t \\
& + 1157100 C_1 L^{12} b^4 h^2 t + 113400 C_2 L^{12} b^2 h^4 t - 249200 C_2 L^{12} b^3 h^3 t - 487200 C_2 L^{12} b^4 h^2 t \\
& + 1212750 C_3 L^{12} b^2 h^4 t + 3454500 C_3 L^{12} b^3 h^3 t + 3969000 C_3 L^{12} b^4 h^2 t + 176400 C_1 L^{12} b^6 t \sigma_2 \\
& - 705600 C_2 L^{12} b^6 t \sigma_2 + 2646000 C_3 L^{12} b^6 t \sigma_2 + 116410 C_1 L^{12} b h^5 t + 462840 C_1 L^{12} b^5 h t \\
& + 109480 C_2 L^{12} b h^5 t - 194880 C_2 L^{12} b^5 h t + 143850 C_3 L^{12} b h^5 t + 1587600 C_3 L^{12} b^5 h t \\
& + 4200 C_1 L^{12} b h^5 t \sigma_2 + 529200 C_1 L^{12} b^5 h t \sigma_2 - 16800 C_2 L^{12} b h^5 t \sigma_2 - 2116800 C_2 L^{12} b^5 h t \sigma_2 \\
& + 63000 C_3 L^{12} b h^5 t \sigma_2 + 7938000 C_3 L^{12} b^5 h t \sigma_2 - 4200 C_1 L^{12} b h^5 t \sigma_1 - 529200 C_1 L^{12} b^5 h t \sigma_1 \\
& + 16800 C_2 L^{12} b h^5 t \sigma_1 + 2116800 C_2 L^{12} b^5 h t \sigma_1 - 63000 C_3 L^{12} b h^5 t \sigma_1 \\
& - 7938000 C_3 L^{12} b^5 h t \sigma_1 + 63000 C_1 L^{12} b^2 h^4 t \sigma_2 + 294000 C_1 L^{12} b^3 h^3 t \sigma_2 \\
& + 588000 C_1 L^{12} b^4 h^2 t \sigma_2 - 252000 C_2 L^{12} b^2 h^4 t \sigma_2 - 1176000 C_2 L^{12} b^3 h^3 t \sigma_2 \\
& - 2352000 C_2 L^{12} b^4 h^2 t \sigma_2 + 945000 C_3 L^{12} b^2 h^4 t \sigma_2 + 4410000 C_3 L^{12} b^3 h^3 t \sigma_2 \\
& + 8820000 C_3 L^{12} b^4 h^2 t \sigma_2 - 63000 C_1 L^{12} b^2 h^4 t \sigma_1 - 294000 C_1 L^{12} b^3 h^3 t \sigma_1 \\
& - 588000 C_1 L^{12} b^4 h^2 t \sigma_1 + 252000 C_2 L^{12} b^2 h^4 t \sigma_1 + 1176000 C_2 L^{12} b^3 h^3 t \sigma_1 \\
& + 2352000 C_2 L^{12} b^4 h^2 t \sigma_1 - 945000 C_3 L^{12} b^2 h^4 t \sigma_1 - 4410000 C_3 L^{12} b^3 h^3 t \sigma_1 \\
& - 8820000 C_3 L^{12} b^4 h^2 t \sigma_1 \\
a_{h,5} = & 11690 C_1 L^{13} h^5 t - 2296 C_2 L^{13} h^5 t + 28770 C_3 L^{13} h^5 t - 211680 C_1 L^{13} b^5 t \sigma_1 \\
& + 846720 C_2 L^{13} b^5 t \sigma_1 - 3175200 C_3 L^{13} b^5 t \sigma_1 - 840 C_1 L^{13} h^5 t \sigma_1 + 3360 C_2 L^{13} h^5 t \sigma_1 \\
& - 12600 C_3 L^{13} h^5 t \sigma_1 + 350700 C_1 L^{13} b^2 h^3 t + 487200 C_1 L^{13} b^3 h^2 t - 498960 C_2 L^{13} b^2 h^3 t \\
& - 792960 C_2 L^{13} b^3 h^2 t + 2072700 C_3 L^{13} b^2 h^3 t + 3175200 C_3 L^{13} b^3 h^2 t + 211680 C_1 L^{13} b^5 t \sigma_2 \\
& - 846720 C_2 L^{13} b^5 t \sigma_2 + 3175200 C_3 L^{13} b^5 t \sigma_2 + 840 C_1 L^{13} h^5 t \sigma_2 - 3360 C_2 L^{13} h^5 t \sigma_2 \\
& + 12600 C_3 L^{13} h^5 t \sigma_2 + 107100 C_1 L^{13} b h^4 t + 243600 C_1 L^{13} b^4 h t - 102480 C_2 L^{13} b h^4 t \\
& - 396480 C_2 L^{13} b^4 h t + 485100 C_3 L^{13} b h^4 t + 1587600 C_3 L^{13} b^4 h t + 25200 C_1 L^{13} b h^4 t \sigma_2
\end{aligned}$$

$$\begin{aligned}
& + 529200 C_1 L^{13} b^4 h t \sigma_2 - 100800 C_2 L^{13} b h^4 t \sigma_2 - 2116800 C_2 L^{13} b^4 h t \sigma_2 \\
& + 378000 C_3 L^{13} b h^4 t \sigma_2 + 7938000 C_3 L^{13} b^4 h t \sigma_2 - 25200 C_1 L^{13} b h^4 t \sigma_1 \\
& - 529200 C_1 L^{13} b^4 h t \sigma_1 + 100800 C_2 L^{13} b h^4 t \sigma_1 + 2116800 C_2 L^{13} b^4 h t \sigma_1 \\
& - 378000 C_3 L^{13} b h^4 t \sigma_1 - 7938000 C_3 L^{13} b^4 h t \sigma_1 + 176400 C_1 L^{13} b^2 h^3 t \sigma_2 \\
& + 470400 C_1 L^{13} b^3 h^2 t \sigma_2 - 705600 C_2 L^{13} b^2 h^3 t \sigma_2 - 1881600 C_2 L^{13} b^3 h^2 t \sigma_2 \\
& + 2646000 C_3 L^{13} b^2 h^3 t \sigma_2 + 7056000 C_3 L^{13} b^3 h^2 t \sigma_2 - 176400 C_1 L^{13} b^2 h^3 t \sigma_1 \\
& - 470400 C_1 L^{13} b^3 h^2 t \sigma_1 + 705600 C_2 L^{13} b^2 h^3 t \sigma_1 + 1881600 C_2 L^{13} b^3 h^2 t \sigma_1 \\
& - 2646000 C_3 L^{13} b^2 h^3 t \sigma_1 - 7056000 C_3 L^{13} b^3 h^2 t \sigma_1 \\
a_{h,4} = & 10570 C_1 L^{14} h^4 t - 21560 C_2 L^{14} h^4 t + 80850 C_3 L^{14} h^4 t - 176400 C_1 L^{14} b^4 t \sigma_1 \\
& + 705600 C_2 L^{14} b^4 t \sigma_1 - 2646000 C_3 L^{14} b^4 t \sigma_1 - 4200 C_1 L^{14} h^4 t \sigma_1 + 16800 C_2 L^{14} h^4 t \sigma_1 \\
& - 63000 C_3 L^{14} h^4 t \sigma_1 + 153720 C_1 L^{14} b^2 h^2 t - 423360 C_2 L^{14} b^2 h^2 t + 1587600 C_3 L^{14} b^2 h^2 t \\
& + 176400 C_1 L^{14} b^4 t \sigma_2 - 705600 C_2 L^{14} b^4 t \sigma_2 + 2646000 C_3 L^{14} b^4 t \sigma_2 + 4200 C_1 L^{14} h^4 t \sigma_2 \\
& - 16800 C_2 L^{14} h^4 t \sigma_2 + 63000 C_3 L^{14} h^4 t \sigma_2 + 72380 C_1 L^{14} b h^3 t + 102480 C_1 L^{14} b^3 h t \\
& - 184240 C_2 L^{14} b h^3 t - 282240 C_2 L^{14} b^3 h t + 690900 C_3 L^{14} b h^3 t + 1058400 C_3 L^{14} b^3 h t \\
& + 58800 C_1 L^{14} b h^3 t \sigma_2 + 352800 C_1 L^{14} b^3 h t \sigma_2 - 235200 C_2 L^{14} b h^3 t \sigma_2 \\
& - 1411200 C_2 L^{14} b^3 h t \sigma_2 + 882000 C_3 L^{14} b h^3 t \sigma_2 + 5292000 C_3 L^{14} b^3 h t \sigma_2 \\
& - 58800 C_1 L^{14} b h^3 t \sigma_1 - 352800 C_1 L^{14} b^3 h t \sigma_1 + 235200 C_2 L^{14} b h^3 t \sigma_1 \\
& + 1411200 C_2 L^{14} b^3 h t \sigma_1 - 882000 C_3 L^{14} b h^3 t \sigma_1 - 5292000 C_3 L^{14} b^3 h t \sigma_1 \\
& + 235200 C_1 L^{14} b^2 h^2 t \sigma_2 - 940800 C_2 L^{14} b^2 h^2 t \sigma_2 + 3528000 C_3 L^{14} b^2 h^2 t \sigma_2 \\
& - 235200 C_1 L^{14} b^2 h^2 t \sigma_1 + 940800 C_2 L^{14} b^2 h^2 t \sigma_1 - 3528000 C_3 L^{14} b^2 h^2 t \sigma_1 \\
a_{h,3} = & 7700 C_1 L^{15} h^3 t - 26320 C_2 L^{15} h^3 t + 98700 C_3 L^{15} h^3 t - 100800 C_1 L^{15} b^3 t \sigma_1 \\
& + 403200 C_2 L^{15} b^3 t \sigma_1 - 1512000 C_3 L^{15} b^3 t \sigma_1 - 8400 C_1 L^{15} h^3 t \sigma_1 + 33600 C_2 L^{15} h^3 t \sigma_1 \\
& - 126000 C_3 L^{15} h^3 t \sigma_1 + 100800 C_1 L^{15} b^3 t \sigma_2 - 403200 C_2 L^{15} b^3 t \sigma_2 + 1512000 C_3 L^{15} b^3 t \sigma_2 \\
& + 8400 C_1 L^{15} h^3 t \sigma_2 - 33600 C_2 L^{15} h^3 t \sigma_2 + 126000 C_3 L^{15} h^3 t \sigma_2 + 33600 C_1 L^{15} b h^2 t \\
& + 33600 C_1 L^{15} b^2 h t - 120960 C_2 L^{15} b h^2 t - 120960 C_2 L^{15} b^2 h t + 453600 C_3 L^{15} b h^2 t \\
& + 453600 C_3 L^{15} b^2 h t + 67200 C_1 L^{15} b h^2 t \sigma_2 + 151200 C_1 L^{15} b^2 h t \sigma_2 \\
& - 268800 C_2 L^{15} b h^2 t \sigma_2 - 604800 C_2 L^{15} b^2 h t \sigma_2 + 1008000 C_3 L^{15} b h^2 t \sigma_2 \\
& + 2268000 C_3 L^{15} b^2 h t \sigma_2 - 67200 C_1 L^{15} b h^2 t \sigma_1 - 151200 C_1 L^{15} b^2 h t \sigma_1 \\
& + 268800 C_2 L^{15} b h^2 t \sigma_1 + 604800 C_2 L^{15} b^2 h t \sigma_1 - 1008000 C_3 L^{15} b h^2 t \sigma_1 \\
& - 2268000 C_3 L^{15} b^2 h t \sigma_1 \\
a_{h,2} = & 3780 C_1 L^{16} h^2 t - 15120 C_2 L^{16} h^2 t + 56700 C_3 L^{16} h^2 t - 37800 C_1 L^{16} b^2 t \sigma_1 \\
& + 151200 C_2 L^{16} b^2 t \sigma_1 - 567000 C_3 L^{16} b^2 t \sigma_1 - 8400 C_1 L^{16} h^2 t \sigma_1 + 33600 C_2 L^{16} h^2 t \sigma_1 \\
& - 126000 C_3 L^{16} h^2 t \sigma_1 + 7560 C_1 L^{16} b h t - 30240 C_2 L^{16} b h t + 113400 C_3 L^{16} b h t \\
& + 37800 C_1 L^{16} b^2 t \sigma_2 - 151200 C_2 L^{16} b^2 t \sigma_2 + 567000 C_3 L^{16} b^2 t \sigma_2 + 8400 C_1 L^{16} h^2 t \sigma_2
\end{aligned}$$

$$\begin{aligned}
& -33600 C_2 L^{16} h^2 t \sigma_2 + 126000 C_3 L^{16} h^2 t \sigma_2 - 37800 C_1 L^{16} b h t \sigma_1 + 151200 C_2 L^{16} b h t \sigma_1 \\
& -567000 C_3 L^{16} b h t \sigma_1 + 37800 C_1 L^{16} b h t \sigma_2 - 151200 C_2 L^{16} b h t \sigma_2 + 567000 C_3 L^{16} b h t \sigma_2 \\
a_{h,1} = & 840 C_1 L^{17} h t - 3360 C_2 L^{17} h t + 12600 C_3 L^{17} h t + 8400 C_1 L^{17} b t \sigma_2 - 33600 C_2 L^{17} b t \sigma_2 \\
& + 126000 C_3 L^{17} b t \sigma_2 + 4200 C_1 L^{17} h t \sigma_2 - 16800 C_2 L^{17} h t \sigma_2 + 63000 C_3 L^{17} h t \sigma_2 \\
& - 8400 C_1 L^{17} b t \sigma_1 + 33600 C_2 L^{17} b t \sigma_1 - 126000 C_3 L^{17} b t \sigma_1 - 4200 C_1 L^{17} h t \sigma_1 \\
& + 16800 C_2 L^{17} h t \sigma_1 - 63000 C_3 L^{17} h t \sigma_1 \\
a_{h,0} = & 840 C_1 L^{18} t \sigma_2 - 3360 C_2 L^{18} t \sigma_2 + 12600 C_3 L^{18} t \sigma_2 - 840 C_1 L^{18} t \sigma_1 + 3360 C_2 L^{18} t \sigma_1 \\
& - 12600 C_3 L^{18} t \sigma_1 \\
b_{h,12} = & 210 L^6 b^{10} + 1050 L^6 b^9 h + 2100 L^6 b^8 h^2 + 2100 L^6 b^7 h^3 + 1050 L^6 b^6 h^4 + 210 L^6 b^5 h^5 \\
b_{h,11} = & 2100 L^7 b^9 + 9450 L^7 b^8 h + 16800 L^7 b^7 h^2 + 14700 L^7 b^6 h^3 + 6300 L^7 b^5 h^4 + 1050 L^7 b^4 h^5 \\
b_{h,10} = & 9450 L^8 b^8 + 37800 L^8 b^7 h + 58800 L^8 b^6 h^2 + 44100 L^8 b^5 h^3 + 15750 L^8 b^4 h^4 + 2100 L^8 b^3 h^5 \\
b_{h,9} = & 25200 L^9 b^7 + 88200 L^9 b^6 h + 117600 L^9 b^5 h^2 + 73500 L^9 b^4 h^3 + 21000 L^9 b^3 h^4 \\
& + 2100 L^9 b^2 h^5 \\
b_{h,8} = & 44100 L^{10} b^6 + 132300 L^{10} b^5 h + 147000 L^{10} b^4 h^2 + 73500 L^{10} b^3 h^3 + 15750 L^{10} b^2 h^4 \\
& + 1050 L^{10} b h^5 \\
b_{h,7} = & 52920 L^{11} b^5 + 132300 L^{11} b^4 h + 117600 L^{11} b^3 h^2 + 44100 L^{11} b^2 h^3 + 6300 L^{11} b h^4 \\
& + 210 L^{11} h^5 \\
b_{h,6} = & 44100 L^{12} b^4 + 88200 L^{12} b^3 h + 58800 L^{12} b^2 h^2 + 14700 L^{12} b h^3 + 1050 L^{12} h^4 \\
b_{h,5} = & 25200 L^{13} b^3 + 37800 L^{13} b^2 h + 16800 L^{13} b h^2 + 2100 L^{13} h^3 \\
b_{h,4} = & 9450 L^{14} b^2 + 9450 L^{14} b h + 2100 L^{14} h^2 \\
b_{h,3} = & 2100 L^{15} b + 1050 L^{15} h \\
b_{h,2} = & 210 L^{16}
\end{aligned}$$

where

$$\sigma_1 = \log(L + b q + h q) \quad \sigma_2 = \log(L + b q)$$

$$\begin{aligned}
a_{t,13} = & 2016 C_3 L \pi b^{14} r_0 t + 1008 C_3 L \pi b^{14} t^2 + 28224 C_3 L \pi b^{13} h r_0 t + 14112 C_3 L \pi b^{13} h t^2 + \\
& 3312 C_3 L \pi^2 b^{13} r_0^2 t + 3312 C_3 L \pi^2 b^{13} r_0 t^2 + 1104 C_3 L \pi^2 b^{13} t^3 + 183456 C_3 L \pi b^{12} h^2 r_0 t + \\
& 91728 C_3 L \pi b^{12} h^2 t^2 + 43056 C_3 L \pi^2 b^{12} h r_0^2 t + 43056 C_3 L \pi^2 b^{12} h r_0 t^2 + 14352 C_3 L \pi^2 b^{12} h t^3 + \\
& 3096 C_3 L \pi^3 b^{12} r_0^3 t + 4644 C_3 L \pi^3 b^{12} r_0^2 t^2 + 3096 C_3 L \pi^3 b^{12} r_0 t^3 + 774 C_3 L \pi^3 b^{12} t^4 + \\
& 733824 C_3 L \pi b^{11} h^3 r_0 t + 366912 C_3 L \pi b^{11} h^3 t^2 + 258336 C_3 L \pi^2 b^{11} h^2 r_0^2 t + \\
& 258336 C_3 L \pi^2 b^{11} h^2 r_0 t^2 + 86112 C_3 L \pi^2 b^{11} h^2 t^3 + 37152 C_3 L \pi^3 b^{11} h r_0^3 t + \\
& 55728 C_3 L \pi^3 b^{11} h r_0^2 t^2 + 37152 C_3 L \pi^3 b^{11} h r_0 t^3 + 9288 C_3 L \pi^3 b^{11} h t^4 + 2018016 C_3 L \pi b^{10} h^4 r_0 t + \\
& 1009008 C_3 L \pi b^{10} h^4 t^2 + 947232 C_3 L \pi^2 b^{10} h^3 r_0^2 t + 947232 C_3 L \pi^2 b^{10} h^3 r_0 t^2 + \\
& 315744 C_3 L \pi^2 b^{10} h^3 t^3 + 204336 C_3 L \pi^3 b^{10} h^2 r_0^3 t + 306504 C_3 L \pi^3 b^{10} h^2 r_0^2 t^2 + \\
& 204336 C_3 L \pi^3 b^{10} h^2 r_0 t^3 + 51084 C_3 L \pi^3 b^{10} h^2 t^4 + 4036032 C_3 L \pi b^9 h^5 r_0 t +
\end{aligned}$$

$$\begin{aligned}
& 2018016 C_3 L \pi b^9 h^5 t^2 + 2368080 C_3 L \pi^2 b^9 h^4 r_0^2 t + 2368080 C_3 L \pi^2 b^9 h^4 r_0 t^2 + \\
& 789360 C_3 L \pi^2 b^9 h^4 t^3 + 681120 C_3 L \pi^3 b^9 h^3 r_0^3 t + 1021680 C_3 L \pi^3 b^9 h^3 r_0^2 t^2 + \\
& 681120 C_3 L \pi^3 b^9 h^3 r_0 t^3 + 170280 C_3 L \pi^3 b^9 h^3 t^4 + 6054048 C_3 L \pi b^8 h^6 r_0 t + \\
& 3027024 C_3 L \pi b^8 h^6 t^2 + 4262544 C_3 L \pi^2 b^8 h^5 r_0^2 t + 4262544 C_3 L \pi^2 b^8 h^5 r_0 t^2 + \\
& 1420848 C_3 L \pi^2 b^8 h^5 t^3 + 1532520 C_3 L \pi^3 b^8 h^4 r_0^3 t + 2298780 C_3 L \pi^3 b^8 h^4 r_0^2 t^2 + \\
& 1532520 C_3 L \pi^3 b^8 h^4 r_0 t^3 + 383130 C_3 L \pi^3 b^8 h^4 t^4 + 6918912 C_3 L \pi b^7 h^7 r_0 t + \\
& 3459456 C_3 L \pi b^7 h^7 t^2 + 5683392 C_3 L \pi^2 b^7 h^6 r_0^2 t + 5683392 C_3 L \pi^2 b^7 h^6 r_0 t^2 + \\
& 1894464 C_3 L \pi^2 b^7 h^6 t^3 + 2452032 C_3 L \pi^3 b^7 h^5 r_0^3 t + 3678048 C_3 L \pi^3 b^7 h^5 r_0^2 t^2 + \\
& 2452032 C_3 L \pi^3 b^7 h^5 r_0 t^3 + 613008 C_3 L \pi^3 b^7 h^5 t^4 + 6054048 C_3 L \pi b^6 h^8 r_0 t + \\
& 3027024 C_3 L \pi b^6 h^8 t^2 + 5683392 C_3 L \pi^2 b^6 h^7 r_0^2 t + 5683392 C_3 L \pi^2 b^6 h^7 r_0 t^2 + \\
& 1894464 C_3 L \pi^2 b^6 h^7 t^3 + 2860704 C_3 L \pi^3 b^6 h^6 r_0^3 t + 4291056 C_3 L \pi^3 b^6 h^6 r_0^2 t^2 + \\
& 2860704 C_3 L \pi^3 b^6 h^6 r_0 t^3 + 715176 C_3 L \pi^3 b^6 h^6 t^4 + 4036032 C_3 L \pi b^5 h^9 r_0 t + \\
& 2018016 C_3 L \pi b^5 h^9 t^2 + 4262544 C_3 L \pi^2 b^5 h^8 r_0^2 t + 4262544 C_3 L \pi^2 b^5 h^8 r_0 t^2 + \\
& 1420848 C_3 L \pi^2 b^5 h^8 t^3 + 2452032 C_3 L \pi^3 b^5 h^7 r_0^3 t + 3678048 C_3 L \pi^3 b^5 h^7 r_0^2 t^2 + \\
& 2452032 C_3 L \pi^3 b^5 h^7 r_0 t^3 + 613008 C_3 L \pi^3 b^5 h^7 t^4 + 2018016 C_3 L \pi b^4 h^{10} r_0 t + \\
& 1009008 C_3 L \pi b^4 h^{10} t^2 + 2368080 C_3 L \pi^2 b^4 h^9 r_0^2 t + 2368080 C_3 L \pi^2 b^4 h^9 r_0 t^2 + \\
& 789360 C_3 L \pi^2 b^4 h^9 t^3 + 1532520 C_3 L \pi^3 b^4 h^8 r_0^3 t + 2298780 C_3 L \pi^3 b^4 h^8 r_0^2 t^2 + \\
& 1532520 C_3 L \pi^3 b^4 h^8 r_0 t^3 + 383130 C_3 L \pi^3 b^4 h^8 t^4 + 733824 C_3 L \pi b^3 h^{11} r_0 t + \\
& 366912 C_3 L \pi b^3 h^{11} t^2 + 947232 C_3 L \pi^2 b^3 h^{10} r_0^2 t + 947232 C_3 L \pi^2 b^3 h^{10} r_0 t^2 + \\
& 315744 C_3 L \pi^2 b^3 h^{10} t^3 + 681120 C_3 L \pi^3 b^3 h^9 r_0^3 t + 1021680 C_3 L \pi^3 b^3 h^9 r_0^2 t^2 + \\
& 681120 C_3 L \pi^3 b^3 h^9 r_0 t^3 + 170280 C_3 L \pi^3 b^3 h^9 t^4 + 183456 C_3 L \pi b^2 h^{12} r_0 t + \\
& 91728 C_3 L \pi b^2 h^{12} t^2 + 258336 C_3 L \pi^2 b^2 h^{11} r_0^2 t + 258336 C_3 L \pi^2 b^2 h^{11} r_0 t^2 + \\
& 86112 C_3 L \pi^2 b^2 h^{11} t^3 + 204336 C_3 L \pi^3 b^2 h^{10} r_0^3 t + 306504 C_3 L \pi^3 b^2 h^{10} r_0^2 t^2 + \\
& 204336 C_3 L \pi^3 b^2 h^{10} r_0 t^3 + 51084 C_3 L \pi^3 b^2 h^{10} t^4 + 28224 C_3 L \pi b h^{13} r_0 t + 14112 C_3 L \pi b h^{13} t^2 + \\
& 43056 C_3 L \pi^2 b h^{12} r_0^2 t + 43056 C_3 L \pi^2 b h^{12} r_0 t^2 + 14352 C_3 L \pi^2 b h^{12} t^3 + 37152 C_3 L \pi^3 b h^{11} r_0^3 t + \\
& 55728 C_3 L \pi^3 b h^{11} r_0^2 t^2 + 37152 C_3 L \pi^3 b h^{11} r_0 t^3 + 9288 C_3 L \pi^3 b h^{11} t^4 + 2016 C_3 L \pi h^{14} r_0 t + \\
& 1008 C_3 L \pi h^{14} t^2 + 3312 C_3 L \pi^2 h^{13} r_0^2 t + 3312 C_3 L \pi^2 h^{13} r_0 t^2 + 1104 C_3 L \pi^2 h^{13} t^3 + \\
& 3096 C_3 L \pi^3 h^{12} r_0^3 t + 4644 C_3 L \pi^3 h^{12} r_0^2 t^2 + 3096 C_3 L \pi^3 h^{12} r_0 t^3 + 774 C_3 L \pi^3 h^{12} t^4
\end{aligned}$$

