Interacting Multipoles of Rank 4 and 4

$$
\begin{bmatrix}
+2027025 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \delta(\eta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot \delta(\zeta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\theta \cdot \delta(\zeta,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot \delta(\epsilon,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\theta \cdot \delta(\epsilon,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\eta \cdot R_\theta \cdot \delta(\epsilon,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \delta(\delta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \delta(\delta,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \delta(\delta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\delta,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \delta(\gamma,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \delta(\gamma,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \delta(\gamma,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\gamma,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\gamma,\delta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \delta(\beta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \delta(\beta,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \delta(\beta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\beta,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\beta,\delta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\beta,\gamma) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \delta(\alpha,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \delta(\alpha,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\delta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\gamma) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\beta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \delta(\epsilon,\zeta) \cdot \delta(\eta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \delta(\epsilon,\eta) \cdot \delta(\zeta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \delta(\epsilon,\theta) \cdot \delta(\zeta,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot \delta(\delta,\zeta) \cdot \delta(\eta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot \delta(\delta,\eta) \cdot \delta(\zeta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot \delta(\delta,\theta) \cdot \delta(\zeta,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \delta(\delta,\epsilon) \cdot \delta(\eta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \delta(\delta,\eta) \cdot \delta(\epsilon,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \delta(\delta,\theta) \cdot \delta(\epsilon,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\eta \cdot \delta(\delta,\epsilon) \cdot \delta(\zeta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\eta \cdot \delta(\delta,\zeta) \cdot \delta(\epsilon,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\eta \cdot \delta(\delta,\theta) \cdot \delta(\epsilon,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\theta \cdot \delta(\delta,\epsilon) \cdot \delta(\zeta,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\theta \cdot \delta(\delta,\zeta) \cdot \delta(\epsilon,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\theta \cdot \delta(\delta,\eta) \cdot \delta(\epsilon,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \delta(\gamma,\zeta) \cdot \delta(\eta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \delta(\gamma,\eta) \cdot \delta(\zeta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \delta(\gamma,\theta) \cdot \delta(\zeta,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \delta(\gamma,\epsilon) \cdot \delta(\eta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \delta(\gamma,\eta) \cdot \delta(\epsilon,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \delta(\gamma,\theta) \cdot \delta(\epsilon,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\eta \cdot \delta(\gamma,\epsilon) \cdot \delta(\zeta,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\eta \cdot \delta(\gamma,\zeta) \cdot \delta(\epsilon,\theta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta}
\end{bmatrix}
$$

Simplify deltas:

$$
\begin{bmatrix}
+2027025 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \delta(\eta,\eta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\theta \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\theta \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\eta \cdot R_\theta \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \delta(\delta,\delta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \delta(\delta,\delta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \delta(\delta,\delta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\delta,\delta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \delta(\gamma,\gamma) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \delta(\gamma,\gamma) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \delta(\gamma,\gamma) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\gamma,\gamma) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\gamma,\gamma) \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \delta(\beta,\beta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \delta(\beta,\beta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \delta(\beta,\beta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\beta,\beta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\beta,\beta) \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\beta,\beta) \cdot \Phi^B_{\alpha\beta\beta\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \delta(\alpha,\alpha) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \delta(\alpha,\alpha) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\alpha) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\alpha) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\alpha) \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\alpha) \cdot \Phi^B_{\alpha\alpha\beta\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \delta(\alpha,\alpha) \cdot \Phi^B_{\alpha\alpha\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \delta(\epsilon,\epsilon) \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \delta(\epsilon,\epsilon) \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \delta(\epsilon,\epsilon) \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot \delta(\delta,\delta) \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot \delta(\delta,\delta) \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot \delta(\delta,\delta) \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \delta(\delta,\delta) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \delta(\delta,\delta) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \delta(\delta,\delta) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\eta \cdot \delta(\delta,\delta) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\eta \cdot \delta(\delta,\delta) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\eta \cdot \delta(\delta,\delta) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\theta \cdot \delta(\delta,\delta) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\theta \cdot \delta(\delta,\delta) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\theta \cdot \delta(\delta,\delta) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \delta(\gamma,\gamma) \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \delta(\gamma,\gamma) \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \delta(\gamma,\gamma) \cdot \delta(\zeta,\zeta) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \delta(\gamma,\gamma) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \delta(\gamma,\gamma) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \delta(\gamma,\gamma) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\eta \cdot \delta(\gamma,\gamma) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\eta \cdot \delta(\gamma,\gamma) \cdot \delta(\epsilon,\epsilon) \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\eta}
\end{bmatrix}
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\begin{bmatrix}
+2027025 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\beta\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\alpha\beta\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\alpha\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\zeta} \\
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+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\theta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\eta}
\end{bmatrix}
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\begin{bmatrix}
+2027025 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\eta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\eta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot R_\eta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\delta \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\delta \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\gamma \cdot \Phi^B_{\alpha\beta\beta\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\delta \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\gamma \cdot \Phi^B_{\alpha\alpha\beta\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\beta \cdot \Phi^B_{\alpha\alpha\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\eta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\zeta} \\
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+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\zeta} \\
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+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+10395 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta}
\end{bmatrix}
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\xRightarrow{\text{added up}} R_z^{-17} \cdot \frac{1}{11025} \cdot \left[\begin{array}{c}
+2027025 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot R_\theta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\theta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\eta\eta} \\
-270270 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\zeta\zeta\eta} \\
-405405 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\eta} \\