$$\begin{aligned}
& a_{t,12} = 48 \pi C_2 L^2 b^{13} t^2 + 6264 \pi C_3 L^2 b^{13} t^2 + 48 \pi C_2 L^2 h^{13} t^2 + 6264 \pi C_3 L^2 h^{13} t^2 + \\
& 40 C_2 L^2 b^{12} t^3 \pi^2 + 20 C_2 L^2 b^{11} t^4 \pi^3 + 6468 C_3 L^2 b^{12} t^3 \pi^2 + 4254 C_3 L^2 b^{11} t^4 \pi^3 + \\
& 40 C_2 L^2 h^{12} t^3 \pi^2 + 20 C_2 L^2 h^{11} t^4 \pi^3 + 6468 C_3 L^2 h^{12} t^3 \pi^2 + 4254 C_3 L^2 h^{11} t^4 \pi^3 + \\
& 120 C_2 L^2 b^{12} r_0 t^2 \pi^2 + 120 C_2 L^2 b^{12} r_0^2 t \pi^2 + 80 C_2 L^2 b^{11} r_0 t^3 \pi^3 + 80 C_2 L^2 b^{11} r_0^3 t \pi^3 + \\
& 19404 C_3 L^2 b^{12} r_0 t^2 \pi^2 + 19404 C_3 L^2 b^{12} r_0^2 t \pi^2 + 17016 C_3 L^2 b^{11} r_0 t^3 \pi^3 + 17016 C_3 L^2 b^{11} r_0^3 t \pi^3 + \\
& 120 C_2 L^2 h^{12} r_0 t^2 \pi^2 + 120 C_2 L^2 h^{12} r_0^2 t \pi^2 + 80 C_2 L^2 h^{11} r_0 t^3 \pi^3 + 80 C_2 L^2 h^{11} r_0^3 t \pi^3 + \\
& 19404 C_3 L^2 h^{12} r_0 t^2 \pi^2 + 19404 C_3 L^2 h^{12} r_0^2 t \pi^2 + 17016 C_3 L^2 h^{11} r_0 t^3 \pi^3 + 17016 C_3 L^2 h^{11} r_0^3 t \pi^3 + \\
& 96 \pi C_2 L^2 b^{13} r_0 t + 12528 \pi C_3 L^2 b^{13} r_0 t + 96 \pi C_2 L^2 h^{13} r_0 t + 12528 \pi C_3 L^2 h^{13} r_0 t + \\
& 2640 C_2 L^2 b^2 h^{10} t^3 \pi^2 + 8800 C_2 L^2 b^3 h^9 t^3 \pi^2 + 19800 C_2 L^2 b^4 h^8 t^3 \pi^2 + 31680 C_2 L^2 b^5 h^7 t^3 \pi^2 + \\
& 36960 C_2 L^2 b^6 h^6 t^3 \pi^2 + 31680 C_2 L^2 b^7 h^5 t^3 \pi^2 + 19800 C_2 L^2 b^8 h^4 t^3 \pi^2 + 8800 C_2 L^2 b^9 h^3 t^3 \pi^2 + \\
& 2640 C_2 L^2 b^{10} h^2 t^3 \pi^2 + 1100 C_2 L^2 b^2 h^9 t^4 \pi^3 + 3300 C_2 L^2 b^3 h^8 t^4 \pi^3 + 6600 C_2 L^2 b^4 h^7 t^4 \pi^3 + \\
& 9240 C_2 L^2 b^5 h^6 t^4 \pi^3 + 9240 C_2 L^2 b^6 h^5 t^4 \pi^3 + 6600 C_2 L^2 b^7 h^4 t^4 \pi^3 + 3300 C_2 L^2 b^8 h^3 t^4 \pi^3 + \\
& 1100 C_2 L^2 b^9 h^2 t^4 \pi^3 + 426888 C_3 L^2 b^2 h^{10} t^3 \pi^2 + 1422960 C_3 L^2 b^3 h^9 t^3 \pi^2 + 3201660 C_3 L^2 b^4 h^8 t^3 \pi^2 + \\
& 5122656 C_3 L^2 b^5 h^7 t^3 \pi^2 + 5976432 C_3 L^2 b^6 h^6 t^3 \pi^2 + 5122656 C_3 L^2 b^7 h^5 t^3 \pi^2 + \\
& 3201660 C_3 L^2 b^8 h^4 t^3 \pi^2 + 1422960 C_3 L^2 b^9 h^3 t^3 \pi^2 + 426888 C_3 L^2 b^{10} h^2 t^3 \pi^2 + \\
& 233970 C_3 L^2 b^2 h^9 t^4 \pi^3 + 701910 C_3 L^2 b^3 h^8 t^4 \pi^3 + 1403820 C_3 L^2 b^4 h^7 t^4 \pi^3 + \\
& 1965348 C_3 L^2 b^5 h^6 t^4 \pi^3 + 1965348 C_3 L^2 b^6 h^5 t^4 \pi^3 + 1403820 C_3 L^2 b^7 h^4 t^4 \pi^3 +
\end{aligned}$$

$$\begin{aligned}
& 701910 C_3 L^2 b^8 h^3 t^4 \pi^3 + 233970 C_3 L^2 b^9 h^2 t^4 \pi^3 + 120 C_2 L^2 b^{11} r_0^2 t^2 \pi^3 + 25524 C_3 L^2 b^{11} r_0^2 t^2 \pi^3 + \\
& 120 C_2 L^2 h^{11} r_0^2 t^2 \pi^3 + 25524 C_3 L^2 h^{11} r_0^2 t^2 \pi^3 + 624 \pi C_2 L^2 b h^{12} t^2 + 624 \pi C_2 L^2 b^{12} h t^2 + \\
& 81432 \pi C_3 L^2 b h^{12} t^2 + 81432 \pi C_3 L^2 b^{12} h t^2 + 3744 \pi C_2 L^2 b^2 h^{11} t^2 + 13728 \pi C_2 L^2 b^3 h^{10} t^2 + \\
& 34320 \pi C_2 L^2 b^4 h^9 t^2 + 61776 \pi C_2 L^2 b^5 h^8 t^2 + 82368 \pi C_2 L^2 b^6 h^7 t^2 + 82368 \pi C_2 L^2 b^7 h^6 t^2 + \\
& 61776 \pi C_2 L^2 b^8 h^5 t^2 + 34320 \pi C_2 L^2 b^9 h^4 t^2 + 13728 \pi C_2 L^2 b^{10} h^3 t^2 + 3744 \pi C_2 L^2 b^{11} h^2 t^2 + \\
& 480 C_2 L^2 b h^{11} t^3 \pi^2 + 480 C_2 L^2 b^{11} h t^3 \pi^2 + 488592 \pi C_3 L^2 b^2 h^{11} t^2 + 1791504 \pi C_3 L^2 b^3 h^{10} t^2 + \\
& 4478760 \pi C_3 L^2 b^4 h^9 t^2 + 8061768 \pi C_3 L^2 b^5 h^8 t^2 + 10749024 \pi C_3 L^2 b^6 h^7 t^2 + \\
& 10749024 \pi C_3 L^2 b^7 h^6 t^2 + 8061768 \pi C_3 L^2 b^8 h^5 t^2 + 4478760 \pi C_3 L^2 b^9 h^4 t^2 + \\
& 1791504 \pi C_3 L^2 b^{10} h^3 t^2 + 488592 \pi C_3 L^2 b^{11} h^2 t^2 + 220 C_2 L^2 b h^{10} t^4 \pi^3 + 220 C_2 L^2 b^{10} h t^4 \pi^3 + \\
& 77616 C_3 L^2 b h^{11} t^3 \pi^2 + 77616 C_3 L^2 b^{11} h t^3 \pi^2 + 46794 C_3 L^2 b h^{10} t^4 \pi^3 + 46794 C_3 L^2 b^{10} h t^4 \pi^3 + \\
& 7488 \pi C_2 L^2 b^2 h^{10} r_0 t + 27456 \pi C_2 L^2 b^3 h^{10} r_0 t + 68640 \pi C_2 L^2 b^4 h^9 r_0 t + 123552 \pi C_2 L^2 b^5 h^8 r_0 t + \\
& 164736 \pi C_2 L^2 b^6 h^7 r_0 t + 164736 \pi C_2 L^2 b^7 h^6 r_0 t + 123552 \pi C_2 L^2 b^8 h^5 r_0 t + \\
& 68640 \pi C_2 L^2 b^9 h^4 r_0 t + 27456 \pi C_2 L^2 b^{10} h^3 r_0 t + 7488 \pi C_2 L^2 b^{11} h^2 r_0 t + 977184 \pi C_3 L^2 b^2 h^{11} r_0 t + \\
& 3583008 \pi C_3 L^2 b^3 h^{10} r_0 t + 8957520 \pi C_3 L^2 b^4 h^9 r_0 t + 16123536 \pi C_3 L^2 b^5 h^8 r_0 t + \\
& 21498048 \pi C_3 L^2 b^6 h^7 r_0 t + 21498048 \pi C_3 L^2 b^7 h^6 r_0 t + 16123536 \pi C_3 L^2 b^8 h^5 r_0 t + \\
& 8957520 \pi C_3 L^2 b^9 h^4 r_0 t + 3583008 \pi C_3 L^2 b^{10} h^3 r_0 t + 977184 \pi C_3 L^2 b^{11} h^2 r_0 t + \\
& 6600 C_2 L^2 b^2 h^9 r_0^2 t^2 \pi^3 + 19800 C_2 L^2 b^3 h^8 r_0^2 t^2 \pi^3 + 39600 C_2 L^2 b^4 h^7 r_0^2 t^2 \pi^3 + \\
& 55440 C_2 L^2 b^5 h^6 r_0^2 t^2 \pi^3 + 55440 C_2 L^2 b^6 h^5 r_0^2 t^2 \pi^3 + 39600 C_2 L^2 b^7 h^4 r_0^2 t^2 \pi^3 + \\
& 19800 C_2 L^2 b^8 h^3 r_0^2 t^2 \pi^3 + 6600 C_2 L^2 b^9 h^2 r_0^2 t^2 \pi^3 + 1403820 C_3 L^2 b^2 h^{11} r_0^2 t^2 \pi^3 + \\
& 4211460 C_3 L^2 b^3 h^{10} r_0^2 t^2 \pi^3 + 8422920 C_3 L^2 b^4 h^9 r_0^2 t^2 \pi^3 + 11792088 C_3 L^2 b^5 h^8 r_0^2 t^2 \pi^3 + \\
& 11792088 C_3 L^2 b^6 h^7 r_0^2 t^2 \pi^3 + 8422920 C_3 L^2 b^7 h^6 r_0^2 t^2 \pi^3 + 4211460 C_3 L^2 b^8 h^5 r_0^2 t^2 \pi^3 + \\
& 1403820 C_3 L^2 b^9 h^4 r_0^2 t^2 \pi^3 + 1440 C_2 L^2 b h^{11} r_0 t^2 \pi^2 + 1440 C_2 L^2 b h^{11} r_0^2 t^2 \pi^2 + \\
& 1440 C_2 L^2 b^{11} h r_0 t^2 \pi^2 + 1440 C_2 L^2 b^{11} h r_0^2 t^2 \pi^2 + 880 C_2 L^2 b h^{10} r_0 t^3 \pi^3 + 880 C_2 L^2 b h^{10} r_0^2 t^3 \pi^3 + \\
& 880 C_2 L^2 b^{10} h r_0 t^3 \pi^3 + 880 C_2 L^2 b^{10} h r_0^2 t^3 \pi^3 + 232848 C_3 L^2 b h^{11} r_0 t^2 \pi^2 + 232848 C_3 L^2 b h^{11} r_0^2 t^2 \pi^2 + \\
& 232848 C_3 L^2 b^2 h^{10} r_0 t^3 \pi^3 + 232848 C_3 L^2 b^2 h^{10} r_0^2 t^3 \pi^3 + 187176 C_3 L^2 b^3 h^9 r_0 t^3 \pi^3 + \\
& 187176 C_3 L^2 b^3 h^9 r_0^2 t^3 \pi^3 + 187176 C_3 L^2 b^{10} h r_0 t^3 \pi^3 + 187176 C_3 L^2 b^{10} h r_0^2 t^3 \pi^3 + \\
& 1248 \pi C_2 L^2 b h^{12} r_0 t + 1248 \pi C_2 L^2 b^{12} h r_0 t + 162864 \pi C_3 L^2 b h^{12} r_0 t + 162864 \pi C_3 L^2 b^{12} h r_0 t + \\
& 7920 C_2 L^2 b^2 h^{10} r_0 t^2 \pi^2 + 7920 C_2 L^2 b^2 h^{10} r_0^2 t^2 \pi^2 + 26400 C_2 L^2 b^3 h^9 r_0 t^2 \pi^2 + \\
& 26400 C_2 L^2 b^3 h^9 r_0^2 t^2 \pi^2 + 59400 C_2 L^2 b^4 h^8 r_0 t^2 \pi^2 + 59400 C_2 L^2 b^4 h^8 r_0^2 t^2 \pi^2 + \\
& 95040 C_2 L^2 b^5 h^7 r_0 t^2 \pi^2 + 95040 C_2 L^2 b^5 h^7 r_0^2 t^2 \pi^2 + 110880 C_2 L^2 b^6 h^6 r_0 t^2 \pi^2 + \\
& 110880 C_2 L^2 b^6 h^6 r_0^2 t^2 \pi^2 + 95040 C_2 L^2 b^7 h^5 r_0 t^2 \pi^2 + 95040 C_2 L^2 b^7 h^5 r_0^2 t^2 \pi^2 + \\
& 59400 C_2 L^2 b^8 h^4 r_0 t^2 \pi^2 + 59400 C_2 L^2 b^8 h^4 r_0^2 t^2 \pi^2 + 26400 C_2 L^2 b^9 h^3 r_0 t^2 \pi^2 + \\
& 26400 C_2 L^2 b^9 h^3 r_0^2 t^2 \pi^2 + 7920 C_2 L^2 b^{10} h^2 r_0 t^2 \pi^2 + 7920 C_2 L^2 b^{10} h^2 r_0^2 t^2 \pi^2 + \\
& 1320 C_2 L^2 b h^{10} r_0 t^2 \pi^3 + 4400 C_2 L^2 b^2 h^9 r_0 t^3 \pi^3 + 4400 C_2 L^2 b^2 h^9 r_0^2 t^3 \pi^3 + \\
& 13200 C_2 L^2 b^3 h^8 r_0 t^3 \pi^3 + 13200 C_2 L^2 b^3 h^8 r_0^2 t^3 \pi^3 + 26400 C_2 L^2 b^4 h^7 r_0 t^3 \pi^3 + \\
& 26400 C_2 L^2 b^4 h^7 r_0^2 t^3 \pi^3 + 36960 C_2 L^2 b^5 h^6 r_0 t^3 \pi^3 + 36960 C_2 L^2 b^5 h^6 r_0^2 t^3 \pi^3 + \\
& 36960 C_2 L^2 b^6 h^5 r_0 t^3 \pi^3 + 36960 C_2 L^2 b^6 h^5 r_0^2 t^3 \pi^3 + 26400 C_2 L^2 b^7 h^4 r_0 t^3 \pi^3 + \\
& 26400 C_2 L^2 b^7 h^4 r_0^2 t^3 \pi^3 + 13200 C_2 L^2 b^8 h^3 r_0 t^3 \pi^3 + 13200 C_2 L^2 b^8 h^3 r_0^2 t^3 \pi^3 + \\
& 4400 C_2 L^2 b^9 h^2 r_0 t^3 \pi^3 + 4400 C_2 L^2 b^9 h^2 r_0^2 t^3 \pi^3 + 1320 C_2 L^2 b^{10} h r_0 t^2 \pi^3 + \\
& 1280664 C_3 L^2 b^2 h^{10} r_0 t^2 \pi^2 + 1280664 C_3 L^2 b^2 h^{10} r_0^2 t^2 \pi^2 + 4268880 C_3 L^2 b^3 h^9 r_0 t^2 \pi^2 + \\
& 4268880 C_3 L^2 b^3 h^9 r_0^2 t^2 \pi^2 + 9604980 C_3 L^2 b^4 h^8 r_0 t^2 \pi^2 + 9604980 C_3 L^2 b^4 h^8 r_0^2 t^2 \pi^2 + \\
& 15367968 C_3 L^2 b^5 h^7 r_0 t^2 \pi^2 + 15367968 C_3 L^2 b^5 h^7 r_0^2 t^2 \pi^2 + 17929296 C_3 L^2 b^6 h^6 r_0 t^2 \pi^2 + \\
& 17929296 C_3 L^2 b^6 h^6 r_0^2 t^2 \pi^2 + 15367968 C_3 L^2 b^7 h^5 r_0 t^2 \pi^2 + 15367968 C_3 L^2 b^7 h^5 r_0^2 t^2 \pi^2 + \\
& 9604980 C_3 L^2 b^8 h^4 r_0 t^2 \pi^2 + 9604980 C_3 L^2 b^8 h^4 r_0^2 t^2 \pi^2 + 4268880 C_3 L^2 b^9 h^3 r_0 t^2 \pi^2 + \\
& 4268880 C_3 L^2 b^9 h^3 r_0^2 t^2 \pi^2 + 1280664 C_3 L^2 b^{10} h^2 r_0 t^2 \pi^2 + 1280664 C_3 L^2 b^{10} h^2 r_0^2 t^2 \pi^2 + \\
& 280764 C_3 L^2 b h^{10} r_0^2 t^2 \pi^3 + 935880 C_3 L^2 b^2 h^9 r_0 t^3 \pi^3 + 935880 C_3 L^2 b^2 h^9 r_0^2 t^3 \pi^3 +
\end{aligned}$$

$$\begin{aligned}
& 2807640 C_3 L^2 b^3 h^8 r_0 t^3 \pi^3 + 2807640 C_3 L^2 b^3 h^8 r_0^3 t \pi^3 + 5615280 C_3 L^2 b^4 h^7 r_0 t^3 \pi^3 + \\
& 5615280 C_3 L^2 b^4 h^7 r_0^3 t \pi^3 + 7861392 C_3 L^2 b^5 h^6 r_0 t^3 \pi^3 + 7861392 C_3 L^2 b^5 h^6 r_0^3 t \pi^3 + \\
& 7861392 C_3 L^2 b^6 h^5 r_0 t^3 \pi^3 + 7861392 C_3 L^2 b^6 h^5 r_0^3 t \pi^3 + 5615280 C_3 L^2 b^7 h^4 r_0 t^3 \pi^3 + \\
& 5615280 C_3 L^2 b^7 h^4 r_0^3 t \pi^3 + 2807640 C_3 L^2 b^8 h^3 r_0 t^3 \pi^3 + 2807640 C_3 L^2 b^8 h^3 r_0^3 t \pi^3 + \\
& 935880 C_3 L^2 b^9 h^2 r_0 t^3 \pi^3 + 935880 C_3 L^2 b^9 h^2 r_0^3 t \pi^3 + 280764 C_3 L^2 b^{10} h r_0^2 t^2 \pi^3
\end{aligned}$$

$$\begin{aligned}
a_{t,11} = & 576 \pi C_2 L^3 b^{12} t^2 + 22752 \pi C_3 L^3 b^{12} t^2 + 576 \pi C_2 L^3 h^{12} t^2 + 22752 \pi C_3 L^3 h^{12} t^2 + \\
& 448 C_2 L^3 b^{11} t^3 \pi^2 + 208 C_2 L^3 b^{10} t^4 \pi^3 + 22272 C_3 L^3 b^{11} t^3 \pi^2 + 13800 C_3 L^3 b^{10} t^4 \pi^3 + \\
& 448 C_2 L^3 h^{11} t^3 \pi^2 + 208 C_2 L^3 h^{10} t^4 \pi^3 + 22272 C_3 L^3 h^{11} t^3 \pi^2 + 13800 C_3 L^3 h^{10} t^4 \pi^3 + \\
& 1344 C_2 L^3 b^{11} r_0 t^2 \pi^2 + 1344 C_2 L^3 b^{11} r_0^2 t \pi^2 + 832 C_2 L^3 b^{10} r_0 t^3 \pi^3 + 832 C_2 L^3 b^{10} r_0^3 t \pi^3 + \\
& 66816 C_3 L^3 b^{11} r_0 t^2 \pi^2 + 66816 C_3 L^3 b^{11} r_0^2 t \pi^2 + 55200 C_3 L^3 b^{10} r_0 t^3 \pi^3 + 55200 C_3 L^3 b^{10} r_0^3 t \pi^3 + \\
& 1344 C_2 L^3 h^{11} r_0 t^2 \pi^2 + 1344 C_2 L^3 h^{11} r_0^2 t \pi^2 + 832 C_2 L^3 h^{10} r_0 t^3 \pi^3 + 832 C_2 L^3 h^{10} r_0^3 t \pi^3 + \\
& 66816 C_3 L^3 h^{11} r_0 t^2 \pi^2 + 66816 C_3 L^3 h^{11} r_0^2 t \pi^2 + 55200 C_3 L^3 h^{10} r_0 t^3 \pi^3 + 55200 C_3 L^3 h^{10} r_0^3 t \pi^3 + \\
& 1152 \pi C_2 L^3 b^{12} r_0 t + 45504 \pi C_3 L^3 b^{12} r_0 t + 1152 \pi C_2 L^3 h^{12} r_0 t + 45504 \pi C_3 L^3 h^{12} r_0 t + \\
& 24640 C_2 L^3 b^2 h^9 t^3 \pi^2 + 73920 C_2 L^3 b^3 h^8 t^3 \pi^2 + 147840 C_2 L^3 b^4 h^7 t^3 \pi^2 + 206976 C_2 L^3 b^5 h^6 t^3 \pi^2 + \\
& 206976 C_2 L^3 b^6 h^5 t^3 \pi^2 + 147840 C_2 L^3 b^7 h^4 t^3 \pi^2 + 73920 C_2 L^3 b^8 h^3 t^3 \pi^2 + 24640 C_2 L^3 b^9 h^2 t^3 \pi^2 + \\
& 9360 C_2 L^3 b^2 h^8 t^4 \pi^3 + 24960 C_2 L^3 b^3 h^7 t^4 \pi^3 + 43680 C_2 L^3 b^4 h^6 t^4 \pi^3 + 52416 C_2 L^3 b^5 h^5 t^4 \pi^3 + \\
& 43680 C_2 L^3 b^6 h^4 t^4 \pi^3 + 24960 C_2 L^3 b^7 h^3 t^4 \pi^3 + 9360 C_2 L^3 b^8 h^2 t^4 \pi^3 + 1224960 C_3 L^3 b^2 h^9 t^3 \pi^2 + \\
& 3674880 C_3 L^3 b^3 h^8 t^3 \pi^2 + 7349760 C_3 L^3 b^4 h^7 t^3 \pi^2 + 10289664 C_3 L^3 b^5 h^6 t^3 \pi^2 + \\
& 10289664 C_3 L^3 b^6 h^5 t^3 \pi^2 + 7349760 C_3 L^3 b^7 h^4 t^3 \pi^2 + 3674880 C_3 L^3 b^8 h^3 t^3 \pi^2 + \\
& 1224960 C_3 L^3 b^9 h^2 t^3 \pi^2 + 621000 C_3 L^3 b^2 h^8 t^4 \pi^3 + 1656000 C_3 L^3 b^3 h^7 t^4 \pi^3 + \\
& 2898000 C_3 L^3 b^4 h^6 t^4 \pi^3 + 3477600 C_3 L^3 b^5 h^5 t^4 \pi^3 + 2898000 C_3 L^3 b^6 h^4 t^4 \pi^3 + \\
& 1656000 C_3 L^3 b^7 h^3 t^4 \pi^3 + 621000 C_3 L^3 b^8 h^2 t^4 \pi^3 + 1248 C_2 L^3 b^{10} r_0^2 t^2 \pi^3 + \\
& 82800 C_3 L^3 b^{10} r_0^2 t^2 \pi^3 + 1248 C_2 L^3 h^{10} r_0^2 t^2 \pi^3 + 82800 C_3 L^3 h^{10} r_0^2 t^2 \pi^3 + \\
& 6912 \pi C_2 L^3 b h^{11} t^2 + 6912 \pi C_2 L^3 b^{11} h t^2 + 273024 \pi C_3 L^3 b h^{11} t^2 + 273024 \pi C_3 L^3 b^{11} h t^2 + \\
& 38016 \pi C_2 L^3 b^2 h^{10} t^2 + 126720 \pi C_2 L^3 b^3 h^9 t^2 + 285120 \pi C_2 L^3 b^4 h^8 t^2 + 456192 \pi C_2 L^3 b^5 h^7 t^2 + \\
& 532224 \pi C_2 L^3 b^6 h^6 t^2 + 456192 \pi C_2 L^3 b^7 h^5 t^2 + 285120 \pi C_2 L^3 b^8 h^4 t^2 + 126720 \pi C_2 L^3 b^9 h^3 t^2 + \\
& 38016 \pi C_2 L^3 b^{10} h^2 t^2 + 4928 C_2 L^3 b h^{10} t^3 \pi^2 + 4928 C_2 L^3 b^{10} h t^3 \pi^2 + 1501632 \pi C_3 L^3 b^2 h^{10} t^2 + \\
& 5005440 \pi C_3 L^3 b^3 h^9 t^2 + 11262240 \pi C_3 L^3 b^4 h^8 t^2 + 18019584 \pi C_3 L^3 b^5 h^7 t^2 + \\
& 21022848 \pi C_3 L^3 b^6 h^6 t^2 + 18019584 \pi C_3 L^3 b^7 h^5 t^2 + 11262240 \pi C_3 L^3 b^8 h^4 t^2 + \\
& 5005440 \pi C_3 L^3 b^9 h^3 t^2 + 1501632 \pi C_3 L^3 b^{10} h^2 t^2 + 2080 C_2 L^3 b h^9 t^4 \pi^3 + 2080 C_2 L^3 b^9 h t^4 \pi^3 + \\
& 244992 C_3 L^3 b h^{10} t^3 \pi^2 + 244992 C_3 L^3 b^{10} h t^3 \pi^2 + 138000 C_3 L^3 b h^9 t^4 \pi^3 + 138000 C_3 L^3 b^9 h t^4 \pi^3 + \\
& 76032 \pi C_2 L^3 b^2 h^{10} r_0 t + 253440 \pi C_2 L^3 b^3 h^9 r_0 t + 570240 \pi C_2 L^3 b^4 h^8 r_0 t + \\
& 912384 \pi C_2 L^3 b^5 h^7 r_0 t + 1064448 \pi C_2 L^3 b^6 h^6 r_0 t + 912384 \pi C_2 L^3 b^7 h^5 r_0 t + \\
& 570240 \pi C_2 L^3 b^8 h^4 r_0 t + 253440 \pi C_2 L^3 b^9 h^3 r_0 t + 76032 \pi C_2 L^3 b^{10} h^2 r_0 t + \\
& 3003264 \pi C_3 L^3 b^2 h^{10} r_0 t + 10010880 \pi C_3 L^3 b^3 h^9 r_0 t + 22524480 \pi C_3 L^3 b^4 h^8 r_0 t + \\
& 36039168 \pi C_3 L^3 b^5 h^7 r_0 t + 42045696 \pi C_3 L^3 b^6 h^6 r_0 t + 36039168 \pi C_3 L^3 b^7 h^5 r_0 t + \\
& 22524480 \pi C_3 L^3 b^8 h^4 r_0 t + 10010880 \pi C_3 L^3 b^9 h^3 r_0 t + 3003264 \pi C_3 L^3 b^{10} h^2 r_0 t + \\
& 56160 C_2 L^3 b^2 h^8 r_0^2 t^2 \pi^3 + 149760 C_2 L^3 b^3 h^7 r_0^2 t^2 \pi^3 + 262080 C_2 L^3 b^4 h^6 r_0^2 t^2 \pi^3 + \\
& 314496 C_2 L^3 b^5 h^5 r_0^2 t^2 \pi^3 + 262080 C_2 L^3 b^6 h^4 r_0^2 t^2 \pi^3 + 149760 C_2 L^3 b^7 h^3 r_0^2 t^2 \pi^3 + \\
& 56160 C_2 L^3 b^8 h^2 r_0^2 t^2 \pi^3 + 3726000 C_3 L^3 b^2 h^8 r_0^2 t^2 \pi^3 + 9936000 C_3 L^3 b^3 h^7 r_0^2 t^2 \pi^3 + \\
& 17388000 C_3 L^3 b^4 h^6 r_0^2 t^2 \pi^3 + 20865600 C_3 L^3 b^5 h^5 r_0^2 t^2 \pi^3 + 17388000 C_3 L^3 b^6 h^4 r_0^2 t^2 \pi^3 + \\
& 9936000 C_3 L^3 b^7 h^3 r_0^2 t^2 \pi^3 + 3726000 C_3 L^3 b^8 h^2 r_0^2 t^2 \pi^3 + 14784 C_2 L^3 b h^{10} r_0 t^2 \pi^2 + \\
& 14784 C_2 L^3 b h^{10} r_0^2 t \pi^2 + 14784 C_2 L^3 b^{10} h r_0 t^2 \pi^2 + 14784 C_2 L^3 b^{10} h r_0^2 t \pi^2 + \\
& 8320 C_2 L^3 b h^9 r_0 t^3 \pi^3 + 8320 C_2 L^3 b h^9 r_0^3 t \pi^3 + 8320 C_2 L^3 b^9 h r_0 t^3 \pi^3 + 8320 C_2 L^3 b^9 h r_0^3 t \pi^3 + \\
& 734976 C_3 L^3 b h^{10} r_0 t^2 \pi^2 + 734976 C_3 L^3 b h^{10} r_0^2 t \pi^2 + 734976 C_3 L^3 b^{10} h r_0 t^2 \pi^2 +
\end{aligned}$$

$$\begin{aligned}
& 734976 C_3 L^3 b^{10} h r_0^2 t \pi^2 + 552000 C_3 L^3 b h^9 r_0 t^3 \pi^3 + 552000 C_3 L^3 b h^9 r_0^3 t \pi^3 + \\
& 552000 C_3 L^3 b^9 h r_0 t^3 \pi^3 + 552000 C_3 L^3 b^9 h r_0^3 t \pi^3 + 13824 \pi C_2 L^3 b h^{11} r_0 t + \\
& 13824 \pi C_2 L^3 b^{11} h r_0 t + 546048 \pi C_3 L^3 b h^{11} r_0 t + 546048 \pi C_3 L^3 b^{11} h r_0 t + 73920 C_2 L^3 b^2 h^9 r_0 t^2 \pi^2 + \\
& 73920 C_2 L^3 b^2 h^9 r_0^2 t \pi^2 + 221760 C_2 L^3 b^3 h^8 r_0 t^2 \pi^2 + 221760 C_2 L^3 b^3 h^8 r_0^2 t \pi^2 + \\
& 443520 C_2 L^3 b^4 h^7 r_0 t^2 \pi^2 + 443520 C_2 L^3 b^4 h^7 r_0^2 t \pi^2 + 620928 C_2 L^3 b^5 h^6 r_0 t^2 \pi^2 + \\
& 620928 C_2 L^3 b^5 h^6 r_0^2 t \pi^2 + 620928 C_2 L^3 b^6 h^5 r_0 t^2 \pi^2 + 620928 C_2 L^3 b^6 h^5 r_0^2 t \pi^2 + \\
& 443520 C_2 L^3 b^7 h^4 r_0 t^2 \pi^2 + 443520 C_2 L^3 b^7 h^4 r_0^2 t \pi^2 + 221760 C_2 L^3 b^8 h^3 r_0 t^2 \pi^2 + \\
& 221760 C_2 L^3 b^8 h^3 r_0^2 t \pi^2 + 73920 C_2 L^3 b^9 h^2 r_0 t^2 \pi^2 + 73920 C_2 L^3 b^9 h^2 r_0^2 t \pi^2 + \\
& 12480 C_2 L^3 b h^9 r_0^2 t^2 \pi^3 + 37440 C_2 L^3 b^2 h^8 r_0 t^3 \pi^3 + 37440 C_2 L^3 b^2 h^8 r_0^3 t \pi^3 + \\
& 99840 C_2 L^3 b^3 h^7 r_0 t^3 \pi^3 + 99840 C_2 L^3 b^3 h^7 r_0^3 t \pi^3 + 174720 C_2 L^3 b^4 h^6 r_0 t^3 \pi^3 + \\
& 174720 C_2 L^3 b^4 h^6 r_0^3 t \pi^3 + 209664 C_2 L^3 b^5 h^5 r_0 t^3 \pi^3 + 209664 C_2 L^3 b^5 h^5 r_0^3 t \pi^3 + \\
& 174720 C_2 L^3 b^6 h^4 r_0 t^3 \pi^3 + 174720 C_2 L^3 b^6 h^4 r_0^3 t \pi^3 + 99840 C_2 L^3 b^7 h^3 r_0 t^3 \pi^3 + \\
& 99840 C_2 L^3 b^7 h^3 r_0^3 t \pi^3 + 37440 C_2 L^3 b^8 h^2 r_0 t^3 \pi^3 + 37440 C_2 L^3 b^8 h^2 r_0^3 t \pi^3 + \\
& 12480 C_2 L^3 b^9 h r_0^2 t^2 \pi^3 + 3674880 C_3 L^3 b^2 h^9 r_0 t^2 \pi^2 + 3674880 C_3 L^3 b^2 h^9 r_0^2 t \pi^2 + \\
& 11024640 C_3 L^3 b^3 h^8 r_0 t^2 \pi^2 + 11024640 C_3 L^3 b^3 h^8 r_0^2 t \pi^2 + 22049280 C_3 L^3 b^4 h^7 r_0 t^2 \pi^2 + \\
& 22049280 C_3 L^3 b^4 h^7 r_0^2 t \pi^2 + 30868992 C_3 L^3 b^5 h^6 r_0 t^2 \pi^2 + 30868992 C_3 L^3 b^5 h^6 r_0^2 t \pi^2 + \\
& 30868992 C_3 L^3 b^6 h^5 r_0 t^2 \pi^2 + 30868992 C_3 L^3 b^6 h^5 r_0^2 t \pi^2 + 22049280 C_3 L^3 b^7 h^4 r_0 t^2 \pi^2 + \\
& 22049280 C_3 L^3 b^7 h^4 r_0^2 t \pi^2 + 11024640 C_3 L^3 b^8 h^3 r_0 t^2 \pi^2 + 11024640 C_3 L^3 b^8 h^3 r_0^2 t \pi^2 + \\
& 3674880 C_3 L^3 b^9 h^2 r_0 t^2 \pi^2 + 3674880 C_3 L^3 b^9 h^2 r_0^2 t \pi^2 + 828000 C_3 L^3 b h^9 r_0^2 t^2 \pi^3 + \\
& 2484000 C_3 L^3 b^2 h^8 r_0 t^3 \pi^3 + 2484000 C_3 L^3 b^2 h^8 r_0^3 t \pi^3 + 6624000 C_3 L^3 b^3 h^7 r_0 t^3 \pi^3 + \\
& 6624000 C_3 L^3 b^3 h^7 r_0^3 t \pi^3 + 11592000 C_3 L^3 b^4 h^6 r_0 t^3 \pi^3 + 11592000 C_3 L^3 b^4 h^6 r_0^3 t \pi^3 + \\
& 13910400 C_3 L^3 b^5 h^5 r_0 t^3 \pi^3 + 13910400 C_3 L^3 b^5 h^5 r_0^3 t \pi^3 + 11592000 C_3 L^3 b^6 h^4 r_0 t^3 \pi^3 + \\
& 11592000 C_3 L^3 b^6 h^4 r_0^3 t \pi^3 + 6624000 C_3 L^3 b^7 h^3 r_0 t^3 \pi^3 + 6624000 C_3 L^3 b^7 h^3 r_0^3 t \pi^3 + \\
& 2484000 C_3 L^3 b^8 h^2 r_0 t^3 \pi^3 + 2484000 C_3 L^3 b^8 h^2 r_0^3 t \pi^3 + 828000 C_3 L^3 b^9 h r_0^2 t^2 \pi^3
\end{aligned}$$

$$\begin{aligned}
& a_{t,10} = 24 \pi C_1 L^4 b^{11} t^2 + 3072 \pi C_2 L^4 b^{11} t^2 + 53424 \pi C_3 L^4 b^{11} t^2 + 24 \pi C_1 L^4 h^{11} t^2 + \\
& 3072 \pi C_2 L^4 h^{11} t^2 + 53424 \pi C_3 L^4 h^{11} t^2 + 12 C_1 L^4 b^{10} t^3 \pi^2 + 3 C_1 L^4 b^9 t^4 \pi^3 + \\
& 2240 C_2 L^4 b^{10} t^3 \pi^2 + 968 C_2 L^4 b^9 t^4 \pi^3 + 49944 C_3 L^4 b^{10} t^3 \pi^2 + 29310 C_3 L^4 b^9 t^4 \pi^3 + \\
& 12 C_1 L^4 h^{10} t^3 \pi^2 + 3 C_1 L^4 h^9 t^4 \pi^3 + 2240 C_2 L^4 h^{10} t^3 \pi^2 + 968 C_2 L^4 h^9 t^4 \pi^3 + \\
& 49944 C_3 L^4 h^{10} t^3 \pi^2 + 29310 C_3 L^4 h^9 t^4 \pi^3 + 36 C_1 L^4 b^{10} r_0 t^2 \pi^2 + 36 C_1 L^4 b^{10} r_0^2 t \pi^2 + \\
& 12 C_1 L^4 b^9 r_0 t^3 \pi^3 + 12 C_1 L^4 b^9 r_0^3 t \pi^3 + 6720 C_2 L^4 b^{10} r_0 t^2 \pi^2 + 6720 C_2 L^4 b^{10} r_0^2 t \pi^2 + \\
& 3872 C_2 L^4 b^9 r_0 t^3 \pi^3 + 3872 C_2 L^4 b^9 r_0^3 t \pi^3 + 149832 C_3 L^4 b^{10} r_0 t^2 \pi^2 + 149832 C_3 L^4 b^{10} r_0^2 t \pi^2 + \\
& 117240 C_3 L^4 b^9 r_0 t^3 \pi^3 + 117240 C_3 L^4 b^9 r_0^3 t \pi^3 + 36 C_1 L^4 h^{10} r_0 t^2 \pi^2 + 36 C_1 L^4 h^{10} r_0^2 t \pi^2 + \\
& 12 C_1 L^4 h^9 r_0 t^3 \pi^3 + 12 C_1 L^4 h^9 r_0^3 t \pi^3 + 6720 C_2 L^4 h^{10} r_0 t^2 \pi^2 + 6720 C_2 L^4 h^{10} r_0^2 t \pi^2 + \\
& 3872 C_2 L^4 h^9 r_0 t^3 \pi^3 + 3872 C_2 L^4 h^9 r_0^3 t \pi^3 + 149832 C_3 L^4 h^{10} r_0 t^2 \pi^2 + 149832 C_3 L^4 h^{10} r_0^2 t \pi^2 + \\
& 117240 C_3 L^4 h^9 r_0 t^3 \pi^3 + 117240 C_3 L^4 h^9 r_0^3 t \pi^3 + 48 \pi C_1 L^4 b^{11} r_0 t + 6144 \pi C_2 L^4 b^{11} r_0 t + \\
& 106848 \pi C_3 L^4 b^{11} r_0 t + 48 \pi C_1 L^4 h^{11} r_0 t + 6144 \pi C_2 L^4 h^{11} r_0 t + 106848 \pi C_3 L^4 h^{11} r_0 t + \\
& 540 C_1 L^4 b^2 h^8 t^3 \pi^2 + 1440 C_1 L^4 b^3 h^7 t^3 \pi^2 + 2520 C_1 L^4 b^4 h^6 t^3 \pi^2 + 3024 C_1 L^4 b^5 h^5 t^3 \pi^2 + \\
& 2520 C_1 L^4 b^6 h^4 t^3 \pi^2 + 1440 C_1 L^4 b^7 h^3 t^3 \pi^2 + 540 C_1 L^4 b^8 h^2 t^3 \pi^2 + 108 C_1 L^4 b^2 h^7 t^4 \pi^3 + \\
& 252 C_1 L^4 b^3 h^6 t^4 \pi^3 + 378 C_1 L^4 b^4 h^5 t^4 \pi^3 + 378 C_1 L^4 b^5 h^4 t^4 \pi^3 + 252 C_1 L^4 b^6 h^3 t^4 \pi^3 + \\
& 108 C_1 L^4 b^7 h^2 t^4 \pi^3 + 100800 C_2 L^4 b^2 h^8 t^3 \pi^2 + 268800 C_2 L^4 b^3 h^7 t^3 \pi^2 + 470400 C_2 L^4 b^4 h^6 t^3 \pi^2 + \\
& 564480 C_2 L^4 b^5 h^5 t^3 \pi^2 + 470400 C_2 L^4 b^6 h^4 t^3 \pi^2 + 268800 C_2 L^4 b^7 h^3 t^3 \pi^2 + 100800 C_2 L^4 b^8 h^2 t^3 \pi^2 + \\
& 34848 C_2 L^4 b^2 h^7 t^4 \pi^3 + 81312 C_2 L^4 b^3 h^6 t^4 \pi^3 + 121968 C_2 L^4 b^4 h^5 t^4 \pi^3 + 121968 C_2 L^4 b^5 h^4 t^4 \pi^3 + \\
& 81312 C_2 L^4 b^6 h^3 t^4 \pi^3 + 34848 C_2 L^4 b^7 h^2 t^4 \pi^3 + 2247480 C_3 L^4 b^2 h^8 t^3 \pi^2 + 5993280 C_3 L^4 b^3 h^7 t^3 \pi^2 + \\
& 10488240 C_3 L^4 b^4 h^6 t^3 \pi^2 + 12585888 C_3 L^4 b^5 h^5 t^3 \pi^2 + 10488240 C_3 L^4 b^6 h^4 t^3 \pi^2 + \\
& 5993280 C_3 L^4 b^7 h^3 t^3 \pi^2 + 2247480 C_3 L^4 b^8 h^2 t^3 \pi^2 + 1055160 C_3 L^4 b^2 h^7 t^4 \pi^3 +
\end{aligned}$$

$$\begin{aligned}
& 2462040 C_3 L^4 b^3 h^6 t^4 \pi^3 + 3693060 C_3 L^4 b^4 h^5 t^4 \pi^3 + 3693060 C_3 L^4 b^5 h^4 t^4 \pi^3 + \\
& 2462040 C_3 L^4 b^6 h^3 t^4 \pi^3 + 1055160 C_3 L^4 b^7 h^2 t^4 \pi^3 + 18 C_1 L^4 b^9 r_0^2 t^2 \pi^3 + 5808 C_2 L^4 b^9 r_0^2 t^2 \pi^3 + \\
& 175860 C_3 L^4 b^9 r_0^2 t^2 \pi^3 + 18 C_1 L^4 h^9 r_0^2 t^2 \pi^3 + 5808 C_2 L^4 h^9 r_0^2 t^2 \pi^3 + 175860 C_3 L^4 h^9 r_0^2 t^2 \pi^3 + \\
& 264 \pi C_1 L^4 b h^{10} t^2 + 264 \pi C_1 L^4 b^{10} h t^2 + 33792 \pi C_2 L^4 b h^{10} t^2 + 33792 \pi C_2 L^4 b^{10} h t^2 + \\
& 587664 \pi C_3 L^4 b h^{10} t^2 + 587664 \pi C_3 L^4 b^{10} h t^2 + 1320 \pi C_1 L^4 b^2 h^9 t^2 + 3960 \pi C_1 L^4 b^3 h^8 t^2 + \\
& 7920 \pi C_1 L^4 b^4 h^7 t^2 + 11088 \pi C_1 L^4 b^5 h^6 t^2 + 11088 \pi C_1 L^4 b^6 h^5 t^2 + 7920 \pi C_1 L^4 b^7 h^4 t^2 + \\
& 3960 \pi C_1 L^4 b^8 h^3 t^2 + 1320 \pi C_1 L^4 b^9 h^2 t^2 + 120 C_1 L^4 b h^9 t^3 \pi^2 + 120 C_1 L^4 b^9 h t^3 \pi^2 + \\
& 168960 \pi C_2 L^4 b^2 h^9 t^2 + 506880 \pi C_2 L^4 b^3 h^8 t^2 + 1013760 \pi C_2 L^4 b^4 h^7 t^2 + 1419264 \pi C_2 L^4 b^5 h^6 t^2 + \\
& 1419264 \pi C_2 L^4 b^6 h^5 t^2 + 1013760 \pi C_2 L^4 b^7 h^4 t^2 + 506880 \pi C_2 L^4 b^8 h^3 t^2 + 168960 \pi C_2 L^4 b^9 h^2 t^2 + \\
& 27 C_1 L^4 b h^8 t^4 \pi^3 + 27 C_1 L^4 b^8 h t^4 \pi^3 + 22400 C_2 L^4 b h^9 t^3 \pi^2 + 22400 C_2 L^4 b^9 h t^3 \pi^2 + \\
& 2938320 \pi C_3 L^4 b^2 h^9 t^2 + 8814960 \pi C_3 L^4 b^3 h^8 t^2 + 17629920 \pi C_3 L^4 b^4 h^7 t^2 + \\
& 24681888 \pi C_3 L^4 b^5 h^6 t^2 + 24681888 \pi C_3 L^4 b^6 h^5 t^2 + 17629920 \pi C_3 L^4 b^7 h^4 t^2 + \\
& 8814960 \pi C_3 L^4 b^8 h^3 t^2 + 2938320 \pi C_3 L^4 b^9 h^2 t^2 + 8712 C_2 L^4 b h^8 t^4 \pi^3 + 8712 C_2 L^4 b^8 h t^4 \pi^3 + \\
& 499440 C_3 L^4 b^8 h^3 t^2 + 499440 C_3 L^4 b^9 h^2 t^2 + 263790 C_3 L^4 b h^8 t^4 \pi^3 + 263790 C_3 L^4 b^8 h t^4 \pi^3 + \\
& 2640 \pi C_1 L^4 b^2 h^9 r_0 t + 7920 \pi C_1 L^4 b^3 h^8 r_0 t + 15840 \pi C_1 L^4 b^4 h^7 r_0 t + 22176 \pi C_1 L^4 b^5 h^6 r_0 t + \\
& 22176 \pi C_1 L^4 b^6 h^5 r_0 t + 15840 \pi C_1 L^4 b^7 h^4 r_0 t + 7920 \pi C_1 L^4 b^8 h^3 r_0 t + 2640 \pi C_1 L^4 b^9 h^2 r_0 t + \\
& 337920 \pi C_2 L^4 b^2 h^9 r_0 t + 1013760 \pi C_2 L^4 b^3 h^8 r_0 t + 2027520 \pi C_2 L^4 b^4 h^7 r_0 t + \\
& 2838528 \pi C_2 L^4 b^5 h^6 r_0 t + 2838528 \pi C_2 L^4 b^6 h^5 r_0 t + 2027520 \pi C_2 L^4 b^7 h^4 r_0 t + \\
& 1013760 \pi C_2 L^4 b^8 h^3 r_0 t + 337920 \pi C_2 L^4 b^9 h^2 r_0 t + 5876640 \pi C_3 L^4 b^2 h^9 r_0 t + \\
& 17629920 \pi C_3 L^4 b^3 h^8 r_0 t + 35259840 \pi C_3 L^4 b^4 h^7 r_0 t + 49363776 \pi C_3 L^4 b^5 h^6 r_0 t + \\
& 49363776 \pi C_3 L^4 b^6 h^5 r_0 t + 35259840 \pi C_3 L^4 b^7 h^4 r_0 t + 17629920 \pi C_3 L^4 b^8 h^3 r_0 t + \\
& 5876640 \pi C_3 L^4 b^9 h^2 r_0 t + 648 C_1 L^4 b^2 h^7 r_0^2 t^2 \pi^3 + 1512 C_1 L^4 b^3 h^6 r_0^2 t^2 \pi^3 + \\
& 2268 C_1 L^4 b^4 h^5 r_0^2 t^2 \pi^3 + 2268 C_1 L^4 b^5 h^4 r_0^2 t^2 \pi^3 + 1512 C_1 L^4 b^6 h^3 r_0^2 t^2 \pi^3 + \\
& 648 C_1 L^4 b^7 h^2 r_0^2 t^2 \pi^3 + 209088 C_2 L^4 b^2 h^7 r_0^2 t^2 \pi^3 + 487872 C_2 L^4 b^3 h^6 r_0^2 t^2 \pi^3 + \\
& 731808 C_2 L^4 b^4 h^5 r_0^2 t^2 \pi^3 + 731808 C_2 L^4 b^5 h^4 r_0^2 t^2 \pi^3 + 487872 C_2 L^4 b^6 h^3 r_0^2 t^2 \pi^3 + \\
& 209088 C_2 L^4 b^7 h^2 r_0^2 t^2 \pi^3 + 6330960 C_3 L^4 b^2 h^7 r_0^2 t^2 \pi^3 + 14772240 C_3 L^4 b^3 h^6 r_0^2 t^2 \pi^3 + \\
& 22158360 C_3 L^4 b^4 h^5 r_0^2 t^2 \pi^3 + 22158360 C_3 L^4 b^5 h^4 r_0^2 t^2 \pi^3 + 14772240 C_3 L^4 b^6 h^3 r_0^2 t^2 \pi^3 + \\
& 6330960 C_3 L^4 b^7 h^2 r_0^2 t^2 \pi^3 + 360 C_1 L^4 b h^9 r_0 t^2 \pi^2 + 360 C_1 L^4 b h^9 r_0 t^2 \pi^2 + \\
& 360 C_1 L^4 b^9 h r_0 t^2 \pi^2 + 360 C_1 L^4 b^9 h r_0 t^2 \pi^2 + 108 C_1 L^4 b h^8 r_0 t^3 \pi^3 + 108 C_1 L^4 b h^8 r_0 t^3 \pi^3 + \\
& 108 C_1 L^4 b^8 h r_0 t^3 \pi^3 + 108 C_1 L^4 b^8 h r_0 t^3 \pi^3 + 67200 C_2 L^4 b h^9 r_0 t^2 \pi^2 + 67200 C_2 L^4 b h^9 r_0 t^2 \pi^2 + \\
& 67200 C_2 L^4 b^9 h r_0 t^2 \pi^2 + 67200 C_2 L^4 b^9 h r_0 t^2 \pi^2 + 34848 C_2 L^4 b h^8 r_0 t^3 \pi^3 + \\
& 34848 C_2 L^4 b h^8 r_0 t^3 \pi^3 + 34848 C_2 L^4 b^8 h r_0 t^3 \pi^3 + 34848 C_2 L^4 b^8 h r_0 t^3 \pi^3 + \\
& 1498320 C_3 L^4 b h^9 r_0 t^2 \pi^2 + 1498320 C_3 L^4 b h^9 r_0 t^2 \pi^2 + 1498320 C_3 L^4 b^9 h r_0 t^2 \pi^2 + \\
& 1498320 C_3 L^4 b^9 h r_0 t^2 \pi^2 + 1055160 C_3 L^4 b h^8 r_0 t^3 \pi^3 + 1055160 C_3 L^4 b h^8 r_0 t^3 \pi^3 + \\
& 1055160 C_3 L^4 b^8 h r_0 t^3 \pi^3 + 1055160 C_3 L^4 b^8 h r_0 t^3 \pi^3 + 528 \pi C_1 L^4 b h^{10} r_0 t + \\
& 528 \pi C_1 L^4 b^{10} h r_0 t + 67584 \pi C_2 L^4 b h^{10} r_0 t + 67584 \pi C_2 L^4 b^{10} h r_0 t + 1175328 \pi C_3 L^4 b h^{10} r_0 t + \\
& 1175328 \pi C_3 L^4 b^{10} h r_0 t + 1620 C_1 L^4 b^2 h^8 r_0 t^2 \pi^2 + 1620 C_1 L^4 b^2 h^8 r_0 t^2 \pi^2 + \\
& 4320 C_1 L^4 b^3 h^7 r_0 t^2 \pi^2 + 4320 C_1 L^4 b^3 h^7 r_0 t^2 \pi^2 + 7560 C_1 L^4 b^4 h^6 r_0 t^2 \pi^2 + \\
& 7560 C_1 L^4 b^4 h^6 r_0 t^2 \pi^2 + 9072 C_1 L^4 b^5 h^5 r_0 t^2 \pi^2 + 9072 C_1 L^4 b^5 h^5 r_0 t^2 \pi^2 + \\
& 7560 C_1 L^4 b^6 h^4 r_0 t^2 \pi^2 + 7560 C_1 L^4 b^6 h^4 r_0 t^2 \pi^2 + 4320 C_1 L^4 b^7 h^3 r_0 t^2 \pi^2 + \\
& 4320 C_1 L^4 b^7 h^3 r_0 t^2 \pi^2 + 1620 C_1 L^4 b^8 h^2 r_0 t^2 \pi^2 + 1620 C_1 L^4 b^8 h^2 r_0 t^2 \pi^2 + \\
& 162 C_1 L^4 b h^8 r_0^2 t^2 \pi^3 + 432 C_1 L^4 b^2 h^7 r_0 t^3 \pi^3 + 432 C_1 L^4 b^2 h^7 r_0 t^3 \pi^3 + 1008 C_1 L^4 b^3 h^6 r_0 t^3 \pi^3 + \\
& 1008 C_1 L^4 b^3 h^6 r_0 t^3 \pi^3 + 1512 C_1 L^4 b^4 h^5 r_0 t^3 \pi^3 + 1512 C_1 L^4 b^4 h^5 r_0 t^3 \pi^3 + \\
& 1512 C_1 L^4 b^5 h^4 r_0 t^3 \pi^3 + 1512 C_1 L^4 b^5 h^4 r_0 t^3 \pi^3 + 1008 C_1 L^4 b^6 h^3 r_0 t^3 \pi^3 + \\
& 1008 C_1 L^4 b^6 h^3 r_0 t^3 \pi^3 + 432 C_1 L^4 b^7 h^2 r_0 t^3 \pi^3 + 432 C_1 L^4 b^7 h^2 r_0 t^3 \pi^3 + 162 C_1 L^4 b^8 h r_0^2 t^2 \pi^3 + \\
& 302400 C_2 L^4 b^2 h^8 r_0 t^2 \pi^2 + 302400 C_2 L^4 b^2 h^8 r_0 t^2 \pi^2 + 806400 C_2 L^4 b^3 h^7 r_0 t^2 \pi^2 +
\end{aligned}$$

$$\begin{aligned}
& 806400 C_2 L^4 b^3 h^7 r_0^2 t \pi^2 + 1411200 C_2 L^4 b^4 h^6 r_0 t^2 \pi^2 + 1411200 C_2 L^4 b^4 h^6 r_0^2 t \pi^2 + \\
& 1693440 C_2 L^4 b^5 h^5 r_0 t^2 \pi^2 + 1693440 C_2 L^4 b^5 h^5 r_0^2 t \pi^2 + 1411200 C_2 L^4 b^6 h^4 r_0 t^2 \pi^2 + \\
& 1411200 C_2 L^4 b^6 h^4 r_0^2 t \pi^2 + 806400 C_2 L^4 b^7 h^3 r_0 t^2 \pi^2 + 806400 C_2 L^4 b^7 h^3 r_0^2 t \pi^2 + \\
& 302400 C_2 L^4 b^8 h^2 r_0 t^2 \pi^2 + 302400 C_2 L^4 b^8 h^2 r_0^2 t \pi^2 + 52272 C_2 L^4 b h^8 r_0^2 t^2 \pi^3 + \\
& 139392 C_2 L^4 b^2 h^7 r_0 t^3 \pi^3 + 139392 C_2 L^4 b^2 h^7 r_0^3 t \pi^3 + 325248 C_2 L^4 b^3 h^6 r_0 t^3 \pi^3 + \\
& 325248 C_2 L^4 b^3 h^6 r_0^3 t \pi^3 + 487872 C_2 L^4 b^4 h^5 r_0 t^3 \pi^3 + 487872 C_2 L^4 b^4 h^5 r_0^3 t \pi^3 + \\
& 487872 C_2 L^4 b^5 h^4 r_0 t^3 \pi^3 + 487872 C_2 L^4 b^5 h^4 r_0^3 t \pi^3 + 325248 C_2 L^4 b^6 h^3 r_0 t^3 \pi^3 + \\
& 325248 C_2 L^4 b^6 h^3 r_0^3 t \pi^3 + 139392 C_2 L^4 b^7 h^2 r_0 t^3 \pi^3 + 139392 C_2 L^4 b^7 h^2 r_0^3 t \pi^3 + \\
& 52272 C_2 L^4 b^8 h r_0^2 t^2 \pi^3 + 6742440 C_3 L^4 b^2 h^8 r_0 t^2 \pi^2 + 6742440 C_3 L^4 b^2 h^8 r_0^2 t \pi^2 + \\
& 17979840 C_3 L^4 b^3 h^7 r_0 t^2 \pi^2 + 17979840 C_3 L^4 b^3 h^7 r_0^2 t \pi^2 + 31464720 C_3 L^4 b^4 h^6 r_0 t^2 \pi^2 + \\
& 31464720 C_3 L^4 b^4 h^6 r_0^2 t \pi^2 + 37757664 C_3 L^4 b^5 h^5 r_0 t^2 \pi^2 + 37757664 C_3 L^4 b^5 h^5 r_0^2 t \pi^2 + \\
& 31464720 C_3 L^4 b^6 h^4 r_0 t^2 \pi^2 + 31464720 C_3 L^4 b^6 h^4 r_0^2 t \pi^2 + 17979840 C_3 L^4 b^7 h^3 r_0 t^2 \pi^2 + \\
& 17979840 C_3 L^4 b^7 h^3 r_0^2 t \pi^2 + 6742440 C_3 L^4 b^8 h^2 r_0 t^2 \pi^2 + 6742440 C_3 L^4 b^8 h^2 r_0^2 t \pi^2 + \\
& 1582740 C_3 L^4 b h^8 r_0^2 t^2 \pi^3 + 4220640 C_3 L^4 b^2 h^7 r_0 t^3 \pi^3 + 4220640 C_3 L^4 b^2 h^7 r_0^3 t \pi^3 + \\
& 9848160 C_3 L^4 b^3 h^6 r_0 t^3 \pi^3 + 9848160 C_3 L^4 b^3 h^6 r_0^3 t \pi^3 + 14772240 C_3 L^4 b^4 h^5 r_0 t^3 \pi^3 + \\
& 14772240 C_3 L^4 b^4 h^5 r_0^3 t \pi^3 + 14772240 C_3 L^4 b^5 h^4 r_0 t^3 \pi^3 + 14772240 C_3 L^4 b^5 h^4 r_0^3 t \pi^3 + \\
& 9848160 C_3 L^4 b^6 h^3 r_0 t^3 \pi^3 + 9848160 C_3 L^4 b^6 h^3 r_0^3 t \pi^3 + 4220640 C_3 L^4 b^7 h^2 r_0 t^3 \pi^3 + \\
& 4220640 C_3 L^4 b^7 h^2 r_0^3 t \pi^3 + 1582740 C_3 L^4 b^8 h r_0^2 t^2 \pi^3
\end{aligned}$$