-540540 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-540540 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-540540 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\beta\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-540540 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\delta\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\alpha\beta\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\eta} \\
-135135 \cdot R_z^2 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot R_\eta \cdot \Phi^B_{\alpha\alpha\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\eta} \\
+31185 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\epsilon\epsilon\zeta\zeta} \\
+31185 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\zeta\zeta} \\
+93555 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\gamma \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\delta\epsilon\epsilon\zeta} \\
+31185 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\zeta\zeta} \\
+93555 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\epsilon\epsilon\zeta} \\
+62370 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\delta\delta\epsilon\zeta} \\
+124740 \cdot R_z^4 \cdot R_\alpha \cdot R_\beta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\delta\epsilon\zeta} \\
+31185 \cdot R_z^4 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\zeta\zeta} \\
+93555 \cdot R_z^4 \cdot R_\alpha \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\epsilon\epsilon\zeta} \\
+62370 \cdot R_z^4 \cdot R_\alpha \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\delta\delta\epsilon\zeta} \\
+124740 \cdot R_z^4 \cdot R_\alpha \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\delta\epsilon\zeta} \\
+62370 \cdot R_z^4 \cdot R_\alpha \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\beta\delta} \cdot \Phi^A_{\gamma\gamma\epsilon\zeta} \\
+124740 \cdot R_z^4 \cdot R_\alpha \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\gamma\epsilon\zeta} \\
+83160 \cdot R_z^4 \cdot R_\alpha \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\gamma\delta\epsilon\zeta} \\
+41580 \cdot R_z^4 \cdot R_\alpha \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\beta\delta\epsilon\zeta} \\
+31185 \cdot R_z^4 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\zeta\zeta} \\
+93555 \cdot R_z^4 \cdot R_\beta \cdot R_\gamma \cdot R_\delta \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\epsilon\epsilon\zeta} \\
+62370 \cdot R_z^4 \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\delta\delta\epsilon\zeta} \\
+124740 \cdot R_z^4 \cdot R_\beta \cdot R_\gamma \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\delta\epsilon\zeta} \\
+62370 \cdot R_z^4 \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\alpha\beta\delta} \cdot \Phi^A_{\gamma\gamma\epsilon\zeta} \\
+124740 \cdot R_z^4 \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\gamma\epsilon\zeta} \\
+83160 \cdot R_z^4 \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\gamma\delta\epsilon\zeta} \\
+41580 \cdot R_z^4 \cdot R_\beta \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\alpha\delta\epsilon\zeta} \\
+62370 \cdot R_z^4 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\alpha\gamma\delta} \cdot \Phi^A_{\beta\beta\epsilon\zeta} \\
+124740 \cdot R_z^4 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\beta\epsilon\zeta} \\
+83160 \cdot R_z^4 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\beta\delta\epsilon\zeta} \\
+41580 \cdot R_z^4 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\alpha\delta\epsilon\zeta} \\
+83160 \cdot R_z^4 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\alpha\beta\delta} \cdot \Phi^A_{\beta\gamma\epsilon\zeta} \\
+41580 \cdot R_z^4 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\beta\beta\delta} \cdot \Phi^A_{\alpha\gamma\epsilon\zeta} \\
+31185 \cdot R_z^4 \cdot R_\gamma \cdot R_\delta \cdot R_\epsilon \cdot R_\zeta \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{\gamma\delta\epsilon\zeta} \\
-2835 \cdot R_z^6 \cdot R_\alpha \cdot R_\beta \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\delta\delta\epsilon\epsilon} \\
-11340 \cdot R_z^6 \cdot R_\alpha \cdot R_\beta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\gamma\delta\epsilon\epsilon} \\
-2835 \cdot R_z^6 \cdot R_\alpha \cdot R_\gamma \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\delta\delta\epsilon\epsilon} \\
-11340 \cdot R_z^6 \cdot R_\alpha \cdot R_\gamma \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\delta\epsilon\epsilon} \\
-2835 \cdot R_z^6 \cdot R_\alpha \cdot R_\delta \cdot \Phi^B_{\alpha\beta\beta\delta} \cdot \Phi^A_{\gamma\gamma\epsilon\epsilon} \\
-11340 \cdot R_z^6 \cdot R_\alpha \cdot R_\delta \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\gamma\epsilon\epsilon} \\
-22680 \cdot R_z^6 \cdot R_\alpha \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\gamma\delta\delta\epsilon} \\
-11340 \cdot R_z^6 \cdot R_\alpha \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\beta\delta\delta\epsilon} \\
-22680 \cdot R_z^6 \cdot R_\alpha \cdot R_\epsilon \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\beta\gamma\delta\epsilon}
\end{array}\right] \tag{2d}
$$

Simplify R:

$$