$$\begin{aligned}
& a_{t,9} = 240 \pi C_1 L^5 b^{10} t^2 + 9600 \pi C_2 L^5 b^{10} t^2 + 84384 \pi C_3 L^5 b^{10} t^2 + 240 \pi C_1 L^5 h^{10} t^2 + \\
& 9600 \pi C_2 L^5 h^{10} t^2 + 84384 \pi C_3 L^5 h^{10} t^2 + 112 C_1 L^5 b^9 t^3 \pi^2 + 26 C_1 L^5 b^8 t^4 \pi^3 + \\
& 6592 C_2 L^5 b^9 t^3 \pi^2 + 2656 C_2 L^5 b^8 t^4 \pi^3 + 76128 C_3 L^5 b^9 t^3 \pi^2 + 42636 C_3 L^5 b^8 t^4 \pi^3 + \\
& 112 C_1 L^5 h^9 t^3 \pi^2 + 26 C_1 L^5 h^8 t^4 \pi^3 + 6592 C_2 L^5 h^9 t^3 \pi^2 + 2656 C_2 L^5 h^8 t^4 \pi^3 + \\
& 76128 C_3 L^5 h^9 t^3 \pi^2 + 42636 C_3 L^5 h^8 t^4 \pi^3 + 336 C_1 L^5 b^9 r_0 t^2 \pi^2 + 336 C_1 L^5 b^9 r_0^2 t \pi^2 + \\
& 104 C_1 L^5 b^8 r_0 t^3 \pi^3 + 104 C_1 L^5 b^8 r_0^3 t \pi^3 + 19776 C_2 L^5 b^9 r_0 t^2 \pi^2 + 19776 C_2 L^5 b^9 r_0^2 t \pi^2 + \\
& 10624 C_2 L^5 b^8 r_0 t^3 \pi^3 + 10624 C_2 L^5 b^8 r_0^3 t \pi^3 + 228384 C_3 L^5 b^9 r_0 t^2 \pi^2 + 228384 C_3 L^5 b^9 r_0^2 t \pi^2 + \\
& 170544 C_3 L^5 b^8 r_0 t^3 \pi^3 + 170544 C_3 L^5 b^8 r_0^3 t \pi^3 + 336 C_1 L^5 h^9 r_0 t^2 \pi^2 + 336 C_1 L^5 h^9 r_0^2 t \pi^2 + \\
& 104 C_1 L^5 h^8 r_0 t^3 \pi^3 + 104 C_1 L^5 h^8 r_0^3 t \pi^3 + 19776 C_2 L^5 h^9 r_0 t^2 \pi^2 + 19776 C_2 L^5 h^9 r_0^2 t \pi^2 + \\
& 10624 C_2 L^5 h^8 r_0 t^3 \pi^3 + 10624 C_2 L^5 h^8 r_0^3 t \pi^3 + 228384 C_3 L^5 h^9 r_0 t^2 \pi^2 + 228384 C_3 L^5 h^9 r_0^2 t \pi^2 + \\
& 170544 C_3 L^5 h^8 r_0 t^3 \pi^3 + 170544 C_3 L^5 h^8 r_0^3 t \pi^3 + 480 \pi C_1 L^5 b^{10} r_0 t + 19200 \pi C_2 L^5 b^{10} r_0 t + \\
& 168768 \pi C_3 L^5 b^{10} r_0 t + 480 \pi C_1 L^5 h^{10} r_0 t + 19200 \pi C_2 L^5 h^{10} r_0 t + 168768 \pi C_3 L^5 h^{10} r_0 t + \\
& 4032 C_1 L^5 b^2 h^7 t^3 \pi^2 + 9408 C_1 L^5 b^3 h^6 t^3 \pi^2 + 14112 C_1 L^5 b^4 h^5 t^3 \pi^2 + 14112 C_1 L^5 b^5 h^4 t^3 \pi^2 + \\
& 9408 C_1 L^5 b^6 h^3 t^3 \pi^2 + 4032 C_1 L^5 b^7 h^2 t^3 \pi^2 + 728 C_1 L^5 b^2 h^6 t^4 \pi^3 + 1456 C_1 L^5 b^3 h^5 t^4 \pi^3 + \\
& 1820 C_1 L^5 b^4 h^4 t^4 \pi^3 + 1456 C_1 L^5 b^5 h^3 t^4 \pi^3 + 728 C_1 L^5 b^6 h^2 t^4 \pi^3 + 237312 C_2 L^5 b^2 h^7 t^3 \pi^2 + \\
& 553728 C_2 L^5 b^3 h^6 t^3 \pi^2 + 830592 C_2 L^5 b^4 h^5 t^3 \pi^2 + 830592 C_2 L^5 b^5 h^4 t^3 \pi^2 + 553728 C_2 L^5 b^6 h^3 t^3 \pi^2 + \\
& 237312 C_2 L^5 b^7 h^2 t^3 \pi^2 + 74368 C_2 L^5 b^2 h^6 t^4 \pi^3 + 148736 C_2 L^5 b^3 h^5 t^4 \pi^3 + 185920 C_2 L^5 b^4 h^4 t^4 \pi^3 + \\
& 148736 C_2 L^5 b^5 h^3 t^4 \pi^3 + 74368 C_2 L^5 b^6 h^2 t^4 \pi^3 + 2740608 C_3 L^5 b^2 h^7 t^3 \pi^2 + 6394752 C_3 L^5 b^3 h^6 t^3 \pi^2 + \\
& 9592128 C_3 L^5 b^4 h^5 t^3 \pi^2 + 9592128 C_3 L^5 b^5 h^4 t^3 \pi^2 + 6394752 C_3 L^5 b^6 h^3 t^3 \pi^2 + \\
& 2740608 C_3 L^5 b^7 h^2 t^3 \pi^2 + 1193808 C_3 L^5 b^2 h^6 t^4 \pi^3 + 2387616 C_3 L^5 b^3 h^5 t^4 \pi^3 + \\
& 2984520 C_3 L^5 b^4 h^4 t^4 \pi^3 + 2387616 C_3 L^5 b^5 h^3 t^4 \pi^3 + 1193808 C_3 L^5 b^6 h^2 t^4 \pi^3 + \\
& 156 C_1 L^5 b^8 r_0^2 t^2 \pi^3 + 15936 C_2 L^5 b^8 r_0^2 t^2 \pi^3 + 255816 C_3 L^5 b^8 r_0^2 t^2 \pi^3 + 156 C_1 L^5 h^8 r_0^2 t^2 \pi^3 + \\
& 15936 C_2 L^5 h^8 r_0^2 t^2 \pi^3 + 255816 C_3 L^5 h^8 r_0^2 t^2 \pi^3 + 2400 \pi C_1 L^5 b h^9 t^2 + 2400 \pi C_1 L^5 b^9 h t^2 + \\
& 96000 \pi C_2 L^5 b h^9 t^2 + 96000 \pi C_2 L^5 b^9 h t^2 + 843840 \pi C_3 L^5 b h^9 t^2 + 843840 \pi C_3 L^5 b^9 h t^2 + \\
& 10800 \pi C_1 L^5 b^2 h^8 t^2 + 28800 \pi C_1 L^5 b^3 h^7 t^2 + 50400 \pi C_1 L^5 b^4 h^6 t^2 + 60480 \pi C_1 L^5 b^5 h^5 t^2 + \\
& 50400 \pi C_1 L^5 b^6 h^4 t^2 + 28800 \pi C_1 L^5 b^7 h^3 t^2 + 10800 \pi C_1 L^5 b^8 h^2 t^2 + 1008 C_1 L^5 b h^8 t^3 \pi^2 + \\
& 1008 C_1 L^5 b^8 h t^3 \pi^2 + 432000 \pi C_2 L^5 b^2 h^8 t^2 + 1152000 \pi C_2 L^5 b^3 h^7 t^2 + 2016000 \pi C_2 L^5 b^4 h^6 t^2 +
\end{aligned}$$

$$\begin{aligned}
& 2419200 \pi C_2 L^5 b^5 h^5 t^2 + 2016000 \pi C_2 L^5 b^6 h^4 t^2 + 1152000 \pi C_2 L^5 b^7 h^3 t^2 + 432000 \pi C_2 L^5 b^8 h^2 t^2 + \\
& 208 C_1 L^5 b h^7 t^4 \pi^3 + 208 C_1 L^5 b^7 h t^4 \pi^3 + 59328 C_2 L^5 b h^8 t^3 \pi^2 + 59328 C_2 L^5 b^8 h t^3 \pi^2 + \\
& 3797280 \pi C_3 L^5 b^2 h^8 t^2 + 10126080 \pi C_3 L^5 b^3 h^7 t^2 + 17720640 \pi C_3 L^5 b^4 h^6 t^2 + \\
& 21264768 \pi C_3 L^5 b^5 h^5 t^2 + 17720640 \pi C_3 L^5 b^6 h^4 t^2 + 10126080 \pi C_3 L^5 b^7 h^3 t^2 + \\
& 3797280 \pi C_3 L^5 b^8 h^2 t^2 + 21248 C_2 L^5 b h^7 t^4 \pi^3 + 21248 C_2 L^5 b^7 h t^4 \pi^3 + 685152 C_3 L^5 b h^8 t^3 \pi^2 + \\
& 685152 C_3 L^5 b^8 h t^3 \pi^2 + 341088 C_3 L^5 b h^7 t^4 \pi^3 + 341088 C_3 L^5 b^7 h t^4 \pi^3 + 21600 \pi C_1 L^5 b^2 h^8 r_0 t + \\
& 57600 \pi C_1 L^5 b^3 h^7 r_0 t + 100800 \pi C_1 L^5 b^4 h^6 r_0 t + 120960 \pi C_1 L^5 b^5 h^5 r_0 t + 100800 \pi C_1 L^5 b^6 h^4 r_0 t + \\
& 57600 \pi C_1 L^5 b^7 h^3 r_0 t + 21600 \pi C_1 L^5 b^8 h^2 r_0 t + 864000 \pi C_2 L^5 b^2 h^8 r_0 t + 2304000 \pi C_2 L^5 b^3 h^7 r_0 t + \\
& 4032000 \pi C_2 L^5 b^4 h^6 r_0 t + 4838400 \pi C_2 L^5 b^5 h^5 r_0 t + 4032000 \pi C_2 L^5 b^6 h^4 r_0 t + \\
& 2304000 \pi C_2 L^5 b^7 h^3 r_0 t + 864000 \pi C_2 L^5 b^8 h^2 r_0 t + 7594560 \pi C_3 L^5 b^2 h^8 r_0 t + \\
& 20252160 \pi C_3 L^5 b^3 h^7 r_0 t + 35441280 \pi C_3 L^5 b^4 h^6 r_0 t + 42529536 \pi C_3 L^5 b^5 h^5 r_0 t + \\
& 35441280 \pi C_3 L^5 b^6 h^4 r_0 t + 20252160 \pi C_3 L^5 b^7 h^3 r_0 t + 7594560 \pi C_3 L^5 b^8 h^2 r_0 t + \\
& 4368 C_1 L^5 b^2 h^6 r_0 t^2 \pi^3 + 8736 C_1 L^5 b^3 h^5 r_0 t^2 \pi^3 + 10920 C_1 L^5 b^4 h^4 r_0 t^2 \pi^3 + \\
& 8736 C_1 L^5 b^5 h^3 r_0 t^2 \pi^3 + 4368 C_1 L^5 b^6 h^2 r_0 t^2 \pi^3 + 446208 C_2 L^5 b^2 h^6 r_0 t^2 \pi^3 + \\
& 892416 C_2 L^5 b^3 h^5 r_0 t^2 \pi^3 + 1115520 C_2 L^5 b^4 h^4 r_0 t^2 \pi^3 + 892416 C_2 L^5 b^5 h^3 r_0 t^2 \pi^3 + \\
& 446208 C_2 L^5 b^6 h^2 r_0 t^2 \pi^3 + 7162848 C_3 L^5 b^2 h^6 r_0 t^2 \pi^3 + 14325696 C_3 L^5 b^3 h^5 r_0 t^2 \pi^3 + \\
& 17907120 C_3 L^5 b^4 h^4 r_0 t^2 \pi^3 + 14325696 C_3 L^5 b^5 h^3 r_0 t^2 \pi^3 + 7162848 C_3 L^5 b^6 h^2 r_0 t^2 \pi^3 + \\
& 3024 C_1 L^5 b h^8 r_0 t^2 \pi^2 + 3024 C_1 L^5 b h^8 r_0 t^2 \pi^2 + 3024 C_1 L^5 b^8 h r_0 t^2 \pi^2 + 3024 C_1 L^5 b^8 h r_0 t^2 \pi^2 + \\
& 832 C_1 L^5 b h^7 r_0 t^3 \pi^3 + 832 C_1 L^5 b h^7 r_0 t^3 \pi^3 + 832 C_1 L^5 b^7 h r_0 t^3 \pi^3 + 832 C_1 L^5 b^7 h r_0 t^3 \pi^3 + \\
& 177984 C_2 L^5 b h^8 r_0 t^2 \pi^2 + 177984 C_2 L^5 b h^8 r_0 t^2 \pi^2 + 177984 C_2 L^5 b^8 h r_0 t^2 \pi^2 + \\
& 177984 C_2 L^5 b^8 h r_0 t^2 \pi^2 + 84992 C_2 L^5 b h^7 r_0 t^3 \pi^3 + 84992 C_2 L^5 b h^7 r_0 t^3 \pi^3 + \\
& 84992 C_2 L^5 b^7 h r_0 t^3 \pi^3 + 84992 C_2 L^5 b^7 h r_0 t^3 \pi^3 + 2055456 C_3 L^5 b h^8 r_0 t^2 \pi^2 + \\
& 2055456 C_3 L^5 b h^8 r_0 t^2 \pi^2 + 2055456 C_3 L^5 b^8 h r_0 t^2 \pi^2 + 2055456 C_3 L^5 b^8 h r_0 t^2 \pi^2 + \\
& 1364352 C_3 L^5 b h^7 r_0 t^3 \pi^3 + 1364352 C_3 L^5 b h^7 r_0 t^3 \pi^3 + 1364352 C_3 L^5 b^7 h r_0 t^3 \pi^3 + \\
& 1364352 C_3 L^5 b^7 h r_0 t^3 \pi^3 + 4800 \pi C_1 L^5 b h^9 r_0 t + 4800 \pi C_1 L^5 b^9 h r_0 t + 192000 \pi C_2 L^5 b h^9 r_0 t + \\
& 192000 \pi C_2 L^5 b^9 h r_0 t + 1687680 \pi C_3 L^5 b h^9 r_0 t + 1687680 \pi C_3 L^5 b^9 h r_0 t + 12096 C_1 L^5 b^2 h^7 r_0 t^2 \pi^2 + \\
& 12096 C_1 L^5 b^2 h^7 r_0 t^2 \pi^2 + 28224 C_1 L^5 b^3 h^6 r_0 t^2 \pi^2 + 28224 C_1 L^5 b^3 h^6 r_0 t^2 \pi^2 + \\
& 42336 C_1 L^5 b^4 h^5 r_0 t^2 \pi^2 + 42336 C_1 L^5 b^4 h^5 r_0 t^2 \pi^2 + 42336 C_1 L^5 b^5 h^4 r_0 t^2 \pi^2 + \\
& 42336 C_1 L^5 b^5 h^4 r_0 t^2 \pi^2 + 28224 C_1 L^5 b^6 h^3 r_0 t^2 \pi^2 + 28224 C_1 L^5 b^6 h^3 r_0 t^2 \pi^2 + \\
& 12096 C_1 L^5 b^7 h^2 r_0 t^2 \pi^2 + 12096 C_1 L^5 b^7 h^2 r_0 t^2 \pi^2 + 1248 C_1 L^5 b h^7 r_0 t^2 \pi^3 + \\
& 2912 C_1 L^5 b^2 h^6 r_0 t^3 \pi^3 + 2912 C_1 L^5 b^2 h^6 r_0 t^3 \pi^3 + 5824 C_1 L^5 b^3 h^5 r_0 t^3 \pi^3 + \\
& 5824 C_1 L^5 b^3 h^5 r_0 t^3 \pi^3 + 7280 C_1 L^5 b^4 h^4 r_0 t^3 \pi^3 + 7280 C_1 L^5 b^4 h^4 r_0 t^3 \pi^3 + \\
& 5824 C_1 L^5 b^5 h^3 r_0 t^3 \pi^3 + 5824 C_1 L^5 b^5 h^3 r_0 t^3 \pi^3 + 2912 C_1 L^5 b^6 h^2 r_0 t^3 \pi^3 + \\
& 2912 C_1 L^5 b^6 h^2 r_0 t^3 \pi^3 + 1248 C_1 L^5 b^7 h r_0 t^2 \pi^3 + 711936 C_2 L^5 b^2 h^7 r_0 t^2 \pi^2 + \\
& 711936 C_2 L^5 b^2 h^7 r_0 t^2 \pi^2 + 1661184 C_2 L^5 b^3 h^6 r_0 t^2 \pi^2 + 1661184 C_2 L^5 b^3 h^6 r_0 t^2 \pi^2 + \\
& 2491776 C_2 L^5 b^4 h^5 r_0 t^2 \pi^2 + 2491776 C_2 L^5 b^4 h^5 r_0 t^2 \pi^2 + 2491776 C_2 L^5 b^5 h^4 r_0 t^2 \pi^2 + \\
& 2491776 C_2 L^5 b^5 h^4 r_0 t^2 \pi^2 + 1661184 C_2 L^5 b^6 h^3 r_0 t^2 \pi^2 + 1661184 C_2 L^5 b^6 h^3 r_0 t^2 \pi^2 + \\
& 711936 C_2 L^5 b^7 h^2 r_0 t^2 \pi^2 + 711936 C_2 L^5 b^7 h^2 r_0 t^2 \pi^2 + 127488 C_2 L^5 b h^7 r_0 t^2 \pi^3 + \\
& 297472 C_2 L^5 b^2 h^6 r_0 t^3 \pi^3 + 297472 C_2 L^5 b^2 h^6 r_0 t^3 \pi^3 + 594944 C_2 L^5 b^3 h^5 r_0 t^3 \pi^3 + \\
& 594944 C_2 L^5 b^3 h^5 r_0 t^3 \pi^3 + 743680 C_2 L^5 b^4 h^4 r_0 t^3 \pi^3 + 743680 C_2 L^5 b^4 h^4 r_0 t^3 \pi^3 + \\
& 594944 C_2 L^5 b^5 h^3 r_0 t^3 \pi^3 + 594944 C_2 L^5 b^5 h^3 r_0 t^3 \pi^3 + 297472 C_2 L^5 b^6 h^2 r_0 t^3 \pi^3 + \\
& 297472 C_2 L^5 b^6 h^2 r_0 t^3 \pi^3 + 127488 C_2 L^5 b^7 h r_0 t^2 \pi^3 + 8221824 C_3 L^5 b^2 h^7 r_0 t^2 \pi^2 + \\
& 8221824 C_3 L^5 b^2 h^7 r_0 t^2 \pi^2 + 19184256 C_3 L^5 b^3 h^6 r_0 t^2 \pi^2 + 19184256 C_3 L^5 b^3 h^6 r_0 t^2 \pi^2 + \\
& 28776384 C_3 L^5 b^4 h^5 r_0 t^2 \pi^2 + 28776384 C_3 L^5 b^4 h^5 r_0 t^2 \pi^2 + 28776384 C_3 L^5 b^5 h^4 r_0 t^2 \pi^2 + \\
& 28776384 C_3 L^5 b^5 h^4 r_0 t^2 \pi^2 + 19184256 C_3 L^5 b^6 h^3 r_0 t^2 \pi^2 + 19184256 C_3 L^5 b^6 h^3 r_0 t^2 \pi^2 + \\
& 8221824 C_3 L^5 b^7 h^2 r_0 t^2 \pi^2 + 8221824 C_3 L^5 b^7 h^2 r_0 t^2 \pi^2 + 2046528 C_3 L^5 b h^7 r_0 t^2 \pi^3 +
\end{aligned}$$

$$\begin{aligned}
& 4775232 C_3 L^5 b^2 h^6 r_0 t^3 \pi^3 + 4775232 C_3 L^5 b^2 h^6 r_0^3 t \pi^3 + 9550464 C_3 L^5 b^3 h^5 r_0 t^3 \pi^3 + \\
& 9550464 C_3 L^5 b^3 h^5 r_0^3 t \pi^3 + 11938080 C_3 L^5 b^4 h^4 r_0 t^3 \pi^3 + 11938080 C_3 L^5 b^4 h^4 r_0^3 t \pi^3 + \\
& 9550464 C_3 L^5 b^5 h^3 r_0 t^3 \pi^3 + 9550464 C_3 L^5 b^5 h^3 r_0^3 t \pi^3 + 4775232 C_3 L^5 b^6 h^2 r_0 t^3 \pi^3 + \\
& 4775232 C_3 L^5 b^6 h^2 r_0^3 t \pi^3 + 2046528 C_3 L^5 b^7 h r_0^2 t^2 \pi^3
\end{aligned}$$

$$\begin{aligned}
a_{t,8} = & 1080 \pi C_1 L^6 b^9 t^2 + 19440 \pi C_2 L^6 b^9 t^2 + 89856 \pi C_3 L^6 b^9 t^2 + 1080 \pi C_1 L^6 h^9 t^2 + \\
& 19440 \pi C_2 L^6 h^9 t^2 + 89856 \pi C_3 L^6 h^9 t^2 + 468 C_1 L^6 b^8 t^3 \pi^2 + 100 C_1 L^6 b^7 t^4 \pi^3 + \\
& 12648 C_2 L^6 b^8 t^3 \pi^2 + 4760 C_2 L^6 b^7 t^4 \pi^3 + 79488 C_3 L^6 b^8 t^3 \pi^2 + 43008 C_3 L^6 b^7 t^4 \pi^3 + \\
& 468 C_1 L^6 h^8 t^3 \pi^2 + 100 C_1 L^6 h^7 t^4 \pi^3 + 12648 C_2 L^6 h^8 t^3 \pi^2 + 4760 C_2 L^6 h^7 t^4 \pi^3 + \\
& 79488 C_3 L^6 h^8 t^3 \pi^2 + 43008 C_3 L^6 h^7 t^4 \pi^3 + 1404 C_1 L^6 b^8 r_0 t^2 \pi^2 + 1404 C_1 L^6 b^8 r_0^2 t \pi^2 + \\
& 400 C_1 L^6 b^7 r_0 t^3 \pi^3 + 400 C_1 L^6 b^7 r_0^3 t \pi^3 + 37944 C_2 L^6 b^8 r_0 t^2 \pi^2 + 37944 C_2 L^6 b^8 r_0^2 t \pi^2 + \\
& 19040 C_2 L^6 b^7 r_0 t^3 \pi^3 + 19040 C_2 L^6 b^7 r_0^3 t \pi^3 + 238464 C_3 L^6 b^8 r_0 t^2 \pi^2 + 238464 C_3 L^6 b^8 r_0^2 t \pi^2 + \\
& 172032 C_3 L^6 b^7 r_0 t^3 \pi^3 + 172032 C_3 L^6 b^7 r_0^3 t \pi^3 + 1404 C_1 L^6 h^8 r_0 t^2 \pi^2 + 1404 C_1 L^6 h^8 r_0^2 t \pi^2 + \\
& 400 C_1 L^6 h^7 r_0 t^3 \pi^3 + 400 C_1 L^6 h^7 r_0^3 t \pi^3 + 37944 C_2 L^6 h^8 r_0 t^2 \pi^2 + 37944 C_2 L^6 h^8 r_0^2 t \pi^2 + \\
& 19040 C_2 L^6 h^7 r_0 t^3 \pi^3 + 19040 C_2 L^6 h^7 r_0^3 t \pi^3 + 238464 C_3 L^6 h^8 r_0 t^2 \pi^2 + 238464 C_3 L^6 h^8 r_0^2 t \pi^2 + \\
& 172032 C_3 L^6 h^7 r_0 t^3 \pi^3 + 172032 C_3 L^6 h^7 r_0^3 t \pi^3 + 2160 \pi C_1 L^6 b^9 r_0 t + 38880 \pi C_2 L^6 b^9 r_0 t + \\
& 179712 \pi C_3 L^6 b^9 r_0 t + 2160 \pi C_1 L^6 h^9 r_0 t + 38880 \pi C_2 L^6 h^9 r_0 t + 179712 \pi C_3 L^6 h^9 r_0 t + \\
& 13104 C_1 L^6 b^2 h^6 t^3 \pi^2 + 26208 C_1 L^6 b^3 h^5 t^3 \pi^2 + 32760 C_1 L^6 b^4 h^4 t^3 \pi^2 + 26208 C_1 L^6 b^5 h^3 t^3 \pi^2 + \\
& 13104 C_1 L^6 b^6 h^2 t^3 \pi^2 + 2100 C_1 L^6 b^2 h^5 t^4 \pi^3 + 3500 C_1 L^6 b^3 h^4 t^4 \pi^3 + 3500 C_1 L^6 b^4 h^3 t^4 \pi^3 + \\
& 2100 C_1 L^6 b^5 h^2 t^4 \pi^3 + 354144 C_2 L^6 b^2 h^6 t^3 \pi^2 + 708288 C_2 L^6 b^3 h^5 t^3 \pi^2 + 885360 C_2 L^6 b^4 h^4 t^3 \pi^2 + \\
& 708288 C_2 L^6 b^5 h^3 t^3 \pi^2 + 354144 C_2 L^6 b^6 h^2 t^3 \pi^2 + 99960 C_2 L^6 b^2 h^5 t^4 \pi^3 + 166600 C_2 L^6 b^3 h^4 t^4 \pi^3 + \\
& 166600 C_2 L^6 b^4 h^3 t^4 \pi^3 + 99960 C_2 L^6 b^5 h^2 t^4 \pi^3 + 2225664 C_3 L^6 b^2 h^6 t^3 \pi^2 + 4451328 C_3 L^6 b^3 h^5 t^3 \pi^2 + \\
& 5564160 C_3 L^6 b^4 h^4 t^3 \pi^2 + 4451328 C_3 L^6 b^5 h^3 t^3 \pi^2 + 2225664 C_3 L^6 b^6 h^2 t^3 \pi^2 + \\
& 903168 C_3 L^6 b^2 h^5 t^4 \pi^3 + 1505280 C_3 L^6 b^3 h^4 t^4 \pi^3 + 1505280 C_3 L^6 b^4 h^3 t^4 \pi^3 + \\
& 903168 C_3 L^6 b^5 h^2 t^4 \pi^3 + 600 C_1 L^6 b^7 r_0^2 t^2 \pi^3 + 28560 C_2 L^6 b^7 r_0^2 t^2 \pi^3 + 258048 C_3 L^6 b^7 r_0^2 t^2 \pi^3 + \\
& 600 C_1 L^6 h^7 r_0^2 t^2 \pi^3 + 28560 C_2 L^6 h^7 r_0^2 t^2 \pi^3 + 258048 C_3 L^6 h^7 r_0^2 t^2 \pi^3 + 9720 \pi C_1 L^6 b h^8 t^2 + \\
& 9720 \pi C_1 L^6 b^8 h t^2 + 174960 \pi C_2 L^6 b h^8 t^2 + 174960 \pi C_2 L^6 b^8 h t^2 + 808704 \pi C_3 L^6 b h^8 t^2 + \\
& 808704 \pi C_3 L^6 b^8 h t^2 + 38880 \pi C_1 L^6 b^2 h^7 t^2 + 90720 \pi C_1 L^6 b^3 h^6 t^2 + 136080 \pi C_1 L^6 b^4 h^5 t^2 + \\
& 136080 \pi C_1 L^6 b^5 h^4 t^2 + 90720 \pi C_1 L^6 b^6 h^3 t^2 + 38880 \pi C_1 L^6 b^7 h^2 t^2 + 3744 C_1 L^6 b h^7 t^3 \pi^2 + \\
& 3744 C_1 L^6 b^7 h t^3 \pi^2 + 699840 \pi C_2 L^6 b^2 h^7 t^2 + 1632960 \pi C_2 L^6 b^3 h^6 t^2 + 2449440 \pi C_2 L^6 b^4 h^5 t^2 + \\
& 2449440 \pi C_2 L^6 b^5 h^4 t^2 + 1632960 \pi C_2 L^6 b^6 h^3 t^2 + 699840 \pi C_2 L^6 b^7 h^2 t^2 + 700 C_1 L^6 b h^6 t^4 \pi^3 + \\
& 700 C_1 L^6 b^6 h t^4 \pi^3 + 101184 C_2 L^6 b h^7 t^3 \pi^2 + 101184 C_2 L^6 b^7 h t^3 \pi^2 + 3234816 \pi C_3 L^6 b^2 h^7 t^2 + \\
& 7547904 \pi C_3 L^6 b^3 h^6 t^2 + 11321856 \pi C_3 L^6 b^4 h^5 t^2 + 11321856 \pi C_3 L^6 b^5 h^4 t^2 + \\
& 7547904 \pi C_3 L^6 b^6 h^3 t^2 + 3234816 \pi C_3 L^6 b^7 h^2 t^2 + 33320 C_2 L^6 b h^6 t^4 \pi^3 + 33320 C_2 L^6 b^6 h t^4 \pi^3 + \\
& 635904 C_3 L^6 b h^7 t^3 \pi^2 + 635904 C_3 L^6 b^7 h t^3 \pi^2 + 301056 C_3 L^6 b h^6 t^4 \pi^3 + 301056 C_3 L^6 b^6 h t^4 \pi^3 + \\
& 77760 \pi C_1 L^6 b^2 h^7 r_0 t + 181440 \pi C_1 L^6 b^3 h^6 r_0 t + 272160 \pi C_1 L^6 b^4 h^5 r_0 t + 272160 \pi C_1 L^6 b^5 h^4 r_0 t + \\
& 181440 \pi C_1 L^6 b^6 h^3 r_0 t + 77760 \pi C_1 L^6 b^7 h^2 r_0 t + 1399680 \pi C_2 L^6 b^2 h^7 r_0 t + \\
& 3265920 \pi C_2 L^6 b^3 h^6 r_0 t + 4898880 \pi C_2 L^6 b^4 h^5 r_0 t + 4898880 \pi C_2 L^6 b^5 h^4 r_0 t + \\
& 3265920 \pi C_2 L^6 b^6 h^3 r_0 t + 1399680 \pi C_2 L^6 b^7 h^2 r_0 t + 6469632 \pi C_3 L^6 b^2 h^7 r_0 t + \\
& 15095808 \pi C_3 L^6 b^3 h^6 r_0 t + 22643712 \pi C_3 L^6 b^4 h^5 r_0 t + 22643712 \pi C_3 L^6 b^5 h^4 r_0 t + \\
& 15095808 \pi C_3 L^6 b^6 h^3 r_0 t + 6469632 \pi C_3 L^6 b^7 h^2 r_0 t + 12600 C_1 L^6 b^2 h^5 r_0^2 t^2 \pi^3 + \\
& 21000 C_1 L^6 b^3 h^4 r_0^2 t^2 \pi^3 + 21000 C_1 L^6 b^4 h^3 r_0^2 t^2 \pi^3 + 12600 C_1 L^6 b^5 h^2 r_0^2 t^2 \pi^3 + \\
& 599760 C_2 L^6 b^2 h^5 r_0^2 t^2 \pi^3 + 999600 C_2 L^6 b^3 h^4 r_0^2 t^2 \pi^3 + 999600 C_2 L^6 b^4 h^3 r_0^2 t^2 \pi^3 + \\
& 599760 C_2 L^6 b^5 h^2 r_0^2 t^2 \pi^3 + 5419008 C_3 L^6 b^2 h^5 r_0^2 t^2 \pi^3 + 9031680 C_3 L^6 b^3 h^4 r_0^2 t^2 \pi^3 + \\
& 9031680 C_3 L^6 b^4 h^3 r_0^2 t^2 \pi^3 + 5419008 C_3 L^6 b^5 h^2 r_0^2 t^2 \pi^3 + 11232 C_1 L^6 b h^7 r_0 t^2 \pi^2 + \\
& 11232 C_1 L^6 b h^7 r_0^2 t \pi^2 + 11232 C_1 L^6 b^7 h r_0 t^2 \pi^2 + 11232 C_1 L^6 b^7 h r_0^2 t \pi^2 +
\end{aligned}$$

$$\begin{aligned}
& 2800 C_1 L^6 b h^6 r_0 t^3 \pi^3 + 2800 C_1 L^6 b h^6 r_0^3 t \pi^3 + 2800 C_1 L^6 b^6 h r_0 t^3 \pi^3 + 2800 C_1 L^6 b^6 h r_0^3 t \pi^3 + \\
& 303552 C_2 L^6 b h^7 r_0 t^2 \pi^2 + 303552 C_2 L^6 b h^7 r_0^2 t \pi^2 + 303552 C_2 L^6 b^7 h r_0 t^2 \pi^2 + \\
& 303552 C_2 L^6 b^7 h r_0^2 t \pi^2 + 133280 C_2 L^6 b h^6 r_0 t^3 \pi^3 + 133280 C_2 L^6 b h^6 r_0^3 t \pi^3 + \\
& 133280 C_2 L^6 b^6 h r_0 t^3 \pi^3 + 133280 C_2 L^6 b^6 h r_0^3 t \pi^3 + 1907712 C_3 L^6 b h^7 r_0 t^2 \pi^2 + \\
& 1907712 C_3 L^6 b h^7 r_0^2 t \pi^2 + 1907712 C_3 L^6 b^7 h r_0 t^2 \pi^2 + 1907712 C_3 L^6 b^7 h r_0^2 t \pi^2 + \\
& 1204224 C_3 L^6 b h^6 r_0 t^3 \pi^3 + 1204224 C_3 L^6 b h^6 r_0^3 t \pi^3 + 1204224 C_3 L^6 b^6 h r_0 t^3 \pi^3 + \\
& 1204224 C_3 L^6 b^6 h r_0^3 t \pi^3 + 19440 \pi C_1 L^6 b h^8 r_0 t + 19440 \pi C_1 L^6 b^8 h r_0 t + 349920 \pi C_2 L^6 b h^8 r_0 t + \\
& 349920 \pi C_2 L^6 b^8 h r_0 t + 1617408 \pi C_3 L^6 b h^8 r_0 t + 1617408 \pi C_3 L^6 b^8 h r_0 t + 39312 C_1 L^6 b^2 h^6 r_0 t^2 \pi^2 + \\
& 39312 C_1 L^6 b^2 h^6 r_0^2 t \pi^2 + 78624 C_1 L^6 b^3 h^5 r_0 t^2 \pi^2 + 78624 C_1 L^6 b^3 h^5 r_0^2 t \pi^2 + \\
& 98280 C_1 L^6 b^4 h^4 r_0 t^2 \pi^2 + 98280 C_1 L^6 b^4 h^4 r_0^2 t \pi^2 + 78624 C_1 L^6 b^5 h^3 r_0 t^2 \pi^2 + \\
& 78624 C_1 L^6 b^5 h^3 r_0^2 t \pi^2 + 39312 C_1 L^6 b^6 h^2 r_0 t^2 \pi^2 + 39312 C_1 L^6 b^6 h^2 r_0^2 t \pi^2 + \\
& 4200 C_1 L^6 b h^6 r_0^2 t^2 \pi^3 + 8400 C_1 L^6 b^2 h^5 r_0 t^3 \pi^3 + 8400 C_1 L^6 b^2 h^5 r_0^3 t \pi^3 + \\
& 14000 C_1 L^6 b^3 h^4 r_0 t^3 \pi^3 + 14000 C_1 L^6 b^3 h^4 r_0^3 t \pi^3 + 14000 C_1 L^6 b^4 h^3 r_0 t^3 \pi^3 + \\
& 14000 C_1 L^6 b^4 h^3 r_0^3 t \pi^3 + 8400 C_1 L^6 b^5 h^2 r_0 t^3 \pi^3 + 8400 C_1 L^6 b^5 h^2 r_0^3 t \pi^3 + \\
& 4200 C_1 L^6 b^6 h r_0^2 t^2 \pi^3 + 1062432 C_2 L^6 b^2 h^6 r_0 t^2 \pi^2 + 1062432 C_2 L^6 b^2 h^6 r_0^2 t \pi^2 + \\
& 2124864 C_2 L^6 b^3 h^5 r_0 t^2 \pi^2 + 2124864 C_2 L^6 b^3 h^5 r_0^2 t \pi^2 + 2656080 C_2 L^6 b^4 h^4 r_0 t^2 \pi^2 + \\
& 2656080 C_2 L^6 b^4 h^4 r_0^2 t \pi^2 + 2124864 C_2 L^6 b^5 h^3 r_0 t^2 \pi^2 + 2124864 C_2 L^6 b^5 h^3 r_0^2 t \pi^2 + \\
& 1062432 C_2 L^6 b^6 h^2 r_0 t^2 \pi^2 + 1062432 C_2 L^6 b^6 h^2 r_0^2 t \pi^2 + 199920 C_2 L^6 b h^6 r_0^2 t^2 \pi^3 + \\
& 399840 C_2 L^6 b^2 h^5 r_0 t^3 \pi^3 + 399840 C_2 L^6 b^2 h^5 r_0^3 t \pi^3 + 666400 C_2 L^6 b^3 h^4 r_0 t^3 \pi^3 + \\
& 666400 C_2 L^6 b^3 h^4 r_0^3 t \pi^3 + 666400 C_2 L^6 b^4 h^3 r_0 t^3 \pi^3 + 666400 C_2 L^6 b^4 h^3 r_0^3 t \pi^3 + \\
& 399840 C_2 L^6 b^5 h^2 r_0 t^3 \pi^3 + 399840 C_2 L^6 b^5 h^2 r_0^3 t \pi^3 + 199920 C_2 L^6 b^6 h r_0^2 t^2 \pi^3 + \\
& 6676992 C_3 L^6 b^2 h^6 r_0 t^2 \pi^2 + 6676992 C_3 L^6 b^2 h^6 r_0^2 t \pi^2 + 13353984 C_3 L^6 b^3 h^5 r_0 t^2 \pi^2 + \\
& 13353984 C_3 L^6 b^3 h^5 r_0^2 t \pi^2 + 16692480 C_3 L^6 b^4 h^4 r_0 t^2 \pi^2 + 16692480 C_3 L^6 b^4 h^4 r_0^2 t \pi^2 + \\
& 13353984 C_3 L^6 b^5 h^3 r_0 t^2 \pi^2 + 13353984 C_3 L^6 b^5 h^3 r_0^2 t \pi^2 + 6676992 C_3 L^6 b^6 h^2 r_0 t^2 \pi^2 + \\
& 6676992 C_3 L^6 b^6 h^2 r_0^2 t \pi^2 + 1806336 C_3 L^6 b h^6 r_0^2 t^2 \pi^3 + 3612672 C_3 L^6 b^2 h^5 r_0 t^3 \pi^3 + \\
& 3612672 C_3 L^6 b^2 h^5 r_0^3 t \pi^3 + 6021120 C_3 L^6 b^3 h^4 r_0 t^3 \pi^3 + 6021120 C_3 L^6 b^3 h^4 r_0^3 t \pi^3 + \\
& 6021120 C_3 L^6 b^4 h^3 r_0 t^3 \pi^3 + 6021120 C_3 L^6 b^4 h^3 r_0^3 t \pi^3 + 3612672 C_3 L^6 b^5 h^2 r_0 t^3 \pi^3 + \\
& 3612672 C_3 L^6 b^5 h^2 r_0^3 t \pi^3 + 1806336 C_3 L^6 b^6 h r_0^2 t^2 \pi^3
\end{aligned}$$

$$\begin{aligned}
& a_{t,7} = 2880 \pi C_1 L^7 b^8 t^2 + 26496 \pi C_2 L^7 b^8 t^2 + 62208 \pi C_3 L^7 b^8 t^2 + 2880 \pi C_1 L^7 h^8 t^2 + \\
& 26496 \pi C_2 L^7 h^8 t^2 + 62208 \pi C_3 L^7 h^8 t^2 + 1152 C_1 L^7 b^7 t^3 \pi^2 + 224 C_1 L^7 b^6 t^4 \pi^3 + \\
& 16512 C_2 L^7 b^7 t^3 \pi^2 + 5824 C_2 L^7 b^6 t^4 \pi^3 + 55296 C_3 L^7 b^7 t^3 \pi^2 + 29568 C_3 L^7 b^6 t^4 \pi^3 + \\
& 1152 C_1 L^7 h^7 t^3 \pi^2 + 224 C_1 L^7 h^6 t^4 \pi^3 + 16512 C_2 L^7 h^7 t^3 \pi^2 + 5824 C_2 L^7 h^6 t^4 \pi^3 + \\
& 55296 C_3 L^7 h^7 t^3 \pi^2 + 29568 C_3 L^7 h^6 t^4 \pi^3 + 3456 C_1 L^7 b^7 r_0 t^2 \pi^2 + 3456 C_1 L^7 b^7 r_0^2 t \pi^2 + \\
& 896 C_1 L^7 b^6 r_0 t^3 \pi^3 + 896 C_1 L^7 b^6 r_0^3 t \pi^3 + 49536 C_2 L^7 b^7 r_0 t^2 \pi^2 + 49536 C_2 L^7 b^7 r_0^2 t \pi^2 + \\
& 23296 C_2 L^7 b^6 r_0 t^3 \pi^3 + 23296 C_2 L^7 b^6 r_0^3 t \pi^3 + 165888 C_3 L^7 b^7 r_0 t^2 \pi^2 + 165888 C_3 L^7 b^7 r_0^2 t \pi^2 + \\
& 118272 C_3 L^7 b^6 r_0 t^3 \pi^3 + 118272 C_3 L^7 b^6 r_0^3 t \pi^3 + 3456 C_1 L^7 h^7 r_0 t^2 \pi^2 + 3456 C_1 L^7 h^7 r_0^2 t \pi^2 + \\
& 896 C_1 L^7 h^6 r_0 t^3 \pi^3 + 896 C_1 L^7 h^6 r_0^3 t \pi^3 + 49536 C_2 L^7 h^7 r_0 t^2 \pi^2 + 49536 C_2 L^7 h^7 r_0^2 t \pi^2 + \\
& 23296 C_2 L^7 h^6 r_0 t^3 \pi^3 + 23296 C_2 L^7 h^6 r_0^3 t \pi^3 + 165888 C_3 L^7 h^7 r_0 t^2 \pi^2 + 165888 C_3 L^7 h^7 r_0^2 t \pi^2 + \\
& 118272 C_3 L^7 h^6 r_0 t^3 \pi^3 + 118272 C_3 L^7 h^6 r_0^3 t \pi^3 + 5760 \pi C_1 L^7 b^8 r_0 t + 52992 \pi C_2 L^7 b^8 r_0 t + \\
& 124416 \pi C_3 L^7 b^8 r_0 t + 5760 \pi C_1 L^7 h^8 r_0 t + 52992 \pi C_2 L^7 h^8 r_0 t + 124416 \pi C_3 L^7 h^8 r_0 t + \\
& 24192 C_1 L^7 b^2 h^5 t^3 \pi^2 + 40320 C_1 L^7 b^3 h^4 t^3 \pi^2 + 40320 C_1 L^7 b^4 h^3 t^3 \pi^2 + 24192 C_1 L^7 b^5 h^2 t^3 \pi^2 + \\
& 3360 C_1 L^7 b^2 h^4 t^4 \pi^3 + 4480 C_1 L^7 b^3 h^3 t^4 \pi^3 + 3360 C_1 L^7 b^4 h^2 t^4 \pi^3 + 346752 C_2 L^7 b^2 h^5 t^3 \pi^2 + \\
& 577920 C_2 L^7 b^3 h^4 t^3 \pi^2 + 577920 C_2 L^7 b^4 h^3 t^3 \pi^2 + 346752 C_2 L^7 b^5 h^2 t^3 \pi^2 + 87360 C_2 L^7 b^2 h^4 t^4 \pi^3 + \\
& 116480 C_2 L^7 b^3 h^3 t^4 \pi^3 + 87360 C_2 L^7 b^4 h^2 t^4 \pi^3 + 1161216 C_3 L^7 b^2 h^5 t^3 \pi^2 + 1935360 C_3 L^7 b^3 h^4 t^3 \pi^2 + \\
& 1935360 C_3 L^7 b^4 h^3 t^3 \pi^2 + 1161216 C_3 L^7 b^5 h^2 t^3 \pi^2 + 443520 C_3 L^7 b^2 h^4 t^4 \pi^3 +
\end{aligned}$$

$$\begin{aligned}
& 591360 C_3 L^7 b^3 h^3 t^4 \pi^3 + 443520 C_3 L^7 b^4 h^2 t^4 \pi^3 + 1344 C_1 L^7 b^6 r_0^2 t^2 \pi^3 + 34944 C_2 L^7 b^6 r_0^2 t^2 \pi^3 + \\
& 177408 C_3 L^7 b^6 r_0^2 t^2 \pi^3 + 1344 C_1 L^7 h^6 r_0^2 t^2 \pi^3 + 34944 C_2 L^7 h^6 r_0^2 t^2 \pi^3 + 177408 C_3 L^7 h^6 r_0^2 t^2 \pi^3 + \\
& 23040 \pi C_1 L^7 b h^7 t^2 + 23040 \pi C_1 L^7 b^7 h t^2 + 211968 \pi C_2 L^7 b h^7 t^2 + 211968 \pi C_2 L^7 b^7 h t^2 + \\
& 497664 \pi C_3 L^7 b h^7 t^2 + 497664 \pi C_3 L^7 b^7 h t^2 + 80640 \pi C_1 L^7 b^2 h^6 t^2 + 161280 \pi C_1 L^7 b^3 h^5 t^2 + \\
& 201600 \pi C_1 L^7 b^4 h^4 t^2 + 161280 \pi C_1 L^7 b^5 h^3 t^2 + 80640 \pi C_1 L^7 b^6 h^2 t^2 + 8064 C_1 L^7 b h^6 t^3 \pi^2 + \\
& 8064 C_1 L^7 b^6 h t^3 \pi^2 + 741888 \pi C_2 L^7 b^2 h^6 t^2 + 1483776 \pi C_2 L^7 b^3 h^5 t^2 + 1854720 \pi C_2 L^7 b^4 h^4 t^2 + \\
& 1483776 \pi C_2 L^7 b^5 h^3 t^2 + 741888 \pi C_2 L^7 b^6 h^2 t^2 + 1344 C_1 L^7 b h^5 t^4 \pi^3 + 1344 C_1 L^7 b^5 h t^4 \pi^3 + \\
& 115584 C_2 L^7 b h^6 t^3 \pi^2 + 115584 C_2 L^7 b^6 h^2 t^3 \pi^2 + 1741824 \pi C_3 L^7 b^2 h^6 t^2 + 3483648 \pi C_3 L^7 b^3 h^5 t^2 + \\
& 4354560 \pi C_3 L^7 b^4 h^4 t^2 + 3483648 \pi C_3 L^7 b^5 h^3 t^2 + 1741824 \pi C_3 L^7 b^6 h^2 t^2 + 34944 C_2 L^7 b h^5 t^4 \pi^3 + \\
& 34944 C_2 L^7 b^5 h t^4 \pi^3 + 387072 C_3 L^7 b h^6 t^3 \pi^2 + 387072 C_3 L^7 b^6 h t^3 \pi^2 + 177408 C_3 L^7 b h^5 t^4 \pi^3 + \\
& 177408 C_3 L^7 b^5 h t^4 \pi^3 + 161280 \pi C_1 L^7 b^2 h^6 r_0 t + 322560 \pi C_1 L^7 b^3 h^5 r_0 t + 403200 \pi C_1 L^7 b^4 h^4 r_0 t + \\
& 322560 \pi C_1 L^7 b^5 h^3 r_0 t + 161280 \pi C_1 L^7 b^6 h^2 r_0 t + 1483776 \pi C_2 L^7 b^2 h^6 r_0 t + \\
& 2967552 \pi C_2 L^7 b^3 h^5 r_0 t + 3709440 \pi C_2 L^7 b^4 h^4 r_0 t + 2967552 \pi C_2 L^7 b^5 h^3 r_0 t + \\
& 1483776 \pi C_2 L^7 b^6 h^2 r_0 t + 3483648 \pi C_3 L^7 b^2 h^6 r_0 t + 6967296 \pi C_3 L^7 b^3 h^5 r_0 t + \\
& 8709120 \pi C_3 L^7 b^4 h^4 r_0 t + 6967296 \pi C_3 L^7 b^5 h^3 r_0 t + 3483648 \pi C_3 L^7 b^6 h^2 r_0 t + \\
& 20160 C_1 L^7 b^2 h^4 r_0^2 t^2 \pi^3 + 26880 C_1 L^7 b^3 h^3 r_0^2 t^2 \pi^3 + 20160 C_1 L^7 b^4 h^2 r_0^2 t^2 \pi^3 + \\
& 524160 C_2 L^7 b^2 h^4 r_0^2 t^2 \pi^3 + 698880 C_2 L^7 b^3 h^3 r_0^2 t^2 \pi^3 + 524160 C_2 L^7 b^4 h^2 r_0^2 t^2 \pi^3 + \\
& 2661120 C_3 L^7 b^2 h^4 r_0^2 t^2 \pi^3 + 3548160 C_3 L^7 b^3 h^3 r_0^2 t^2 \pi^3 + 2661120 C_3 L^7 b^4 h^2 r_0^2 t^2 \pi^3 + \\
& 24192 C_1 L^7 b h^6 r_0 t^2 \pi^2 + 24192 C_1 L^7 b h^6 r_0^2 t^2 \pi^2 + 24192 C_1 L^7 b^6 h r_0 t^2 \pi^2 + \\
& 24192 C_1 L^7 b^6 h r_0^2 t^2 \pi^2 + 5376 C_1 L^7 b h^5 r_0 t^3 \pi^3 + 5376 C_1 L^7 b h^5 r_0^2 t^3 \pi^3 + 5376 C_1 L^7 b^5 h r_0 t^3 \pi^3 + \\
& 5376 C_1 L^7 b^5 h r_0^2 t^3 \pi^3 + 346752 C_2 L^7 b h^6 r_0 t^2 \pi^2 + 346752 C_2 L^7 b h^6 r_0^2 t^2 \pi^2 + \\
& 346752 C_2 L^7 b^6 h r_0 t^2 \pi^2 + 346752 C_2 L^7 b^6 h r_0^2 t^2 \pi^2 + 139776 C_2 L^7 b h^5 r_0 t^3 \pi^3 + \\
& 139776 C_2 L^7 b h^5 r_0^2 t^3 \pi^3 + 139776 C_2 L^7 b^5 h r_0 t^3 \pi^3 + 139776 C_2 L^7 b^5 h r_0^2 t^3 \pi^3 + \\
& 1161216 C_3 L^7 b h^6 r_0 t^2 \pi^2 + 1161216 C_3 L^7 b h^6 r_0^2 t^2 \pi^2 + 1161216 C_3 L^7 b^6 h r_0 t^2 \pi^2 + \\
& 1161216 C_3 L^7 b^6 h r_0^2 t^2 \pi^2 + 709632 C_3 L^7 b h^5 r_0 t^3 \pi^3 + 709632 C_3 L^7 b h^5 r_0^2 t^3 \pi^3 + \\
& 709632 C_3 L^7 b^5 h r_0 t^3 \pi^3 + 709632 C_3 L^7 b^5 h r_0^2 t^3 \pi^3 + 46080 \pi C_1 L^7 b h^7 r_0 t + \\
& 46080 \pi C_1 L^7 b^7 h r_0 t + 423936 \pi C_2 L^7 b h^7 r_0 t + 423936 \pi C_2 L^7 b^7 h r_0 t + 995328 \pi C_3 L^7 b h^7 r_0 t + \\
& 995328 \pi C_3 L^7 b^7 h r_0 t + 72576 C_1 L^7 b^2 h^5 r_0 t^2 \pi^2 + 72576 C_1 L^7 b^2 h^5 r_0^2 t^2 \pi^2 + \\
& 120960 C_1 L^7 b^3 h^4 r_0 t^2 \pi^2 + 120960 C_1 L^7 b^3 h^4 r_0^2 t^2 \pi^2 + 120960 C_1 L^7 b^4 h^3 r_0 t^2 \pi^2 + \\
& 120960 C_1 L^7 b^4 h^3 r_0^2 t^2 \pi^2 + 72576 C_1 L^7 b^5 h^2 r_0 t^2 \pi^2 + 72576 C_1 L^7 b^5 h^2 r_0^2 t^2 \pi^2 + \\
& 8064 C_1 L^7 b h^5 r_0^2 t^2 \pi^3 + 13440 C_1 L^7 b^2 h^4 r_0 t^3 \pi^3 + 13440 C_1 L^7 b^2 h^4 r_0^2 t^3 \pi^3 + \\
& 17920 C_1 L^7 b^3 h^3 r_0 t^3 \pi^3 + 17920 C_1 L^7 b^3 h^3 r_0^2 t^3 \pi^3 + 13440 C_1 L^7 b^4 h^2 r_0 t^3 \pi^3 + \\
& 13440 C_1 L^7 b^4 h^2 r_0^2 t^3 \pi^3 + 8064 C_1 L^7 b^5 h r_0^2 t^2 \pi^3 + 1040256 C_2 L^7 b^2 h^5 r_0 t^2 \pi^2 + \\
& 1040256 C_2 L^7 b^2 h^5 r_0^2 t^2 \pi^2 + 1733760 C_2 L^7 b^3 h^4 r_0 t^2 \pi^2 + 1733760 C_2 L^7 b^3 h^4 r_0^2 t^2 \pi^2 + \\
& 1733760 C_2 L^7 b^4 h^3 r_0 t^2 \pi^2 + 1733760 C_2 L^7 b^4 h^3 r_0^2 t^2 \pi^2 + 1040256 C_2 L^7 b^5 h^2 r_0 t^2 \pi^2 + \\
& 1040256 C_2 L^7 b^5 h^2 r_0^2 t^2 \pi^2 + 209664 C_2 L^7 b h^5 r_0^2 t^2 \pi^3 + 349440 C_2 L^7 b^2 h^4 r_0 t^3 \pi^3 + \\
& 349440 C_2 L^7 b^2 h^4 r_0^2 t^3 \pi^3 + 465920 C_2 L^7 b^3 h^3 r_0 t^3 \pi^3 + 465920 C_2 L^7 b^3 h^3 r_0^2 t^3 \pi^3 + \\
& 349440 C_2 L^7 b^4 h^2 r_0 t^3 \pi^3 + 349440 C_2 L^7 b^4 h^2 r_0^2 t^3 \pi^3 + 209664 C_2 L^7 b^5 h r_0^2 t^2 \pi^3 + \\
& 3483648 C_3 L^7 b^2 h^5 r_0 t^2 \pi^2 + 3483648 C_3 L^7 b^2 h^5 r_0^2 t^2 \pi^2 + 5806080 C_3 L^7 b^3 h^4 r_0 t^2 \pi^2 + \\
& 5806080 C_3 L^7 b^3 h^4 r_0^2 t^2 \pi^2 + 5806080 C_3 L^7 b^4 h^3 r_0 t^2 \pi^2 + 5806080 C_3 L^7 b^4 h^3 r_0^2 t^2 \pi^2 + \\
& 3483648 C_3 L^7 b^5 h^2 r_0 t^2 \pi^2 + 3483648 C_3 L^7 b^5 h^2 r_0^2 t^2 \pi^2 + 1064448 C_3 L^7 b h^5 r_0^2 t^2 \pi^3 + \\
& 1774080 C_3 L^7 b^2 h^4 r_0 t^3 \pi^3 + 1774080 C_3 L^7 b^2 h^4 r_0^2 t^3 \pi^3 + 2365440 C_3 L^7 b^3 h^3 r_0 t^3 \pi^3 + \\
& 2365440 C_3 L^7 b^3 h^3 r_0^2 t^3 \pi^3 + 1774080 C_3 L^7 b^4 h^2 r_0 t^3 \pi^3 + 1774080 C_3 L^7 b^4 h^2 r_0^2 t^3 \pi^3 + \\
& 1064448 C_3 L^7 b^5 h r_0^2 t^2 \pi^3
\end{aligned}$$