+\frac{1}{11025}\cdot T_{\alpha\beta\gamma\delta\epsilon\zeta\eta\theta}\Phi^{B}_{\alpha\beta\gamma\delta}\Phi^{A}_{\epsilon\zeta\eta\theta} = R_z^{-17}\cdot\frac{1}{11025}\cdot
\left[\begin{array}{c}
+2027025\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzzz}\cdot\Phi^{A}_{zzzz}\\
-135135\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzzz}\cdot\Phi^{A}_{zz\eta\eta}\\
-270270\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzzz}\cdot\Phi^{A}_{zz\zeta\zeta}\\
-405405\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzzz}\cdot\Phi^{A}_{zz\epsilon\epsilon}\\
-540540\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\delta}\cdot\Phi^{A}_{zzz\delta}\\
-540540\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\gamma}\cdot\Phi^{A}_{zzz\gamma}\\
-135135\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\gamma\gamma}\cdot\Phi^{A}_{zzzz}\\
-540540\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\beta}\cdot\Phi^{A}_{zzz\beta}\\
-135135\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\beta}\cdot\Phi^{A}_{zzzz}\\
-135135\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\beta}\cdot\Phi^{A}_{zzzz}\\
-540540\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\alpha}\cdot\Phi^{A}_{zzz\alpha}\\
-135135\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\alpha\alpha}\cdot\Phi^{A}_{zzzz}\\
-135135\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\alpha\alpha}\cdot\Phi^{A}_{zzzz}\\
-135135\cdot R_z^2\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\alpha\alpha}\cdot\Phi^{A}_{zzzz}\\
+31185\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzzz}\cdot\Phi^{A}_{\epsilon\epsilon\zeta\zeta}\\
+31185\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\delta}\cdot\Phi^{A}_{z\delta\zeta\zeta}\\
+93555\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\delta}\cdot\Phi^{A}_{z\delta\epsilon\epsilon}\\
+31185\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\gamma}\cdot\Phi^{A}_{z\gamma\zeta\zeta}\\
+93555\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\gamma}\cdot\Phi^{A}_{z\gamma\epsilon\epsilon}\\
+62370\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\gamma\gamma}\cdot\Phi^{A}_{zz\delta\delta}\\
+124740\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\gamma\delta}\cdot\Phi^{A}_{zz\gamma\delta}\\
+31185\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\beta}\cdot\Phi^{A}_{z\beta\zeta\zeta}\\
+93555\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\beta}\cdot\Phi^{A}_{z\beta\epsilon\epsilon}\\
+62370\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\beta}\cdot\Phi^{A}_{zz\delta\delta}\\
+124740\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\delta}\cdot\Phi^{A}_{zz\beta\delta}\\
+62370\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\beta}\cdot\Phi^{A}_{zz\gamma\gamma}\\
+124740\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\gamma}\cdot\Phi^{A}_{zz\beta\gamma}\\
+83160\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{z\beta\beta\gamma}\cdot\Phi^{A}_{zzz\gamma}\\
+41580\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{z\beta\gamma\gamma}\cdot\Phi^{A}_{zzz\beta}\\
+31185\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\alpha}\cdot\Phi^{A}_{z\alpha\zeta\zeta}\\
+93555\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zzz\alpha}\cdot\Phi^{A}_{z\alpha\epsilon\epsilon}\\
+62370\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\alpha\alpha}\cdot\Phi^{A}_{zz\delta\delta}\\
+124740\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\alpha\delta}\cdot\Phi^{A}_{zz\alpha\delta}\\
+62370\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\alpha\alpha}\cdot\Phi^{A}_{zz\gamma\gamma}\\
+124740\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\alpha\gamma}\cdot\Phi^{A}_{zz\alpha\gamma}\\
+83160\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{z\alpha\alpha\gamma}\cdot\Phi^{A}_{zzz\gamma}\\
+41580\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{z\alpha\gamma\gamma}\cdot\Phi^{A}_{zzz\alpha}\\
+62370\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\alpha\alpha}\cdot\Phi^{A}_{zz\beta\beta}\\
+124740\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\alpha\beta}\cdot\Phi^{A}_{zz\alpha\beta}\\
+83160\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{z\alpha\alpha\beta}\cdot\Phi^{A}_{zzz\beta}\\
+41580\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{z\alpha\beta\beta}\cdot\Phi^{A}_{zzz\alpha}\\
+83160\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{z\alpha\alpha\beta}\cdot\Phi^{A}_{zzz\beta}\\
+41580\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{z\alpha\beta\beta}\cdot\Phi^{A}_{zzz\alpha}\\
+31185\cdot R_z^4\cdot R_z\cdot R_z\cdot R_z\cdot R_z\cdot \Phi^{B}_{\alpha\alpha\beta\beta}\cdot\Phi^{A}_{zzzz}\\
-2835\cdot R_z^6\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\gamma\gamma}\cdot\Phi^{A}_{\delta\delta\epsilon\epsilon}\\
-11340\cdot R_z^6\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\gamma\delta}\cdot\Phi^{A}_{\gamma\delta\epsilon\epsilon}\\
-2835\cdot R_z^6\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\beta}\cdot\Phi^{A}_{\delta\delta\epsilon\epsilon}\\
-11340\cdot R_z^6\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\delta}\cdot\Phi^{A}_{\beta\delta\epsilon\epsilon}\\
-2835\cdot R_z^6\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\beta}\cdot\Phi^{A}_{\gamma\gamma\epsilon\epsilon}\\
-11340\cdot R_z^6\cdot R_z\cdot R_z\cdot \Phi^{B}_{zz\beta\gamma}\cdot\Phi^{A}_{\beta\gamma\epsilon\epsilon}\\
-22680\cdot R_z^6\cdot R_z\cdot R_z\cdot \Phi^{B}_{z\beta\beta\gamma}\cdot\Phi^{A}_{z\gamma\delta\delta}\\
-11340\cdot R_z^6\cdot R_z\cdot R_z\cdot \Phi^{B}_{\alpha\alpha\beta\beta}\cdot\Phi^{A}_{zzzz}
\end{array}\right]
$$

$$
\xRightarrow{\text{cleaned up}} R_z^{-17} \cdot \frac{1}{11025} \cdot \left[\begin{array}{c}
+2027025 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} - 135135 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zz\eta\eta} \\
-270270 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zz\zeta\zeta} - 405405 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zz\epsilon\epsilon} \\
-540540 \cdot R_z^8 \cdot \Phi^B_{zzz\delta} \cdot \Phi^A_{zzz\delta} - 540540 \cdot R_z^8 \cdot \Phi^B_{zzz\gamma} \cdot \Phi^A_{zzz\gamma} \\
-135135 \cdot R_z^8 \cdot \Phi^B_{zz\gamma\gamma} \cdot \Phi^A_{zzzz} - 540540 \cdot R_z^8 \cdot \Phi^B_{zzz\beta} \cdot \Phi^A_{zzz\beta} \\
-135135 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{zzzz} - 135135 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{zzzz} \\
-540540 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{zzz\alpha} - 135135 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} \\
-135135 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} - 135135 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} \\
+31185 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{\epsilon\epsilon\zeta\zeta} \\
+31185 \cdot R_z^8 \cdot \Phi^B_{zzz\delta} \cdot \Phi^A_{z\delta\zeta\zeta} + 93555 \cdot R_z^8 \cdot \Phi^B_{zzz\delta} \cdot \Phi^A_{z\delta\epsilon\epsilon} \\
+31185 \cdot R_z^8 \cdot \Phi^B_{zzz\gamma} \cdot \Phi^A_{z\gamma\zeta\zeta} + 93555 \cdot R_z^8 \cdot \Phi^B_{zzz\gamma} \cdot \Phi^A_{z\gamma\epsilon\epsilon} \\
+62370 \cdot R_z^8 \cdot \Phi^B_{zz\gamma\gamma} \cdot \Phi^A_{zz\delta\delta} + 124740 \cdot R_z^8 \cdot \Phi^B_{zz\gamma\delta} \cdot \Phi^A_{zz\gamma\delta} \\
+31185 \cdot R_z^8 \cdot \Phi^B_{zzz\beta} \cdot \Phi^A_{z\beta\zeta\zeta} + 93555 \cdot R_z^8 \cdot \Phi^B_{zzz\beta} \cdot \Phi^A_{z\beta\epsilon\epsilon} \\
+62370 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{zz\delta\delta} + 124740 \cdot R_z^8 \cdot \Phi^B_{zz\beta\delta} \cdot \Phi^A_{zz\beta\delta} \\
+62370 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{zz\gamma\gamma} + 124740 \cdot R_z^8 \cdot \Phi^B_{zz\beta\gamma} \cdot \Phi^A_{zz\beta\gamma} \\
+83160 \cdot R_z^8 \cdot \Phi^B_{z\beta\beta\gamma} \cdot \Phi^A_{zzz\gamma} + 41580 \cdot R_z^8 \cdot \Phi^B_{z\beta\gamma\gamma} \cdot \Phi^A_{zzz\beta} \\
+31185 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{z\alpha\zeta\zeta} + 93555 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{z\alpha\epsilon\epsilon} \\
+62370 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zz\delta\delta} + 124740 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\delta} \cdot \Phi^A_{zz\alpha\delta} \\
+62370 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zz\gamma\gamma} + 124740 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\gamma} \cdot \Phi^A_{zz\alpha\gamma} \\
+83160 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\gamma} \cdot \Phi^A_{zzz\gamma} + 41580 \cdot R_z^8 \cdot \Phi^B_{z\alpha\gamma\gamma} \cdot \Phi^A_{zzz\alpha} \\
+62370 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zz\beta\beta} + 124740 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{zz\alpha\beta} \\
+83160 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{zzz\beta} + 41580 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{zzz\alpha} \\
+83160 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{zzz\beta} + 41580 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{zzz\alpha} \\
+31185 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{zzzz} - 2835 \cdot R_z^8 \cdot \Phi^B_{zz\gamma\gamma} \cdot \Phi^A_{\delta\delta\epsilon\epsilon} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\gamma\delta} \cdot \Phi^A_{\gamma\delta\epsilon\epsilon} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{\delta\delta\epsilon\epsilon} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\beta\delta} \cdot \Phi^A_{\beta\delta\epsilon\epsilon} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{\gamma\gamma\epsilon\epsilon} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\beta\gamma} \cdot \Phi^A_{\beta\gamma\epsilon\epsilon} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\beta\beta\gamma} \cdot \Phi^A_{z\gamma\delta\delta} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\beta\gamma\gamma} \cdot \Phi^A_{z\beta\delta\delta} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\beta\gamma\delta} \cdot \Phi^A_{z\beta\gamma\delta} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{\delta\delta\epsilon\epsilon} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\delta} \cdot \Phi^A_{\alpha\delta\epsilon\epsilon} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{\gamma\gamma\epsilon\epsilon} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\gamma} \cdot \Phi^A_{\alpha\gamma\epsilon\epsilon} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\gamma} \cdot \Phi^A_{z\gamma\delta\delta} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\alpha\gamma\gamma} \cdot \Phi^A_{z\alpha\delta\delta} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\gamma\delta} \cdot \Phi^A_{z\alpha\gamma\delta} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{\beta\beta\epsilon\epsilon} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{\alpha\beta\epsilon\epsilon} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{z\beta\delta\delta} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{z\alpha\delta\delta} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\delta} \cdot \Phi^A_{z\alpha\beta\delta} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{z\beta\gamma\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{z\alpha\gamma\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\gamma} \cdot \Phi^A_{z\alpha\beta\gamma} \\
-17010 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{zz\gamma\gamma} \\
-34020 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{zz\beta\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{zz\alpha\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{zz\alpha\beta} \\
9 + 945 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{\gamma\gamma\delta\delta} \\
+3780 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\beta\gamma\delta\delta} \\
+2520 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\alpha\alpha\delta\delta}
\end{array} \right] \tag{3b}
$$

$$
\xrightarrow{\text{reduced indices}} R_z^{-17} \cdot \frac{1}{11025} \cdot \left[\begin{array}{c}
+2027025 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} - 135135 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zz\alpha\alpha} \\
-270270 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zz\alpha\alpha} - 405405 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zz\alpha\alpha} \\
-540540 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{zzz\alpha} - 540540 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{zzz\alpha} \\
-135135 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} - 540540 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{zzz\alpha} \\
-135135 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} - 135135 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} \\
-540540 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{zzz\alpha} - 135135 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} \\
-135135 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} - 135135 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} \\
+31185 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{\alpha\alpha\beta\beta} + 31185 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{z\alpha\beta\beta} \\
+93555 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{z\alpha\beta\beta} + 31185 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{z\alpha\beta\beta} \\
+93555 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{z\alpha\beta\beta} + 62370 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zz\beta\beta} \\
+124740 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{zz\alpha\beta} + 31185 \cdot R_z^8 \cdot \Phi^B_{zzz\beta} \cdot \Phi^A_{z\alpha\alpha\beta} \\
+93555 \cdot R_z^8 \cdot \Phi^B_{zzz\beta} \cdot \Phi^A_{z\alpha\alpha\beta} + 62370 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{zz\alpha\alpha} \\
+124740 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{zz\alpha\beta} + 62370 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{zz\alpha\alpha} \\
+124740 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{zz\alpha\beta} + 83160 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{zzz\alpha} \\
+41580 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{zzz\beta} + 31185 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{z\alpha\beta\beta} \\
+93555 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{z\alpha\beta\beta} + 62370 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zz\beta\beta} \\
+124740 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{zz\alpha\beta} + 62370 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zz\beta\beta} \\
+124740 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{zz\alpha\beta} + 83160 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{zzz\beta} \\
+41580 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{zzz\alpha} + 62370 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zz\beta\beta} \\
+124740 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{zz\alpha\beta} + 83160 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{zzz\beta} \\
+41580 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{zzz\alpha} + 83160 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{zzz\beta} \\