$$a_{t,6} = 5016 \pi C_1 L^8 b^7 t^2 + 24288 \pi C_2 L^8 b^7 t^2 + 25344 \pi C_3 L^8 b^7 t^2 + 5016 \pi C_1 L^8 h^7 t^2 +$$

$$\begin{aligned}
& 24288 \pi C_2 L^8 h^7 t^2 + 25344 \pi C_3 L^8 h^7 t^2 + 1852 C_1 L^8 b^6 t^3 \pi^2 + 321 C_1 L^8 b^5 t^4 \pi^3 + \\
& 14768 C_2 L^8 b^6 t^3 \pi^2 + 4932 C_2 L^8 b^5 t^4 \pi^3 + 23424 C_3 L^8 b^6 t^3 \pi^2 + 12960 C_3 L^8 b^5 t^4 \pi^3 + \\
& 1852 C_1 L^8 h^6 t^3 \pi^2 + 321 C_1 L^8 h^5 t^4 \pi^3 + 14768 C_2 L^8 h^6 t^3 \pi^2 + 4932 C_2 L^8 h^5 t^4 \pi^3 + \\
& 23424 C_3 L^8 h^6 t^3 \pi^2 + 12960 C_3 L^8 h^5 t^4 \pi^3 + 5556 C_1 L^8 b^6 r_0 t^2 \pi^2 + 5556 C_1 L^8 b^6 r_0^2 t \pi^2 + \\
& 1284 C_1 L^8 b^5 r_0 t^3 \pi^3 + 1284 C_1 L^8 b^5 r_0^3 t \pi^3 + 44304 C_2 L^8 b^6 r_0 t^2 \pi^2 + 44304 C_2 L^8 b^6 r_0^2 t \pi^2 + \\
& 19728 C_2 L^8 b^5 r_0 t^3 \pi^3 + 19728 C_2 L^8 b^5 r_0^3 t \pi^3 + 70272 C_3 L^8 b^6 r_0 t^2 \pi^2 + 70272 C_3 L^8 b^6 r_0^2 t \pi^2 + \\
& 51840 C_3 L^8 b^5 r_0 t^3 \pi^3 + 51840 C_3 L^8 b^5 r_0^3 t \pi^3 + 5556 C_1 L^8 h^6 r_0 t^2 \pi^2 + 5556 C_1 L^8 h^6 r_0^2 t \pi^2 + \\
& 1284 C_1 L^8 h^5 r_0 t^3 \pi^3 + 1284 C_1 L^8 h^5 r_0^3 t \pi^3 + 44304 C_2 L^8 h^6 r_0 t^2 \pi^2 + 44304 C_2 L^8 h^6 r_0^2 t \pi^2 + \\
& 19728 C_2 L^8 h^5 r_0 t^3 \pi^3 + 19728 C_2 L^8 h^5 r_0^3 t \pi^3 + 70272 C_3 L^8 h^6 r_0 t^2 \pi^2 + 70272 C_3 L^8 h^6 r_0^2 t \pi^2 + \\
& 51840 C_3 L^8 h^5 r_0 t^3 \pi^3 + 51840 C_3 L^8 h^5 r_0^3 t \pi^3 + 10032 \pi C_1 L^8 b^7 r_0 t + 48576 \pi C_2 L^8 b^7 r_0 t + \\
& 50688 \pi C_3 L^8 b^7 r_0 t + 10032 \pi C_1 L^8 h^7 r_0 t + 48576 \pi C_2 L^8 h^7 r_0 t + 50688 \pi C_3 L^8 h^7 r_0 t + \\
& 27780 C_1 L^8 b^2 h^4 t^3 \pi^2 + 37040 C_1 L^8 b^3 h^3 t^3 \pi^2 + 27780 C_1 L^8 b^4 h^2 t^3 \pi^2 + 3210 C_1 L^8 b^2 h^3 t^4 \pi^3 + \\
& 3210 C_1 L^8 b^3 h^2 t^4 \pi^3 + 221520 C_2 L^8 b^2 h^4 t^3 \pi^2 + 295360 C_2 L^8 b^3 h^3 t^3 \pi^2 + 221520 C_2 L^8 b^4 h^2 t^3 \pi^2 + \\
& 49320 C_2 L^8 b^2 h^3 t^4 \pi^3 + 49320 C_2 L^8 b^3 h^2 t^4 \pi^3 + 351360 C_3 L^8 b^2 h^4 t^3 \pi^2 + 468480 C_3 L^8 b^3 h^3 t^3 \pi^2 + \\
& 351360 C_3 L^8 b^4 h^2 t^3 \pi^2 + 129600 C_3 L^8 b^2 h^3 t^4 \pi^3 + 129600 C_3 L^8 b^3 h^2 t^4 \pi^3 + 1926 C_1 L^8 b^5 r_0^2 t^2 \pi^3 + \\
& 29592 C_2 L^8 b^5 r_0^2 t^2 \pi^3 + 77760 C_3 L^8 b^5 r_0^2 t^2 \pi^3 + 1926 C_1 L^8 h^5 r_0^2 t^2 \pi^3 + 29592 C_2 L^8 h^5 r_0^2 t^2 \pi^3 + \\
& 77760 C_3 L^8 h^5 r_0^2 t^2 \pi^3 + 35112 \pi C_1 L^8 b h^6 t^2 + 35112 \pi C_1 L^8 b^6 h t^2 + 170016 \pi C_2 L^8 b h^6 t^2 + \\
& 170016 \pi C_2 L^8 b^6 h t^2 + 177408 \pi C_3 L^8 b h^6 t^2 + 177408 \pi C_3 L^8 b^6 h t^2 + 105336 \pi C_1 L^8 b^2 h^5 t^2 + \\
& 175560 \pi C_1 L^8 b^3 h^4 t^2 + 175560 \pi C_1 L^8 b^4 h^3 t^2 + 105336 \pi C_1 L^8 b^5 h^2 t^2 + 11112 C_1 L^8 b h^5 t^3 \pi^2 + \\
& 11112 C_1 L^8 b^5 h t^3 \pi^2 + 510048 \pi C_2 L^8 b^2 h^5 t^2 + 850080 \pi C_2 L^8 b^3 h^4 t^2 + 850080 \pi C_2 L^8 b^4 h^3 t^2 + \\
& 510048 \pi C_2 L^8 b^5 h^2 t^2 + 1605 C_1 L^8 b h^4 t^4 \pi^3 + 1605 C_1 L^8 b^4 h t^4 \pi^3 + 88608 C_2 L^8 b h^5 t^3 \pi^2 + \\
& 88608 C_2 L^8 b^5 h t^3 \pi^2 + 532224 \pi C_3 L^8 b^2 h^5 t^2 + 887040 \pi C_3 L^8 b^3 h^4 t^2 + 887040 \pi C_3 L^8 b^4 h^3 t^2 + \\
& 532224 \pi C_3 L^8 b^5 h^2 t^2 + 24660 C_2 L^8 b h^4 t^4 \pi^3 + 24660 C_2 L^8 b^4 h t^4 \pi^3 + 140544 C_3 L^8 b h^5 t^3 \pi^2 + \\
& 140544 C_3 L^8 b^5 h t^3 \pi^2 + 64800 C_3 L^8 b h^4 t^4 \pi^3 + 64800 C_3 L^8 b^4 h t^4 \pi^3 + 210672 \pi C_1 L^8 b^2 h^5 r_0 t + \\
& 351120 \pi C_1 L^8 b^3 h^4 r_0 t + 351120 \pi C_1 L^8 b^4 h^3 r_0 t + 210672 \pi C_1 L^8 b^5 h^2 r_0 t + \\
& 1020096 \pi C_2 L^8 b^2 h^5 r_0 t + 1700160 \pi C_2 L^8 b^3 h^4 r_0 t + 1700160 \pi C_2 L^8 b^4 h^3 r_0 t + \\
& 1020096 \pi C_2 L^8 b^5 h^2 r_0 t + 1064448 \pi C_3 L^8 b^2 h^5 r_0 t + 1774080 \pi C_3 L^8 b^3 h^4 r_0 t + \\
& 1774080 \pi C_3 L^8 b^4 h^3 r_0 t + 1064448 \pi C_3 L^8 b^5 h^2 r_0 t + 19260 C_1 L^8 b^2 h^3 r_0^2 t^2 \pi^3 + \\
& 19260 C_1 L^8 b^3 h^2 r_0^2 t^2 \pi^3 + 295920 C_2 L^8 b^2 h^3 r_0^2 t^2 \pi^3 + 295920 C_2 L^8 b^3 h^2 r_0^2 t^2 \pi^3 + \\
& 777600 C_3 L^8 b^2 h^3 r_0^2 t^2 \pi^3 + 777600 C_3 L^8 b^3 h^2 r_0^2 t^2 \pi^3 + 33336 C_1 L^8 b h^5 r_0 t^2 \pi^2 + \\
& 33336 C_1 L^8 b h^5 r_0^2 t \pi^2 + 33336 C_1 L^8 b^5 h r_0 t^2 \pi^2 + 33336 C_1 L^8 b^5 h r_0^2 t \pi^2 + \\
& 6420 C_1 L^8 b h^4 r_0 t^3 \pi^3 + 6420 C_1 L^8 b h^4 r_0^3 t \pi^3 + 6420 C_1 L^8 b^4 h r_0 t^3 \pi^3 + 6420 C_1 L^8 b^4 h r_0^3 t \pi^3 + \\
& 265824 C_2 L^8 b h^5 r_0 t^2 \pi^2 + 265824 C_2 L^8 b h^5 r_0^2 t \pi^2 + 265824 C_2 L^8 b^5 h r_0 t^2 \pi^2 + \\
& 265824 C_2 L^8 b^5 h r_0^2 t \pi^2 + 98640 C_2 L^8 b h^4 r_0 t^3 \pi^3 + 98640 C_2 L^8 b h^4 r_0^3 t \pi^3 + \\
& 98640 C_2 L^8 b^4 h r_0 t^3 \pi^3 + 98640 C_2 L^8 b^4 h r_0^3 t \pi^3 + 421632 C_3 L^8 b h^5 r_0 t^2 \pi^2 + \\
& 421632 C_3 L^8 b h^5 r_0^2 t \pi^2 + 421632 C_3 L^8 b^5 h r_0 t^2 \pi^2 + 421632 C_3 L^8 b^5 h r_0^2 t \pi^2 + \\
& 259200 C_3 L^8 b h^4 r_0 t^3 \pi^3 + 259200 C_3 L^8 b h^4 r_0^3 t \pi^3 + 259200 C_3 L^8 b^4 h r_0 t^3 \pi^3 + \\
& 259200 C_3 L^8 b^4 h r_0^3 t \pi^3 + 70224 \pi C_1 L^8 b h^6 r_0 t + 70224 \pi C_1 L^8 b^6 h r_0 t + 340032 \pi C_2 L^8 b h^6 r_0 t + \\
& 340032 \pi C_2 L^8 b^6 h r_0 t + 354816 \pi C_3 L^8 b h^6 r_0 t + 354816 \pi C_3 L^8 b^6 h r_0 t + 83340 C_1 L^8 b^2 h^4 r_0 t^2 \pi^2 + \\
& 83340 C_1 L^8 b^2 h^4 r_0^2 t \pi^2 + 111120 C_1 L^8 b^3 h^3 r_0 t^2 \pi^2 + 111120 C_1 L^8 b^3 h^3 r_0^2 t \pi^2 + \\
& 83340 C_1 L^8 b^4 h^2 r_0 t^2 \pi^2 + 83340 C_1 L^8 b^4 h^2 r_0^2 t \pi^2 + 9630 C_1 L^8 b h^4 r_0^2 t^2 \pi^3 + \\
& 12840 C_1 L^8 b^2 h^3 r_0 t^3 \pi^3 + 12840 C_1 L^8 b^2 h^3 r_0^3 t \pi^3 + 12840 C_1 L^8 b^3 h^2 r_0 t^3 \pi^3 + \\
& 12840 C_1 L^8 b^3 h^2 r_0^3 t \pi^3 + 9630 C_1 L^8 b^4 h r_0^2 t^2 \pi^3 + 664560 C_2 L^8 b^2 h^4 r_0 t^2 \pi^2 + \\
& 664560 C_2 L^8 b^2 h^4 r_0^2 t \pi^2 + 886080 C_2 L^8 b^3 h^3 r_0 t^2 \pi^2 + 886080 C_2 L^8 b^3 h^3 r_0^2 t \pi^2 + \\
& 664560 C_2 L^8 b^4 h^2 r_0 t^2 \pi^2 + 664560 C_2 L^8 b^4 h^2 r_0^2 t \pi^2 + 147960 C_2 L^8 b h^4 r_0^2 t^2 \pi^3 + \\
& 197280 C_2 L^8 b^2 h^3 r_0 t^3 \pi^3 + 197280 C_2 L^8 b^2 h^3 r_0^3 t \pi^3 + 197280 C_2 L^8 b^3 h^2 r_0 t^3 \pi^3 +
\end{aligned}$$

$$\begin{aligned}
& 197280 C_2 L^8 b^3 h^2 r_0^3 t \pi^3 + 147960 C_2 L^8 b^4 h r_0^2 t^2 \pi^3 + 1054080 C_3 L^8 b^2 h^4 r_0 t^2 \pi^2 + \\
& 1054080 C_3 L^8 b^2 h^4 r_0^2 t \pi^2 + 1405440 C_3 L^8 b^3 h^3 r_0 t^2 \pi^2 + 1405440 C_3 L^8 b^3 h^3 r_0^2 t \pi^2 + \\
& 1054080 C_3 L^8 b^4 h^2 r_0 t^2 \pi^2 + 1054080 C_3 L^8 b^4 h^2 r_0^2 t \pi^2 + 388800 C_3 L^8 b h^4 r_0^2 t^2 \pi^3 + \\
& 518400 C_3 L^8 b^2 h^3 r_0 t^3 \pi^3 + 518400 C_3 L^8 b^2 h^3 r_0^3 t \pi^3 + 518400 C_3 L^8 b^3 h^2 r_0 t^3 \pi^3 + \\
& 518400 C_3 L^8 b^3 h^2 r_0^3 t \pi^3 + 388800 C_3 L^8 b^4 h r_0^2 t^2 \pi^3
\end{aligned}$$

$$\begin{aligned}
& a_{t,5} = 5904 \pi C_1 L^9 b^6 t^2 + 14400 \pi C_2 L^9 b^6 t^2 + 4608 \pi C_3 L^9 b^6 t^2 + 5904 \pi C_1 L^9 h^6 t^2 + \\
& 14400 \pi C_2 L^9 h^6 t^2 + 4608 \pi C_3 L^9 h^6 t^2 + 2032 C_1 L^9 b^5 t^3 \pi^2 + 306 C_1 L^9 b^4 t^4 \pi^3 + \\
& 8768 C_2 L^9 b^5 t^3 \pi^2 + 2856 C_2 L^9 b^4 t^4 \pi^3 + 4608 C_3 L^9 b^5 t^3 \pi^2 + 2880 C_3 L^9 b^4 t^4 \pi^3 + \\
& 2032 C_1 L^9 h^5 t^3 \pi^2 + 306 C_1 L^9 h^4 t^4 \pi^3 + 8768 C_2 L^9 h^5 t^3 \pi^2 + 2856 C_2 L^9 h^4 t^4 \pi^3 + \\
& 4608 C_3 L^9 h^5 t^3 \pi^2 + 2880 C_3 L^9 h^4 t^4 \pi^3 + 6096 C_1 L^9 b^5 r_0 t^2 \pi^2 + 6096 C_1 L^9 b^5 r_0^2 t \pi^2 + \\
& 1224 C_1 L^9 b^4 r_0 t^3 \pi^3 + 1224 C_1 L^9 b^4 r_0^3 t \pi^3 + 26304 C_2 L^9 b^5 r_0 t^2 \pi^2 + 26304 C_2 L^9 b^5 r_0^2 t \pi^2 + \\
& 11424 C_2 L^9 b^4 r_0 t^3 \pi^3 + 11424 C_2 L^9 b^4 r_0^3 t \pi^3 + 13824 C_3 L^9 b^5 r_0 t^2 \pi^2 + 13824 C_3 L^9 b^5 r_0^2 t \pi^2 + \\
& 11520 C_3 L^9 b^4 r_0 t^3 \pi^3 + 11520 C_3 L^9 b^4 r_0^3 t \pi^3 + 6096 C_1 L^9 h^5 r_0 t^2 \pi^2 + 6096 C_1 L^9 h^5 r_0^2 t \pi^2 + \\
& 1224 C_1 L^9 h^4 r_0 t^3 \pi^3 + 1224 C_1 L^9 h^4 r_0^3 t \pi^3 + 26304 C_2 L^9 h^5 r_0 t^2 \pi^2 + 26304 C_2 L^9 h^5 r_0^2 t \pi^2 + \\
& 11424 C_2 L^9 h^4 r_0 t^3 \pi^3 + 11424 C_2 L^9 h^4 r_0^3 t \pi^3 + 13824 C_3 L^9 h^5 r_0 t^2 \pi^2 + 13824 C_3 L^9 h^5 r_0^2 t \pi^2 + \\
& 11520 C_3 L^9 h^4 r_0 t^3 \pi^3 + 11520 C_3 L^9 h^4 r_0^3 t \pi^3 + 11808 \pi C_1 L^9 b^6 r_0 t + 28800 \pi C_2 L^9 b^6 r_0 t + \\
& 9216 \pi C_3 L^9 b^6 r_0 t + 11808 \pi C_1 L^9 h^6 r_0 t + 28800 \pi C_2 L^9 h^6 r_0 t + 9216 \pi C_3 L^9 h^6 r_0 t + \\
& 20320 C_1 L^9 b^2 h^3 t^3 \pi^2 + 20320 C_1 L^9 b^2 h^2 t^4 \pi^3 + 1836 C_1 L^9 b^2 h^2 t^4 \pi^3 + 87680 C_2 L^9 b^2 h^3 t^3 \pi^2 + \\
& 87680 C_2 L^9 b^2 h^2 t^4 \pi^3 + 17136 C_2 L^9 b^2 h^2 t^4 \pi^3 + 46080 C_3 L^9 b^2 h^3 t^3 \pi^2 + 46080 C_3 L^9 b^2 h^2 t^4 \pi^3 + \\
& 17280 C_3 L^9 b^2 h^2 t^4 \pi^3 + 1836 C_1 L^9 b^4 r_0^2 t^2 \pi^3 + 17136 C_2 L^9 b^4 r_0^2 t^2 \pi^3 + 17280 C_3 L^9 b^4 r_0^2 t^2 \pi^3 + \\
& 1836 C_1 L^9 h^4 r_0^2 t^2 \pi^3 + 17136 C_2 L^9 h^4 r_0^2 t^2 \pi^3 + 17280 C_3 L^9 h^4 r_0^2 t^2 \pi^3 + 35424 \pi C_1 L^9 b h^5 t^2 + \\
& 35424 \pi C_1 L^9 b^5 h t^2 + 86400 \pi C_2 L^9 b h^5 t^2 + 86400 \pi C_2 L^9 b^5 h t^2 + 27648 \pi C_3 L^9 b h^5 t^2 + \\
& 27648 \pi C_3 L^9 b^5 h t^2 + 88560 \pi C_1 L^9 b^2 h^4 t^2 + 118080 \pi C_1 L^9 b^3 h^3 t^2 + 88560 \pi C_1 L^9 b^4 h^2 t^2 + \\
& 10160 C_1 L^9 b h^4 t^3 \pi^2 + 10160 C_1 L^9 b^4 h t^3 \pi^2 + 216000 \pi C_2 L^9 b^2 h^4 t^2 + 288000 \pi C_2 L^9 b^3 h^3 t^2 + \\
& 216000 \pi C_2 L^9 b^4 h^2 t^2 + 1224 C_1 L^9 b h^3 t^4 \pi^3 + 1224 C_1 L^9 b^3 h t^4 \pi^3 + 43840 C_2 L^9 b h^3 t^4 \pi^3 + \\
& 43840 C_2 L^9 b^3 h t^4 \pi^3 + 69120 \pi C_3 L^9 b^2 h^4 t^2 + 92160 \pi C_3 L^9 b^3 h^3 t^2 + 69120 \pi C_3 L^9 b^4 h^2 t^2 + \\
& 11424 C_2 L^9 b h^3 t^4 \pi^3 + 11424 C_2 L^9 b^3 h t^4 \pi^3 + 23040 C_3 L^9 b h^4 t^3 \pi^2 + 23040 C_3 L^9 b^4 h t^3 \pi^2 + \\
& 11520 C_3 L^9 b h^3 t^4 \pi^3 + 11520 C_3 L^9 b^3 h t^4 \pi^3 + 177120 \pi C_1 L^9 b^2 h^4 r_0 t + 236160 \pi C_1 L^9 b^3 h^3 r_0 t + \\
& 177120 \pi C_1 L^9 b^4 h^2 r_0 t + 432000 \pi C_2 L^9 b^2 h^4 r_0 t + 576000 \pi C_2 L^9 b^3 h^3 r_0 t + \\
& 432000 \pi C_2 L^9 b^4 h^2 r_0 t + 138240 \pi C_3 L^9 b^2 h^4 r_0 t + 184320 \pi C_3 L^9 b^3 h^3 r_0 t + \\
& 138240 \pi C_3 L^9 b^4 h^2 r_0 t + 11016 C_1 L^9 b^2 h^2 r_0^2 t^2 \pi^3 + 102816 C_2 L^9 b^2 h^2 r_0^2 t^2 \pi^3 + \\
& 103680 C_3 L^9 b^2 h^2 r_0^2 t^2 \pi^3 + 30480 C_1 L^9 b h^4 r_0 t^2 \pi^2 + 30480 C_1 L^9 b h^4 r_0^2 t \pi^2 + \\
& 30480 C_1 L^9 b^4 h r_0 t^2 \pi^2 + 30480 C_1 L^9 b^4 h r_0^2 t \pi^2 + 4896 C_1 L^9 b h^3 r_0 t^3 \pi^3 + 4896 C_1 L^9 b h^3 r_0^3 t \pi^3 + \\
& 4896 C_1 L^9 b^3 h r_0 t^3 \pi^3 + 4896 C_1 L^9 b^3 h r_0^3 t \pi^3 + 131520 C_2 L^9 b h^4 r_0 t^2 \pi^2 + 131520 C_2 L^9 b h^4 r_0^2 t \pi^2 + \\
& 131520 C_2 L^9 b^4 h r_0 t^2 \pi^2 + 131520 C_2 L^9 b^4 h r_0^2 t \pi^2 + 45696 C_2 L^9 b h^3 r_0 t^3 \pi^3 + \\
& 45696 C_2 L^9 b h^3 r_0^3 t \pi^3 + 45696 C_2 L^9 b^3 h r_0 t^3 \pi^3 + 45696 C_2 L^9 b^3 h r_0^3 t \pi^3 + \\
& 69120 C_3 L^9 b h^4 r_0 t^2 \pi^2 + 69120 C_3 L^9 b h^4 r_0^2 t \pi^2 + 69120 C_3 L^9 b^4 h r_0 t^2 \pi^2 + \\
& 69120 C_3 L^9 b^4 h r_0^2 t \pi^2 + 46080 C_3 L^9 b h^3 r_0 t^3 \pi^3 + 46080 C_3 L^9 b h^3 r_0^3 t \pi^3 + \\
& 46080 C_3 L^9 b^3 h r_0 t^3 \pi^3 + 46080 C_3 L^9 b^3 h r_0^3 t \pi^3 + 70848 \pi C_1 L^9 b h^5 r_0 t + 70848 \pi C_1 L^9 b^5 h r_0 t + \\
& 172800 \pi C_2 L^9 b h^5 r_0 t + 172800 \pi C_2 L^9 b^5 h r_0 t + 55296 \pi C_3 L^9 b h^5 r_0 t + 55296 \pi C_3 L^9 b^5 h r_0 t + \\
& 60960 C_1 L^9 b^2 h^3 r_0 t^2 \pi^2 + 60960 C_1 L^9 b^2 h^3 r_0^2 t \pi^2 + 60960 C_1 L^9 b^3 h^2 r_0 t^2 \pi^2 + \\
& 60960 C_1 L^9 b^3 h^2 r_0^2 t \pi^2 + 7344 C_1 L^9 b h^3 r_0^2 t^2 \pi^3 + 7344 C_1 L^9 b^2 h^2 r_0 t^3 \pi^3 + \\
& 7344 C_1 L^9 b^2 h^2 r_0^3 t \pi^3 + 7344 C_1 L^9 b^3 h r_0^2 t^2 \pi^3 + 263040 C_2 L^9 b^2 h^3 r_0 t^2 \pi^2 + \\
& 263040 C_2 L^9 b^2 h^3 r_0^2 t \pi^2 + 263040 C_2 L^9 b^3 h^2 r_0 t^2 \pi^2 + 263040 C_2 L^9 b^3 h^2 r_0^2 t \pi^2 + \\
& 68544 C_2 L^9 b h^3 r_0^2 t^2 \pi^3 + 68544 C_2 L^9 b^2 h^2 r_0 t^3 \pi^3 + 68544 C_2 L^9 b^2 h^2 r_0^3 t \pi^3 +
\end{aligned}$$