+41580 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{zzz\alpha} + 31185 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{zzzz} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\gamma\gamma} \cdot \Phi^A_{\alpha\alpha\beta\beta} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\gamma} \cdot \Phi^A_{\alpha\beta\beta\gamma} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{\alpha\alpha\gamma\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{\alpha\beta\gamma\gamma} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{\alpha\alpha\gamma\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\beta\gamma} \cdot \Phi^A_{\alpha\alpha\beta\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\beta\beta\gamma} \cdot \Phi^A_{z\alpha\alpha\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\beta\gamma\gamma} \cdot \Phi^A_{z\alpha\alpha\beta} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\gamma} \cdot \Phi^A_{z\alpha\beta\gamma} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{\beta\beta\gamma\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{\alpha\beta\gamma\gamma} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{\beta\beta\gamma\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\gamma} \cdot \Phi^A_{\alpha\beta\beta\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\gamma} \cdot \Phi^A_{z\beta\beta\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\alpha\gamma\gamma} \cdot \Phi^A_{z\alpha\beta\beta} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\gamma} \cdot \Phi^A_{z\alpha\beta\gamma} \\
-2835 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{\beta\beta\gamma\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{\alpha\beta\gamma\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{z\beta\gamma\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{z\alpha\gamma\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\gamma} \cdot \Phi^A_{z\alpha\beta\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{z\beta\gamma\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{z\alpha\gamma\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\gamma} \cdot \Phi^A_{z\alpha\beta\gamma} \\
-17010 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{zz\gamma\gamma} \\
-34020 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{zz\beta\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{zz\alpha\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{zz\alpha\beta} \\
+945 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{\gamma\gamma\delta\delta} \\
+3780 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\beta\gamma\delta\delta} \\
+2520 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\alpha\gamma\delta\delta}
\end{array} \right] \tag{3c}
$$

$$
\xRightarrow{\text{added up}} R_z^{-17} \cdot \frac{1}{11025} \cdot \left[\begin{array}{c}
+2027025 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} - 810810 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zz\alpha\alpha} \\
-2162160 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{zzz\alpha} - 810810 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zzzz} \\
+31185 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{\alpha\alpha\beta\beta} + 374220 \cdot R_z^8 \cdot \Phi^B_{zzz\alpha} \cdot \Phi^A_{z\alpha\beta\beta} \\
+249480 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{zz\beta\beta} + 748440 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{zz\alpha\beta} \\
+124740 \cdot R_z^8 \cdot \Phi^B_{zzz\beta} \cdot \Phi^A_{z\alpha\alpha\beta} + 124740 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{zz\alpha\alpha} \\
+207900 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{zzz\alpha} + 291060 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{zzz\beta} \\
+31185 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{zzzz} - 2835 \cdot R_z^8 \cdot \Phi^B_{zz\gamma\gamma} \cdot \Phi^A_{\alpha\alpha\beta\beta} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\gamma} \cdot \Phi^A_{\alpha\beta\beta\gamma} \\
-5670 \cdot R_z^8 \cdot \Phi^B_{zz\beta\beta} \cdot \Phi^A_{\alpha\alpha\gamma\gamma} \\
-34020 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\beta} \cdot \Phi^A_{\alpha\beta\gamma\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{zz\beta\gamma} \cdot \Phi^A_{\alpha\alpha\beta\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\beta\beta\gamma} \cdot \Phi^A_{z\alpha\alpha\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\beta\gamma\gamma} \cdot \Phi^A_{z\alpha\alpha\beta} \\
-90720 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\gamma} \cdot \Phi^A_{z\alpha\beta\gamma} \\
-8505 \cdot R_z^8 \cdot \Phi^B_{zz\alpha\alpha} \cdot \Phi^A_{\beta\beta\gamma\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\gamma} \cdot \Phi^A_{z\beta\beta\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{z\alpha\gamma\gamma} \cdot \Phi^A_{z\alpha\beta\beta} \\
-45360 \cdot R_z^8 \cdot \Phi^B_{z\alpha\alpha\beta} \cdot \Phi^A_{z\beta\gamma\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{z\alpha\beta\beta} \cdot \Phi^A_{z\alpha\gamma\gamma} \\
-17010 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{zz\gamma\gamma} \\
-34020 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{zz\beta\gamma} \\
-22680 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{zz\alpha\gamma} \\
-11340 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{zz\alpha\beta} \\