$$\begin{aligned}
& 68544 C_2 L^9 b^3 h r_0^2 t^2 \pi^3 + 138240 C_3 L^9 b^2 h^3 r_0 t^2 \pi^2 + 138240 C_3 L^9 b^2 h^3 r_0^2 t \pi^2 + \\
& 138240 C_3 L^9 b^3 h^2 r_0 t^2 \pi^2 + 138240 C_3 L^9 b^3 h^2 r_0^2 t \pi^2 + 69120 C_3 L^9 b h^3 r_0^2 t^2 \pi^3 + \\
& 69120 C_3 L^9 b^2 h^2 r_0 t^3 \pi^3 + 69120 C_3 L^9 b^2 h^2 r_0^3 t \pi^3 + 69120 C_3 L^9 b^3 h r_0^2 t^2 \pi^3
\end{aligned}$$

$$\begin{aligned}
a_{t,4} = & 4680 \pi C_1 L^{10} b^5 t^2 + 4992 \pi C_2 L^{10} b^5 t^2 + 4680 \pi C_1 L^{10} h^5 t^2 + 4992 \pi C_2 L^{10} h^5 t^2 + \\
& 1532 C_1 L^{10} b^4 t^3 \pi^2 + 198 C_1 L^{10} b^3 t^4 \pi^3 + 3136 C_2 L^{10} b^4 t^3 \pi^2 + 1056 C_2 L^{10} b^3 t^4 \pi^3 + \\
& 1532 C_1 L^{10} h^4 t^3 \pi^2 + 198 C_1 L^{10} h^3 t^4 \pi^3 + 3136 C_2 L^{10} h^4 t^3 \pi^2 + 1056 C_2 L^{10} h^3 t^4 \pi^3 + \\
& 4596 C_1 L^{10} b^4 r_0 t^2 \pi^2 + 4596 C_1 L^{10} b^4 r_0^2 t \pi^2 + 792 C_1 L^{10} b^3 r_0 t^3 \pi^3 + 792 C_1 L^{10} b^3 r_0^3 t \pi^3 + \\
& 9408 C_2 L^{10} b^4 r_0 t^2 \pi^2 + 9408 C_2 L^{10} b^4 r_0^2 t \pi^2 + 4224 C_2 L^{10} b^3 r_0 t^3 \pi^3 + 4224 C_2 L^{10} b^3 r_0^3 t \pi^3 + \\
& 4596 C_1 L^{10} h^4 r_0 t^2 \pi^2 + 4596 C_1 L^{10} h^4 r_0^2 t \pi^2 + 792 C_1 L^{10} h^3 r_0 t^3 \pi^3 + 792 C_1 L^{10} h^3 r_0^3 t \pi^3 + \\
& 9408 C_2 L^{10} h^4 r_0 t^2 \pi^2 + 9408 C_2 L^{10} h^4 r_0^2 t \pi^2 + 4224 C_2 L^{10} h^3 r_0 t^3 \pi^3 + 4224 C_2 L^{10} h^3 r_0^3 t \pi^3 + \\
& 9360 \pi C_1 L^{10} b^5 r_0 t + 9984 \pi C_2 L^{10} b^5 r_0 t + 9360 \pi C_1 L^{10} h^5 r_0 t + 9984 \pi C_2 L^{10} h^5 r_0 t + \\
& 9192 C_1 L^{10} b^2 h^2 t^3 \pi^2 + 18816 C_2 L^{10} b^2 h^2 t^3 \pi^2 + 1188 C_1 L^{10} b^3 r_0^2 t^2 \pi^3 + 6336 C_2 L^{10} b^3 r_0^2 t^2 \pi^3 + \\
& 1188 C_1 L^{10} h^3 r_0^2 t^2 \pi^3 + 6336 C_2 L^{10} h^3 r_0^2 t^2 \pi^3 + 23400 \pi C_1 L^{10} b h^4 t^2 + 23400 \pi C_1 L^{10} b^4 h t^2 + \\
& 24960 \pi C_2 L^{10} b h^4 t^2 + 24960 \pi C_2 L^{10} b^4 h t^2 + 46800 \pi C_1 L^{10} b^2 h^3 t^2 + 46800 \pi C_1 L^{10} b^3 h^2 t^2 + \\
& 6128 C_1 L^{10} b h^3 t^3 \pi^2 + 6128 C_1 L^{10} b^3 h t^3 \pi^2 + 49920 \pi C_2 L^{10} b^2 h^3 t^2 + 49920 \pi C_2 L^{10} b^3 h^2 t^2 + \\
& 594 C_1 L^{10} b h^2 t^4 \pi^3 + 594 C_1 L^{10} b^2 h t^4 \pi^3 + 12544 C_2 L^{10} b h^3 t^3 \pi^2 + 12544 C_2 L^{10} b^3 h t^3 \pi^2 + \\
& 3168 C_2 L^{10} b h^2 t^4 \pi^3 + 3168 C_2 L^{10} b^2 h t^4 \pi^3 + 93600 \pi C_1 L^{10} b^2 h^3 r_0 t + 93600 \pi C_1 L^{10} b^3 h^2 r_0 t + \\
& 99840 \pi C_2 L^{10} b^2 h^3 r_0 t + 99840 \pi C_2 L^{10} b^3 h^2 r_0 t + 18384 C_1 L^{10} b h^3 r_0 t^2 \pi^2 + \\
& 18384 C_1 L^{10} b h^3 r_0^2 t \pi^2 + 18384 C_1 L^{10} b^3 h r_0 t^2 \pi^2 + 18384 C_1 L^{10} b^3 h r_0^2 t \pi^2 + \\
& 2376 C_1 L^{10} b h^2 r_0 t^3 \pi^3 + 2376 C_1 L^{10} b h^2 r_0^3 t \pi^3 + 2376 C_1 L^{10} b^2 h r_0 t^3 \pi^3 + 2376 C_1 L^{10} b^2 h r_0^3 t \pi^3 + \\
& 37632 C_2 L^{10} b h^3 r_0 t^2 \pi^2 + 37632 C_2 L^{10} b h^3 r_0^2 t \pi^2 + 37632 C_2 L^{10} b^2 h r_0 t^2 \pi^2 + \\
& 37632 C_2 L^{10} b^2 h r_0^2 t \pi^2 + 12672 C_2 L^{10} b h^2 r_0 t^3 \pi^3 + 12672 C_2 L^{10} b h^2 r_0^3 t \pi^3 + \\
& 12672 C_2 L^{10} b^2 h r_0 t^3 \pi^3 + 12672 C_2 L^{10} b^2 h r_0^3 t \pi^3 + 46800 \pi C_1 L^{10} b h^4 r_0 t + \\
& 46800 \pi C_1 L^{10} b^4 h r_0 t + 49920 \pi C_2 L^{10} b h^4 r_0 t + 49920 \pi C_2 L^{10} b^4 h r_0 t + 27576 C_1 L^{10} b^2 h^2 r_0 t^2 \pi^2 + \\
& 27576 C_1 L^{10} b^2 h^2 r_0^2 t \pi^2 + 3564 C_1 L^{10} b h^2 r_0^2 t^2 \pi^3 + 3564 C_1 L^{10} b^2 h r_0^2 t^2 \pi^3 + \\
& 56448 C_2 L^{10} b^2 h^2 r_0 t^2 \pi^2 + 56448 C_2 L^{10} b^2 h^2 r_0^2 t \pi^2 + 19008 C_2 L^{10} b h^2 r_0^2 t^2 \pi^3 + \\
& 19008 C_2 L^{10} b^2 h r_0^2 t^2 \pi^3
\end{aligned}$$

$$\begin{aligned}
a_{t,3} = & 2400 \pi C_1 L^{11} b^4 t^2 + 768 \pi C_2 L^{11} b^4 t^2 + 2400 \pi C_1 L^{11} h^4 t^2 + 768 \pi C_2 L^{11} h^4 t^2 + \\
& 768 C_1 L^{11} b^3 t^3 \pi^2 + 88 C_1 L^{11} b^2 t^4 \pi^3 + 512 C_2 L^{11} b^3 t^3 \pi^2 + 192 C_2 L^{11} b^2 t^4 \pi^3 + \\
& 768 C_1 L^{11} h^3 t^3 \pi^2 + 88 C_1 L^{11} h^2 t^4 \pi^3 + 512 C_2 L^{11} h^3 t^3 \pi^2 + 192 C_2 L^{11} h^2 t^4 \pi^3 + \\
& 2304 C_1 L^{11} b^3 r_0 t^2 \pi^2 + 2304 C_1 L^{11} b^3 r_0^2 t \pi^2 + 352 C_1 L^{11} b^2 r_0 t^3 \pi^3 + 352 C_1 L^{11} b^2 r_0^3 t \pi^3 + \\
& 1536 C_2 L^{11} b^3 r_0 t^2 \pi^2 + 1536 C_2 L^{11} b^3 r_0^2 t \pi^2 + 768 C_2 L^{11} b^2 r_0 t^3 \pi^3 + 768 C_2 L^{11} b^2 r_0^3 t \pi^3 + \\
& 2304 C_1 L^{11} h^3 r_0 t^2 \pi^2 + 2304 C_1 L^{11} h^3 r_0^2 t \pi^2 + 352 C_1 L^{11} h^2 r_0 t^3 \pi^3 + 352 C_1 L^{11} h^2 r_0^3 t \pi^3 + \\
& 1536 C_2 L^{11} h^3 r_0 t^2 \pi^2 + 1536 C_2 L^{11} h^3 r_0^2 t \pi^2 + 768 C_2 L^{11} h^2 r_0 t^3 \pi^3 + 768 C_2 L^{11} h^2 r_0^3 t \pi^3 + \\
& 4800 \pi C_1 L^{11} b^4 r_0 t + 1536 \pi C_2 L^{11} b^4 r_0 t + 4800 \pi C_1 L^{11} h^4 r_0 t + 1536 \pi C_2 L^{11} h^4 r_0 t + \\
& 528 C_1 L^{11} b^2 r_0^2 t^2 \pi^3 + 1152 C_2 L^{11} b^2 r_0^2 t^2 \pi^3 + 528 C_1 L^{11} h^2 r_0^2 t^2 \pi^3 + 1152 C_2 L^{11} h^2 r_0^2 t^2 \pi^3 + \\
& 9600 \pi C_1 L^{11} b h^3 t^2 + 9600 \pi C_1 L^{11} b^3 h t^2 + 3072 \pi C_2 L^{11} b h^3 t^2 + 3072 \pi C_2 L^{11} b^3 h t^2 + \\
& 176 C_1 L^{11} b h t^4 \pi^3 + 384 C_2 L^{11} b h t^4 \pi^3 + 14400 \pi C_1 L^{11} b^2 h^2 t^2 + 2304 C_1 L^{11} b h^2 t^3 \pi^2 + \\
& 2304 C_1 L^{11} b^2 h t^3 \pi^2 + 4608 \pi C_2 L^{11} b^2 h^2 t^2 + 1536 C_2 L^{11} b h^2 t^3 \pi^2 + 1536 C_2 L^{11} b^2 h t^3 \pi^2 + \\
& 28800 \pi C_1 L^{11} b^2 h^2 r_0 t + 9216 \pi C_2 L^{11} b^2 h^2 r_0 t + 704 C_1 L^{11} b h r_0 t^3 \pi^3 + 704 C_1 L^{11} b h r_0^3 t \pi^3 + \\
& 1536 C_2 L^{11} b h r_0 t^3 \pi^3 + 1536 C_2 L^{11} b h r_0^3 t \pi^3 + 6912 C_1 L^{11} b h^2 r_0 t^2 \pi^2 + 6912 C_1 L^{11} b h^2 r_0^2 t \pi^2 + \\
& 6912 C_1 L^{11} b^2 h r_0 t^2 \pi^2 + 6912 C_1 L^{11} b^2 h r_0^2 t \pi^2 + 1056 C_1 L^{11} b h r_0^2 t^2 \pi^3 + 4608 C_2 L^{11} b h^2 r_0 t^2 \pi^2 + \\
& 4608 C_2 L^{11} b h^2 r_0^2 t \pi^2 + 4608 C_2 L^{11} b^2 h r_0 t^2 \pi^2 + 4608 C_2 L^{11} b^2 h r_0^2 t \pi^2 + 2304 C_2 L^{11} b h r_0^2 t^2 \pi^3 + \\
& 19200 \pi C_1 L^{11} b h^3 r_0 t + 19200 \pi C_1 L^{11} b^3 h r_0 t + 6144 \pi C_2 L^{11} b h^3 r_0 t + 6144 \pi C_2 L^{11} b^3 h r_0 t
\end{aligned}$$

$$\begin{aligned}
a_{t,2} = & 1440 C_1 \pi L^{12} b^3 r_0 t + 720 C_1 \pi L^{12} b^3 t^2 + 4320 C_1 \pi L^{12} b^2 h r_0 t + 2160 C_1 \pi L^{12} b^2 h t^2 + \\
& 696 C_1 \pi^2 L^{12} b^2 r_0^2 t + 696 C_1 \pi^2 L^{12} b^2 r_0 t^2 + 232 C_1 \pi^2 L^{12} b^2 t^3 + 4320 C_1 \pi L^{12} b h^2 r_0 t + \\
& 2160 C_1 \pi L^{12} b h^2 t^2 + 1392 C_1 \pi^2 L^{12} b h r_0^2 t + 1392 C_1 \pi^2 L^{12} b h r_0 t^2 + 464 C_1 \pi^2 L^{12} b h t^3 + \\
& 104 C_1 \pi^3 L^{12} b r_0^3 t + 156 C_1 \pi^3 L^{12} b r_0^2 t^2 + 104 C_1 \pi^3 L^{12} b r_0 t^3 + 26 C_1 \pi^3 L^{12} b t^4 + \\
& 1440 C_1 \pi L^{12} h^3 r_0 t + 720 C_1 \pi L^{12} h^3 t^2 + 696 C_1 \pi^2 L^{12} h^2 r_0^2 t + 696 C_1 \pi^2 L^{12} h^2 r_0 t^2 + \\
& 232 C_1 \pi^2 L^{12} h^2 t^3 + 104 C_1 \pi^3 L^{12} h r_0^3 t + 156 C_1 \pi^3 L^{12} h r_0^2 t^2 + 104 C_1 \pi^3 L^{12} h r_0 t^3 + \\
& 26 C_1 \pi^3 L^{12} h t^4
\end{aligned}$$

$$\begin{aligned}
a_{t,1} = & 192 C_1 \pi L^{13} b^2 r_0 t + 96 C_1 \pi L^{13} b^2 t^2 + 384 C_1 \pi L^{13} b h r_0 t + 192 C_1 \pi L^{13} b h t^2 + \\
& 96 C_1 \pi^2 L^{13} b r_0^2 t + 96 C_1 \pi^2 L^{13} b r_0 t^2 + 32 C_1 \pi^2 L^{13} b t^3 + 192 C_1 \pi L^{13} h^2 r_0 t + \\
& 96 C_1 \pi L^{13} h^2 t^2 + 96 C_1 \pi^2 L^{13} h r_0^2 t + 96 C_1 \pi^2 L^{13} h r_0 t^2 + 32 C_1 \pi^2 L^{13} h t^3 + \\
& 16 C_1 \pi^3 L^{13} r_0^3 t + 24 C_1 \pi^3 L^{13} r_0^2 t^2 + 16 C_1 \pi^3 L^{13} r_0 t^3 + 4 C_1 \pi^3 L^{13} t^4
\end{aligned}$$

$$b_{t,8} = 24 L^6 b^8 + 192 L^6 b^7 h + 672 L^6 b^6 h^2 + 1344 L^6 b^5 h^3 + 1680 L^6 b^4 h^4 + 1344 L^6 b^3 h^5 + 672 L^6 b^2 h^6 + 192 L^6 b h^7 + 24 L^6 h^8$$

$$b_{t,7} = 192 L^7 b^7 + 1344 L^7 b^6 h + 4032 L^7 b^5 h^2 + 6720 L^7 b^4 h^3 + 6720 L^7 b^3 h^4 + 4032 L^7 b^2 h^5 + 1344 L^7 b h^6 + 192 L^7 h^7$$

$$b_{t,6} = 672 L^8 b^6 + 4032 L^8 b^5 h + 10080 L^8 b^4 h^2 + 13440 L^8 b^3 h^3 + 10080 L^8 b^2 h^4 + 4032 L^8 b h^5 + 672 L^8 h^6$$

$$b_{t,5} = 1344 L^9 b^5 + 6720 L^9 b^4 h + 13440 L^9 b^3 h^2 + 13440 L^9 b^2 h^3 + 6720 L^9 b h^4 + 1344 L^9 h^5$$

$$b_{t,4} = 1680 L^{10} b^4 + 6720 L^{10} b^3 h + 10080 L^{10} b^2 h^2 + 6720 L^{10} b h^3 + 1680 L^{10} h^4$$

$$b_{t,3} = 1344 L^{11} b^3 + 4032 L^{11} b^2 h + 4032 L^{11} b h^2 + 1344 L^{11} h^3$$

$$b_{t,2} = 672 L^{12} b^2 + 1344 L^{12} b h + 672 L^{12} h^2$$

$$b_{t,1} = 192 L^{13} b + 192 L^{13} h$$

$$b_{t,0} = 24 L^{14}$$

In Appendix, in equation (A1)

$$\sigma_1 = k_{h1} \left(\hat{l}_1 + d_1 x_1^2 - \hat{l}_1 c_1 \right)$$

In equation (A2)

$$\sigma_1 = 2l_2 s_{12} \quad \sigma_2 = 2l_2 c_{12} \quad \sigma_3 = k_{h1} \left(\hat{l}_1 + d_1 x_1^2 - \hat{l}_1 c_1 \right) \sigma_5$$

$$\begin{aligned}
\sigma_4 = & l_2 \hat{l}_1 x_2 c_1 - l_1 \hat{l}_1 x_2 c_{12} - d_1 l_2 x_1^2 x_2 - 2 l_1 \hat{l}_1 x_2 c_2 - l_2 \hat{l}_1 x_2 + l_1 \hat{l}_1 x_2 c_{12} c_1 + l_1 \hat{l}_1 x_2 s_{12} s_1 \\
& - 2 d_1 l_1 x_1^2 x_2 c_2 + 2 l_1 \hat{l}_1 x_2 c_1 c_2 + d_2 l_1 x_1^2 x_2 \sigma_6 + l_1 \hat{l}_2 x_1^2 x_2 \sigma_6 - l_1 \hat{l}_2 x_1^2 c_{12} c_1 + d_2 l_1 x_1^2 x_2 s_{12}^2 \\
& + l_1 \hat{l}_2 x_1^2 s_{12} c_1 + 2 d_1 l_1 x_1^2 x_2 s_{12} s_1 + l_1 \hat{l}_1 x_1 x_2 c_{12} s_1 - l_1 \hat{l}_1 x_1 x_2 s_{12} c_1 - l_1 \hat{l}_2 x_1^2 x_2 c_{12} s_{12} \\
& + 2 d_1 l_1 x_1^2 x_2 c_{12} c_1
\end{aligned}$$

$$\begin{aligned}
\sigma_5 = & \hat{l}_2 x_1^2 x_3 \sigma_8 c_1 - \hat{l}_1 x_2 x_3 \sigma_7 + \hat{l}_1 x_2 x_3 \sigma_7 c_1 + \hat{l}_1 x_2 x_3 \sigma_8 s_1 - \hat{l}_3 x_1^2 x_2 \sigma_7 s_{12} + \hat{l}_3 x_1^2 x_2 \sigma_8 c_{12} \\
& + d_3 x_1^2 x_2 x_3 \sigma_7^2 - \hat{l}_2 x_1^2 x_3 \sigma_7 c_1 + d_3 x_1^2 x_2 x_3 \sigma_8^2 + \hat{l}_1 x_1 x_2 x_3 \sigma_7 s_1 - \hat{l}_1 x_1 x_2 x_3 \sigma_8 c_1 \\
& + 2 d_2 x_1^2 x_2 x_3 \sigma_7 c_{12} + \hat{l}_2 x_1^2 x_2 x_3 \sigma_7 c_{12} - \hat{l}_2 x_1^2 x_2 x_3 \sigma_8 c_{12} + 2 d_2 x_1^2 x_2 x_3 \sigma_8 s_{12} + 2 d_1 x_1^2 x_2 x_3 \sigma_7 c_1 \\
& + 2 d_1 x_1^2 x_2 x_3 \sigma_8 s_1
\end{aligned}$$

$$\sigma_6 = c_{12}^2 \quad \sigma_7 = c_{123} \quad \sigma_8 = s_{123}$$

In equation (A3)

$$\begin{aligned}
\sigma_1 = & 2 l_2 s_{12} \quad \sigma_2 = 2 l_2 c_{12} \quad \sigma_5 = k_1 x_2^2 (\hat{l}_1 + d_1 x_1^2 - \hat{l}_1 c_1) \sigma_9 \sigma_8 \\
\sigma_6 = & c_{12}^2 \quad \sigma_7 = s_{12}^2 \quad \sigma_9 = \hat{l}_3 + d_3 x_3^2 - \hat{l}_3 c_3 \quad \sigma_{10} = c_{123} \quad \sigma_{11} = s_{123}
\end{aligned}$$

$$\begin{aligned}
\sigma_8 = & \hat{l}_2 x_1^2 x_3 \sigma_{11} c_1 - \hat{l}_1 x_2 x_3 \sigma_{10} + \hat{l}_1 x_2 x_3 \sigma_{10} c_1 + \hat{l}_1 x_2 x_3 \sigma_{11} s_1 \\
& - \hat{l}_3 x_1^2 x_2 \sigma_{10} s_{12} + \hat{l}_3 x_1^2 x_2 \sigma_{11} c_{12} + d_3 x_1^2 x_2 x_3 \sigma_{10}^2 - \hat{l}_2 x_1^2 x_3 \sigma_{10} c_1 \\
& + d_3 x_1^2 x_2 x_3 \sigma_{11}^2 + \hat{l}_1 x_1 x_2 x_3 \sigma_{10} s_1 - \hat{l}_1 x_1 x_2 x_3 \sigma_{11} c_1 + 2 d_2 x_1^2 x_2 x_3 \sigma_{10} c_{12} \\
& + \hat{l}_2 x_1^2 x_2 x_3 \sigma_{10} c_{12} - \hat{l}_2 x_1^2 x_2 x_3 \sigma_{11} c_{12} + 2 d_2 x_1^2 x_2 x_3 \sigma_{11} s_{12} \\
& + 2 d_1 x_1^2 x_2 x_3 \sigma_{10} c_1 + 2 d_1 x_1^2 x_2 x_3 \sigma_{11} s_1
\end{aligned}$$

$$\begin{aligned}
\sigma_4 = & l_2 \hat{l}_2 x_1^2 x_3 c_{23} - d_3 l_2 x_1^2 x_2^2 x_3 - l_2 \hat{l}_2 x_1^2 x_3 c_3 - l_3 \hat{l}_1 x_2^2 x_3 \sigma_{10} \\
& - l_2 \hat{l}_3 x_1^2 x_2^2 s_3 - d_2 l_2 x_1^2 x_2^2 x_3 c_3 + l_3 \hat{l}_1 x_2^2 x_3 \sigma_{10} c_1 - 2 l_2 \hat{l}_1 x_2^2 x_3 \sigma_{10} c_3 \\
& + l_3 \hat{l}_1 x_2^2 x_3 \sigma_{11} s_1 - l_3 \hat{l}_3 x_1^2 x_2^2 \sigma_{10} s_{12} + l_3 \hat{l}_3 x_1^2 x_2^2 \sigma_{11} c_{12} \\
& + d_3 l_3 x_1^2 x_2^2 x_3 \sigma_{10}^2 + d_3 l_3 x_1^2 x_2^2 x_3 \sigma_{11}^2 + l_2 \hat{l}_2 x_1^2 x_2 x_3 s_3 + l_3 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{10} c_{12} \\
& - l_3 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{11} c_{12} \\
& + 2 d_2 l_3 x_1^2 x_2^2 x_3 \sigma_{11} s_{12} + 2 d_1 l_3 x_1^2 x_2^2 x_3 \sigma_{10} c_1 \\
& + 2 l_2 \hat{l}_1 x_2^2 x_3 \sigma_{10} c_1 c_3 + 2 d_1 l_3 x_1^2 x_2^2 x_3 \sigma_{11} s_1 + 2 l_2 \hat{l}_1 x_2^2 x_3 \sigma_{11} c_3 s_1 - 2 l_2 \hat{l}_3 x_1^2 x_2^2 \sigma_{10} s_{12} c_3 \\
& + 2 l_2 \hat{l}_3 x_1^2 x_2^2 \sigma_{11} c_{12} c_3 \\
& + 2 d_3 l_2 x_1^2 x_2^2 x_3 \sigma_{10}^2 c_3 + 2 d_3 l_2 x_1^2 x_2^2 x_3 \sigma_{11}^2 c_3 - l_3 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{10} c_1 \\
& + l_3 \hat{l}_1 x_1 x_2^2 x_3 \sigma_{10} s_1 - l_3 \hat{l}_1 x_1 x_2^2 x_3 \sigma_{11} c_1 \\
& + l_3 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{11} c_1 + 2 d_2 l_3 x_1^2 x_2^2 x_3 \sigma_{10} c_{12}
\end{aligned}$$

$$\begin{aligned}
& + 4 d_1 l_2 x_1^2 x_2^2 x_3 \sigma_{10} c_1 c_3 \\
& + 4 d_1 l_2 x_1^2 x_2^2 x_3 \sigma_{11} c_3 s_1 - 2 l_2 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{10} c_1 c_3 \\
& + 2 l_2 \hat{l}_1 x_1 x_2^2 x_3 \sigma_{10} c_3 s_1 - 2 l_2 \hat{l}_1 x_1 x_2^2 x_3 \sigma_{11} c_1 c_3 \\
& + 2 l_2 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{11} c_1 c_3 + 4 d_2 l_2 x_1^2 x_2^2 x_3 \sigma_{10} c_{12} c_3 + 2 l_2 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{10} c_{12} c_3 \\
& - 2 l_2 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{11} c_{12} c_3 + 4 d_2 l_2 x_1^2 x_2^2 x_3 \sigma_{11} s_{12} c_3 \\
\sigma_3 = & l_1 \hat{l}_2^2 x_1^4 x_3 \sigma_{10} c_1 - d_1 l_2 \hat{l}_3 x_1^4 x_2^3 s_3 - l_3 \hat{l}_1^2 x_2^3 x_3 \sigma_{10} c_1^2 \\
& - l_2 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 s_3 - 2 l_1 \hat{l}_1^2 x_2^3 x_3 \sigma_{10} c_{23} - d_1 d_3 l_2 x_1^4 x_2^3 x_3 - d_3 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 - l_3 \hat{l}_1^2 x_2^3 x_3 \sigma_{10} \\
& + 2 l_3 \hat{l}_1^2 x_2^3 x_3 \sigma_{10} c_1 - 2 l_2 \hat{l}_1^2 x_2^3 x_3 \sigma_{10} c_3 - l_1 \hat{l}_2^2 x_1^4 x_3 \sigma_{11} c_1 \\
& + l_3 \hat{l}_1^2 x_2^3 x_3 \sigma_{11} s_1 - l_1 \hat{l}_2^2 x_1^4 x_2 x_3 \sigma_{10} c_{12} \\
& - l_1 \hat{l}_2^2 x_1^4 x_3 c_{23} s_{12} c_1 + d_2 l_1 \hat{l}_3 x_1^4 x_2^3 \sigma_{10} s_{12} - d_2 l_1 \hat{l}_3 x_1^4 x_2^3 \sigma_{11} c_{12} \\
& - d_1 l_3 \hat{l}_3 x_1^4 x_2^3 \sigma_{10} s_{12} + d_1 l_3 \hat{l}_3 x_1^4 x_2^3 \sigma_{11} c_{12} - l_3 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{10} s_{12} \\
& + l_3 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{11} c_{12} + l_1 \hat{l}_2^2 x_1^4 x_2 x_3 \sigma_{11} c_{12} - d_2 d_3 l_1 x_1^4 x_2^3 x_3 \sigma_{10}^2 \\
& + d_1 d_3 l_3 x_1^4 x_2^3 x_3 \sigma_{10}^2 + l_1 \hat{l}_2^2 x_1^4 x_2 x_3 \sigma_6 c_3 - d_1 l_2 \hat{l}_2 x_1^4 x_2 x_3 c_3 + d_3 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10}^2 \\
& + d_2 l_1 \hat{l}_3 x_1^4 x_2^3 \sigma_6 s_3 - l_1 \hat{l}_2^2 x_1^4 x_3 c_{12} c_1 c_3 - d_2 d_3 l_1 x_1^4 x_2^3 x_3 \sigma_{11}^2 + d_1 d_3 l_3 x_1^4 x_2^3 x_3 \sigma_{11}^2 \\
& - l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_3 + l_1 \hat{l}_2 \hat{l}_3 x_1^4 x_2^3 \sigma_6 s_3 \\
& + d_3 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11}^2 + d_2 l_1 \hat{l}_3 x_1^4 x_2^3 \sigma_7 s_3 \\
& + l_1 \hat{l}_2^2 x_1^4 x_3 s_{12} c_1 c_3 + l_3 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{10} s_1 - l_3 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{11} c_1 - d_3 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 c_{12} \\
& - 2 d_2^2 l_1 x_1^4 x_2^3 x_3 \sigma_{10} c_{12} \\
& + 4 l_1 \hat{l}_1^2 x_2^3 x_3 \sigma_{10} c_{23} c_1 + l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{10} \\
& + d_2^2 l_1 x_1^4 x_2^3 x_3 \sigma_6 c_3 - 2 d_1 d_3 l_1 x_1^4 x_2^3 x_3 c_2 - d_1 d_2 l_2 x_1^4 x_2^3 x_3 c_3 - 2 d_2^2 l_1 x_1^4 x_2^3 x_3 \sigma_{11} s_{12} \\
& - 2 d_3 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 c_2 + d_3 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 c_1 - d_2 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 c_3 + 2 l_1 \hat{l}_1^2 x_2^3 x_3 \sigma_{11} c_{23} s_1 \\
& + d_2^2 l_1 x_1^4 x_2^3 x_3 \sigma_7 c_3 + 2 d_1^2 l_3 x_1^4 x_2^3 x_3 \sigma_{10} c_1 - l_1 \hat{l}_2^2 x_1^4 x_2^2 x_3 \sigma_6 s_3 + d_1 l_2 \hat{l}_2 x_1^4 x_2^2 x_3 s_3 \\
& - l_1 \hat{l}_2^2 x_1^4 x_3 \sigma_{10} c_1 c_2 + 4 l_2 \hat{l}_1^2 x_2^3 x_3 \sigma_{10} c_1 c_3 + l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 s_3 \\
& + l_3 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{11} c_1^2 + l_1 \hat{l}_2^2 x_1^4 x_3 \sigma_{11} c_1 c_2 + d_2 d_3 l_1 x_1^4 x_2^3 x_3 \sigma_6 \\
& + 2 d_1^2 l_3 x_1^4 x_2^3 x_3 \sigma_{11} s_1 + l_1 \hat{l}_2 \hat{l}_3 x_1^4 x_2 \sigma_{10} s_{12} - l_1 \hat{l}_2 \hat{l}_3 x_1^4 x_2 \sigma_{11} c_{12} \\
& + d_3 l_1 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_6 - l_3 \hat{l}_1^2 x_2^3 x_3 \sigma_{11} c_1 s_1 + 2 l_2 \hat{l}_1^2 x_2^3 x_3 \sigma_{11} c_3 s_1 \\
& + d_2 d_3 l_1 x_1^4 x_2^3 x_3 \sigma_7 + d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} - d_1 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} \\
& - d_3 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{10}^2 - 2 l_1 \hat{l}_1^2 x_2^3 x_3 \sigma_{10} c_{23} c_1^2 - l_1 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 c_{12} s_3 \\
& - d_3 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{11}^2 - l_1 \hat{l}_2^2 x_1^4 x_2 x_3 \sigma_6 c_{23} + d_1 l_2 \hat{l}_2 x_1^4 x_2 x_3 c_{23} - 2 d_1 l_1 \hat{l}_3 x_1^4 x_2^3 c_2 s_3 \\
& + l_1 \hat{l}_2^2 x_1^4 x_3 c_{12} c_{23} c_1 - 2 l_2 \hat{l}_1^2 x_2^3 x_3 \sigma_{10} c_1^2 c_3 + l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_{23} - 2 l_1 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 c_2 s_3 \\
& + l_2 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 c_1 s_3 - d_2 l_1 \hat{l}_2 x_1^4 x_2 x_3 c_{23} \sigma_7 - d_3 l_1 \hat{l}_2 x_1^4 x_2^3 x_3 c_{12} s_{12} - d_3 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11}^2 c_1 \\
& + 2 d_3 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11}^2 c_3 - 2 d_2 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{10} c_{12} - l_3 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{11} c_1^2
\end{aligned}$$

$$\begin{aligned}
& -l_3 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{10} c_1 s_1 + 2l_2 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{10} c_3 s_1 - 2l_2 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{11} c_1 c_3 + 2d_1 d_3 l_1 x_1^4 x_2^3 x_3 c_{12} c_1 \\
& + d_3 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 c_{12} c_1 - d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 c_{12} c_3 - d_3 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 c_{12} c_1 \\
& + d_2 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_6 c_3 - 2d_2 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{11} s_{12} \\
& + 4d_1^2 l_1 x_1^4 x_2^3 x_3 \sigma_{10} c_{23} c_1 + d_3 l_1 \hat{l}_1 x_1^3 x_2^3 x_3 c_{12} s_1 - d_3 l_1 \hat{l}_1 x_1^3 x_2^3 x_3 s_{12} c_1 \\
& + d_3 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 s_{12} c_1 + d_2 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_7 c_3 - 2d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{10} c_1 + 2d_1 d_3 l_1 x_1^4 x_2^3 x_3 s_{12} s_1 \\
& + l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 c_{12} s_3 - l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{10} c_1 - l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{10} c_2 \\
& + d_3 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 s_{12} s_1 + l_1 \hat{l}_2^2 x_1^4 x_2 x_3 c_{12} c_{23} s_{12} + 2l_1 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{11} c_{23} c_1^2 \\
& - 2d_1 d_2 l_1 x_1^4 x_2^3 x_3 c_2 c_3 + 4d_1^2 l_1 x_1^4 x_2^3 x_3 \sigma_{11} c_{23} s_1 - l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2 x_3 \sigma_{10} s_1 \\
& + l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2 x_3 \sigma_{11} c_1 + 2d_3 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 c_1 c_2 - 2d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 c_2 c_3 \\
& + d_2 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 c_1 c_3 - 2d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{11} s_1 - 2l_1 \hat{l}_1^2 x_1^3 x_3 \sigma_{11} c_{23} c_1 s_1 \\
& + 4d_1^2 l_2 x_1^4 x_2^3 x_3 \sigma_{10} c_1 c_3 + 2d_1 d_2 l_3 x_1^4 x_2^3 x_3 \sigma_{10} c_{12} - l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{11} s_1 \\
& + 2d_1 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 c_2 s_3 - 2d_1 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_{23} + 2d_2 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} \\
& - d_2 l_1 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_{10} c_{12} + d_1 l_3 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_{10} c_{12} + 2l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 c_2 s_3 \\
& - l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 c_1 s_3 + l_3 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} - l_1 \hat{l}_2^2 x_1^4 x_2 x_3 c_{12} s_{12} c_3 + 2l_2 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{11} c_1^2 c_3 \\
& + d_2 l_1 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_{11} c_{12} - d_1 l_3 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_{11} c_{12} + 4d_1^2 l_2 x_1^4 x_2^3 x_3 \sigma_{11} c_3 s_1 \\
& + 2d_1 d_2 l_3 x_1^4 x_2^3 x_3 \sigma_{11} s_{12} - l_3 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{11} c_{12} \\
& - l_1 \hat{l}_2 \hat{l}_3 x_1^4 x_2^3 c_{12} s_{12} s_3 - l_1 \hat{l}_2 \hat{l}_3 x_1^4 x_2 \sigma_{10} s_{12} c_2 \\
& + l_1 \hat{l}_2 \hat{l}_3 x_1^4 x_2 \sigma_{11} c_{12} c_2 + d_2 l_1 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_6 c_3 + 2d_2 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} s_{12} \\
& - 2l_2 \hat{l}_1^2 x_1^3 x_3 \sigma_{11} c_1 c_3 s_1 - 2d_1 d_2 l_1 x_1^4 x_2^3 x_3 \sigma_{10} c_1 - d_2 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_6 s_3 \\
& - d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_1 + 3d_1 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_1 \\
& - 2d_1 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_3 + d_2 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_{10} c_1 - d_1 l_3 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_{10} c_1 + d_3 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{10}^2 c_2 \\
& + 2d_1 l_1 \hat{l}_3 x_1^4 x_2^3 c_{12} c_1 s_3 + l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_{12} c_{23} \\
& - l_3 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{10} c_1 + l_1 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 c_{12} c_1 s_3 - l_1 \hat{l}_2 \hat{l}_3 x_1^4 x_2^2 c_{12} c_1 s_3 - d_2 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_7 s_3 \\
& + l_1 \hat{l}_2^2 x_1^4 x_2 x_3 c_{12} c_1 s_3 - d_2 l_1 \hat{l}_1 x_1^3 x_2^3 x_3 \sigma_{10} s_1 + d_2 l_1 \hat{l}_1 x_1^3 x_2^3 x_3 \sigma_{11} c_1 \\
& + d_1 l_3 \hat{l}_1 x_1^3 x_2^3 x_3 \sigma_{10} s_1 - d_1 l_3 \hat{l}_1 x_1^3 x_2^3 x_3 \sigma_{11} c_1 - d_2 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_{11} c_1 \\
& + d_1 l_3 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_{11} c_1 + d_3 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{11}^2 c_2 - 2d_1 l_1 \hat{l}_3 x_1^4 x_2^3 \sigma_{10} c_{23} s_{12} \\
& + 2d_1 l_1 \hat{l}_3 x_1^4 x_2^3 \sigma_{11} c_{12} c_{23} - 2d_1 d_2 l_1 x_1^4 x_2^3 x_3 \sigma_{11} s_1 + l_3 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{11} c_1 \\
& + l_1 \hat{l}_1 \hat{l}_3 x_1^3 x_2^3 c_{12} s_1 s_3 - l_1 \hat{l}_1 \hat{l}_3 x_1^3 x_2^3 s_{12} c_1 s_3 + l_1 \hat{l}_2 \hat{l}_3 x_1^4 x_2^2 s_{12} c_1 s_3 \\
& - 2l_1 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{10} c_{23} s_{12} + 2l_1 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{11} c_{12} c_{23} - l_1 \hat{l}_2^2 x_1^4 x_2 x_3 s_{12} c_1 s_3 - d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} s_1 \\
& + 3d_1 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} s_1 + 2d_1 l_1 \hat{l}_3 x_1^4 x_2^3 s_{12} s_1 s_3 + 2d_1 d_3 l_1 x_1^4 x_2^3 x_3 \sigma_{10}^2 c_{23} \\
& + l_1 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 s_{12} s_1 s_3 + 2d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 c_{23} c_2 + 2d_3 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10}^2 c_{23} + 2d_1 d_3 l_1 x_1^4 x_2^3 x_3 \sigma_{11}^2 c_{23} \\
& - l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_{12} c_3 + 2l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_{23} c_2 - l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_{23} c_1
\end{aligned}$$

$$\begin{aligned}
& + 2 l_1 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 c_1 c_2 s_3 + 2 d_3 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11}^2 c_{23} + l_1 \hat{l}_2^2 x_1^4 x_2 x_3 \sigma_{10} c_{12} c_2 - 2 d_1 l_2 \hat{l}_3 x_1^4 x_2^3 \sigma_{10} s_{12} c_3 \\
& + 2 d_1 l_2 \hat{l}_3 x_1^4 x_2^3 \sigma_{11} c_{12} c_3 + l_3 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{10} s_{12} c_1 - l_3 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{11} c_{12} c_1 - 2 l_2 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{10} s_{12} c_3 \\
& + 2 l_2 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{11} c_{12} c_3 + l_1 \hat{l}_2^2 x_1^4 x_2^2 x_3 c_{12} s_{12} s_3 + 2 l_1 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{10} c_{23} s_1 \\
& - 2 l_1 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{11} c_{23} c_1 - l_1 \hat{l}_2^2 x_1^4 x_2 x_3 \sigma_{11} c_{12} c_2 \\
& + 2 d_1 d_3 l_2 x_1^4 x_2^3 x_3 \sigma_{10}^2 c_3 - 2 d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 c_2 c_3 - d_2 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_6 c_{23} \\
& - 2 d_1 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_1^2 - d_3 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10}^2 c_1 \\
& + 2 d_3 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10}^2 c_3 + 2 d_1 d_3 l_2 x_1^4 x_2^3 x_3 \sigma_{11}^2 c_3 - 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_2 c_3 \\
& + l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_1 c_3 + l_3 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{10} c_1^2 \\
& + 4 d_1 d_2 l_1 x_1^4 x_2^3 x_3 \sigma_{10} c_{12} c_{23} - 2 d_1 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 c_{12} c_1 s_3 \\
& + d_2 l_1 \hat{l}_1 x_1^3 x_2^3 x_3 c_{12} c_3 s_1 - d_2 l_1 \hat{l}_1 x_1^3 x_2^3 x_3 s_{12} c_1 c_3 \\
& + d_2 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 s_{12} c_1 c_3 + 2 d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{10} c_1 c_2 \\
& + 4 d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_{23} + 2 d_1 l_1 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_{10} c_{12} c_{23} \\
& + 2 d_1 d_2 l_1 x_1^4 x_2^3 x_3 s_{12} c_3 s_1 - l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 c_{12} c_1 s_3 + l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{10} c_1 c_2 \\
& + 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_{23} \\
& + d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 s_{12} c_3 s_1 - 2 d_1 l_1 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_{11} c_{12} c_{23} \\
& - l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2^2 x_3 c_{12} s_1 s_3 + l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2^2 x_3 s_{12} c_1 s_3 \\
& + 4 d_1 d_2 l_1 x_1^4 x_2^3 x_3 \sigma_{11} c_{23} s_{12} + l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2 x_3 \sigma_{10} c_2 s_1 - l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2 x_3 \sigma_{11} c_1 c_2 \\
& - 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{11} c_{12} c_{23} \\
& + 2 d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 c_1 c_2 c_3 - 2 d_1 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 s_{12} s_1 s_3 + 2 d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{11} c_2 s_1 \\
& + 4 d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} c_{23} s_{12} - l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 s_{12} s_1 s_3 \\
& + 4 d_1 d_2 l_2 x_1^4 x_2^3 x_3 \sigma_{10} c_{12} c_3 + l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 \sigma_{11} c_2 s_1 \\
& + 6 d_1 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_{23} c_1 - 2 d_2 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_1 - 2 d_1 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_{10} c_{23} c_1 \\
& + 4 d_2 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_3 + 2 d_1 l_2 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_{10} c_{12} c_3 - 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 c_1 c_2 s_3 \\
& - 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{10} c_{23} c_1 - l_3 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_1 + 2 l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_3 \\
& + 2 d_1 l_1 \hat{l}_1 x_1^3 x_2^3 x_3 \sigma_{10} c_{23} s_1 - 2 d_1 l_1 \hat{l}_1 x_1^3 x_2^3 x_3 \sigma_{11} c_{23} c_1 \\
& + 2 d_1 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_{11} c_{23} c_1 - 2 d_1 l_2 \hat{l}_2 x_1^4 x_2^3 x_3 \sigma_{11} c_{12} c_3 \\
& + 4 d_1 d_2 l_2 x_1^4 x_2^3 x_3 \sigma_{11} s_{12} c_3 + 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{11} c_{23} c_1 \\
& + l_3 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{11} c_{12} c_1 - 2 l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{11} c_{12} c_3 \\
& + 6 d_1 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} c_{23} s_1 - 2 d_2 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} s_{12} c_1 \\
& + 4 d_2 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} s_{12} c_3 - 2 d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 c_{12} c_{23} c_1 \\
& + 6 d_1 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_1 c_3 - 2 d_1 l_2 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_{10} c_1 c_3 \\
& - l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_{12} c_{23} c_1 - 2 l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{10} c_1 c_3
\end{aligned}$$

$$\begin{aligned}
& + 2 d_1 l_2 \hat{l}_1 x_1^3 x_2^3 x_3 \sigma_{10} c_3 s_1 - 2 d_1 l_2 \hat{l}_1 x_1^3 x_2^3 x_3 \sigma_{11} c_1 c_3 \\
& + 2 d_1 l_2 \hat{l}_2 x_1^4 x_2^2 x_3 \sigma_{11} c_1 c_3 - l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2 x_3 c_{12} c_{23} s_1 \\
& + l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2 x_3 c_{23} s_{12} c_1 + 2 l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{11} c_1 c_3 \\
& + 2 l_1 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{10} c_{23} s_{12} c_1 - 2 l_1 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{11} c_{12} c_{23} c_1 - 2 d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 c_{23} s_{12} s_1 \\
& - 2 d_1 l_3 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} c_1 s_1 \\
& + 6 d_1 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} c_3 s_1 - l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_{23} s_{12} s_1 \\
& + 2 d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 c_{12} c_1 c_3 - 4 d_1 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_{23} c_1^2 \\
& - 2 d_3 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10}^2 c_{23} c_1 + l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_{12} c_1 c_3 \\
& - 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_{23} c_1 c_2 \\
& + 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{10} c_{23} c_1^2 - 2 d_3 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11}^2 c_{23} c_1 + l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2 x_3 c_{12} c_3 s_1 \\
& - l_1 \hat{l}_1 \hat{l}_2 x_1^3 x_2 x_3 s_{12} c_1 c_3 - 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{11} c_{23} c_1^2 \\
& + 2 l_2 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{10} s_{12} c_1 c_3 - 2 l_2 \hat{l}_1 \hat{l}_3 x_1^2 x_2^3 \sigma_{11} c_{12} c_1 c_3 + 2 d_1 l_1 \hat{l}_2 x_1^4 x_2 x_3 s_{12} c_3 s_1 \\
& - 2 l_1 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{10} c_{23} c_1 s_1 + l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 s_{12} c_3 s_1 \\
& - 4 d_1 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_1^2 c_3 - 2 d_3 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10}^2 c_1 c_3 \\
& + 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2 x_3 c_1 c_2 c_3 + 2 l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{10} c_1^2 c_3 \\
& - d_2 l_1 \hat{l}_2 x_1^4 x_2^3 x_3 c_{12} s_{12} c_3 - 2 d_3 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11}^2 c_1 c_3 \\
& + 2 d_2 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{10} c_{12} c_2 - 2 l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^2 x_3 \sigma_{11} c_1^2 c_3 \\
& - 2 l_2 \hat{l}_1^2 x_1 x_2^3 x_3 \sigma_{10} c_1 c_3 s_1 + 2 d_1 d_2 l_1 x_1^4 x_2^3 x_3 c_{12} c_1 c_3 \\
& + d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 c_{12} c_1 c_3 - d_2 l_1 \hat{l}_2 x_1^4 x_2^2 x_3 c_{12} c_1 c_3 \\
& + 2 d_2 l_1 \hat{l}_2 x_1^4 x_2 x_3 \sigma_{11} s_{12} c_2 - 4 d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} c_{23} s_{12} c_1 \\
& - 4 d_2 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_1 c_3 - 2 l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_1 c_3 \\
& + 2 l_2 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{11} c_{12} c_1 c_3 - 4 d_1 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} c_{23} c_1 s_1 - 4 d_2 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} s_{12} c_1 c_3 \\
& - 4 d_1 l_2 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{11} c_1 c_3 s_1 - 4 d_2 l_1 \hat{l}_1 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_{23} c_1 \\
& - 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{10} c_{12} c_{23} c_1 + 2 l_1 \hat{l}_1 \hat{l}_2 x_1^2 x_2^3 x_3 \sigma_{11} c_{12} c_{23} c_1
\end{aligned}$$

In equation (A4)

$$\begin{aligned}
& \sigma_1 = c_{123} \quad \sigma_2 = s_{123} \\
& \sigma_3 = 2d_2\sigma_1c_{12} + \hat{l}_2\sigma_1c_{12} - \hat{l}_2\sigma_2c_{12} + 2d_2\sigma_2s_{12} + 2d_1\sigma_1c_1 + 2d_1\sigma_2s_1 + d_3\sigma_1^2 + d_3\sigma_2^2 \\
& \sigma_4 = \left(\hat{l}_1 + d_1x_1^2 - \hat{l}_1c_1 \right) \quad \sigma_5 = \left(\hat{l}_3 + d_3x_3^2 - \hat{l}_3c_3 \right) \quad \sigma_6 = -\sigma_1 + \sigma_1c_1 + \sigma_2s_1 \\
& \sigma_7 = -\sigma_1s_{12} + \sigma_2c_{12} \quad \sigma_8 = \sigma_1s_1 - \sigma_2c_1 \quad \sigma_9 = \sigma_2 - \sigma_1
\end{aligned}$$

In equation (A5)

$$\sigma_1 = 2l_2s_{12} \quad \sigma_2 = 2l_2c_{12} \quad \sigma_5 = k_1x_2^2(\hat{l}_1 + d_1x_1^2 - \hat{l}_1c_1)\sigma_9\sigma_8$$

$$\sigma_6 = c_{12}^2 \quad \sigma_7 = s_{12}^2 \quad \sigma_9 = \hat{l}_3 + d_3 x_3^2 - \hat{l}_3 c_3 \quad \sigma_{10} = c_{123} \quad \sigma_{11} = s_{123}$$

$$\begin{aligned} \sigma_4 = & l_2 \hat{l}_3 x_1^2 x_2^2 \tau_{s2} + d_3 l_2 x_1^2 x_2^2 x_3^2 \tau_{s2} - d_3 l_2 x_1^2 x_2^2 x_3^2 \tau_{s3} - l_2 \hat{l}_3 x_1^2 x_2^2 \tau_{s2} c_3 - l_2 \hat{l}_2 x_1^2 x_3^2 \tau_{s3} c_3 \\ & - l_3 \hat{l}_1 x_2^2 x_3^2 \tau_{s3} \sigma_{10} + l_2 \hat{l}_2 x_1^2 x_3^2 \tau_{s3} c_{23} + l_3 \hat{l}_1 x_2^2 x_3^2 \tau_{s3} \sigma_{10} c_1 - 2 l_2 \hat{l}_1 x_2^2 x_3^2 \tau_{s3} \sigma_{10} c_3 \\ & + l_3 \hat{l}_1 x_2^2 x_3^2 \tau_{s3} \sigma_{11} s_1 + d_3 l_3 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{10}^2 + d_3 l_3 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{11}^2 + l_2 \hat{l}_2 x_1^2 x_2 x_3^2 \tau_{s3} s_3 \\ & - l_2 \hat{l}_3 x_1^2 x_2^2 x_3 \tau_{s3} s_3 - 2 d_2 l_2 x_1^2 x_2^2 x_3^2 \tau_{s3} c_3 + 2 l_2 \hat{l}_1 x_2^2 x_3^2 \tau_{s3} \sigma_{10} c_1 c_3 + 2 d_1 l_3 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{11} s_1 \\ & + 2 l_2 \hat{l}_1 x_2^2 x_3^2 \tau_{s3} \sigma_{11} c_3 s_1 + 2 d_3 l_2 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{10}^2 c_3 + 2 d_3 l_2 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{11}^2 c_3 \\ & + l_3 \hat{l}_2 x_1^2 x_2 x_3^2 \tau_{s3} \sigma_{10} c_{12} - l_3 \hat{l}_2 x_1^2 x_2 x_3^2 \tau_{s3} \sigma_{11} c_{12} - l_3 \hat{l}_3 x_1^2 x_2^2 x_3 \tau_{s3} \sigma_{10} s_{12} \\ & + l_3 \hat{l}_3 x_1^2 x_2^2 x_3 \tau_{s3} \sigma_{11} c_{12} - l_3 \hat{l}_2 x_1^2 x_2 x_3^2 \tau_{s3} \sigma_{10} c_1 + l_3 \hat{l}_1 x_1 x_2^2 x_3^2 \tau_{s3} \sigma_{10} s_1 - l_3 \hat{l}_1 x_1 x_2^2 x_3^2 \tau_{s3} \sigma_{11} c_1 \\ & + l_3 \hat{l}_2 x_1^2 x_2 x_3^2 \tau_{s3} \sigma_{11} c_1 + 2 d_2 l_3 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{10} c_{12} + 2 d_2 l_3 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{11} s_{12} \\ & + 2 d_1 l_3 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{10} c_1 + 2 l_2 \hat{l}_2 x_1^2 x_2 x_3^2 \tau_{s3} \sigma_{10} c_{12} c_3 - 2 l_2 \hat{l}_2 x_1^2 x_2 x_3^2 \tau_{s3} \sigma_{11} c_{12} c_3 \\ & - 2 l_2 \hat{l}_3 x_1^2 x_2^2 x_3 \tau_{s3} \sigma_{10} s_{12} c_3 + 2 l_2 \hat{l}_3 x_1^2 x_2^2 x_3 \tau_{s3} \sigma_{11} c_{12} c_3 - 2 l_2 \hat{l}_2 x_1^2 x_2 x_3^2 \tau_{s3} \sigma_{10} c_1 c_3 \\ & + 2 l_2 \hat{l}_1 x_1 x_2^2 x_3^2 \tau_{s3} \sigma_{10} c_3 s_1 - 2 l_2 \hat{l}_1 x_1 x_2^2 x_3^2 \tau_{s3} \sigma_{11} c_1 c_3 + 2 l_2 \hat{l}_2 x_1^2 x_2 x_3^2 \tau_{s3} \sigma_{11} c_1 c_3 \\ & + 4 d_2 l_2 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{10} c_{12} c_3 + 4 d_2 l_2 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{11} s_{12} c_3 + 4 d_1 l_2 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{10} c_1 c_3 \\ & + 4 d_1 l_2 x_1^2 x_2^2 x_3^2 \tau_{s3} \sigma_{11} c_3 s_1 \end{aligned}$$

$$\begin{aligned} \sigma_8 = & \hat{l}_2 x_1^2 x_3 \sigma_{11} c_1 - \hat{l}_1 x_2 x_3 \sigma_{10} + \hat{l}_1 x_2 x_3 \sigma_{10} c_1 + \hat{l}_1 x_2 x_3 \sigma_{11} s_1 + \hat{l}_2 x_1^2 x_3 \sigma_{10} c_{12} - \hat{l}_2 x_1^2 x_3 \sigma_{11} c_{12} \\ & - \hat{l}_3 x_1^2 x_2 \sigma_{10} s_{12} + \hat{l}_3 x_1^2 x_2 \sigma_{11} c_{12} + d_3 x_1^2 x_2 x_3 \sigma_{10}^2 - \hat{l}_2 x_1^2 x_3 \sigma_{10} c_1 + d_3 x_1^2 x_2 x_3 \sigma_{11}^2 \\ & + \hat{l}_1 x_1 x_2 x_3 \sigma_{10} s_1 - \hat{l}_1 x_1 x_2 x_3 \sigma_{11} c_1 + 2 d_2 x_1^2 x_2 x_3 \sigma_{10} c_{12} + 2 d_2 x_1^2 x_2 x_3 \sigma_{11} s_{12} \\ & + 2 d_1 x_1^2 x_2 x_3 \sigma_{10} c_1 + 2 d_1 x_1^2 x_2 x_3 \sigma_{11} s_1 \end{aligned}$$