+945 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\beta} \cdot \Phi^A_{\gamma\gamma\delta\delta} \\
+3780 \cdot R_z^8 \cdot \Phi^B_{\alpha\alpha\beta\gamma} \cdot \Phi^A_{\beta\gamma\delta\delta} \\
+2520 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\beta\gamma} \cdot \Phi^A_{\alpha\gamma\delta\delta} \\
+1260 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\gamma\gamma} \cdot \Phi^A_{\alpha\beta\delta\delta} \\
+2520 \cdot R_z^8 \cdot \Phi^B_{\alpha\beta\gamma\delta} \cdot \Phi^A_{\alpha\beta\gamma\delta}
\end{array} \right] \tag{3d}
$$

Simplify Hexadecapoles:

$$+\frac{1}{11025}\cdot T_{\alpha\beta\gamma\delta\epsilon\zeta\eta\theta}\Phi^B_{\alpha\beta\gamma\delta}\Phi^A_{\epsilon\zeta\eta\theta} = R_z^{-17}\cdot\frac{1}{11025}\cdot\left[\begin{array}{c}
+2027025\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zzzz} - 810810\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zz\alpha\alpha}\\
-2162160\cdot R_z^8\cdot\Phi^B_{zzz\alpha}\cdot\Phi^A_{zzz\alpha} - 810810\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zzzz}\\
+31185\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{\alpha\alpha\beta\beta} + 374220\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zz\beta\beta}\\
+249480\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta} + 748440\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\alpha\alpha}\\
+124740\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zz\alpha\alpha} + 124740\cdot R_z^8\cdot\Phi^B_{zz\beta\beta}\cdot\Phi^A_{zz\alpha\alpha}\\
+207900\cdot R_z^8\cdot\Phi^B_{zz\beta\beta}\cdot\Phi^A_{zzzz} + 291060\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zzzz}\\
+31185\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zzzz} - 2835\cdot R_z^8\cdot\Phi^B_{zz\gamma\gamma}\cdot\Phi^A_{\alpha\alpha\beta\beta}\\
-22680\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\alpha\alpha\beta\beta}\\
-5670\cdot R_z^8\cdot\Phi^B_{zz\beta\beta}\cdot\Phi^A_{\alpha\alpha\gamma\gamma}\\
-34020\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\alpha\alpha\gamma\gamma}\\
-11340\cdot R_z^8\cdot\Phi^B_{zz\beta\beta}\cdot\Phi^A_{\alpha\alpha\beta\beta}\\
-22680\cdot R_z^8\cdot\Phi^B_{zz\beta\beta}\cdot\Phi^A_{zz\alpha\alpha} - 11340\cdot R_z^8\cdot\Phi^B_{zz\gamma\gamma}\cdot\Phi^A_{zz\alpha\alpha}\\
-90720\cdot R_z^8\cdot\Phi^B_{z\alpha\beta\gamma}\cdot\Phi^A_{z\alpha\beta\gamma}\\
-8505\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\beta\beta\gamma\gamma}\\
-22680\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta} - 11340\cdot R_z^8\cdot\Phi^B_{zz\gamma\gamma}\cdot\Phi^A_{zz\beta\beta}\\
-45360\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\gamma\gamma} - 22680\cdot R_z^8\cdot\Phi^B_{zz\beta\beta}\cdot\Phi^A_{zz\gamma\gamma}\\
-17010\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\gamma\gamma}\\
-34020\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\beta\beta}\\
-22680\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\alpha\alpha}\\
-11340\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\gamma\gamma}\cdot\Phi^A_{zz\alpha\alpha}\\
+945\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{\gamma\gamma\delta\delta}\\
+3780\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{\beta\beta\delta\delta}\\
+2520\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{\alpha\alpha\delta\delta}\\
+1260\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\gamma\gamma}\cdot\Phi^A_{\alpha\alpha\delta\delta}\\
+2520\cdot R_z^8\cdot\Phi^B_{\alpha\beta\gamma\delta}\cdot\Phi^A_{\alpha\beta\gamma\delta}
\end{array}\right] \tag{4a}$$

$$\xRightarrow{\text{reduced indices}} R_z^{-17}\cdot\frac{1}{11025}\cdot\begin{bmatrix} +2027025\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zzzz}-810810\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zz\alpha\alpha}\\ -2162160\cdot R_z^8\cdot\Phi^B_{zzz\alpha}\cdot\Phi^A_{zzz\alpha}-810810\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zzzz}\\ +31185\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{\alpha\alpha\beta\beta}+374220\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zz\alpha\alpha}\\ +249480\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta}+748440\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\alpha\alpha}\\ +124740\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zz\alpha\alpha}+124740\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta}\\ +207900\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zzzz}+291060\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zzzz}\\ +31185\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zzzz}-2835\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\beta\beta\gamma\gamma}\\ -22680\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\alpha\alpha\beta\beta}\\ -5670\cdot R_z^8\cdot\Phi^B_{zz\beta\beta}\cdot\Phi^A_{\alpha\alpha\gamma\gamma}\\ -34020\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\alpha\alpha\beta\beta}\\ -11340\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\alpha\alpha\beta\beta}\\ -22680\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta}-11340\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta}\\ -90720\cdot R_z^8\cdot\Phi^B_{z\alpha\beta\gamma}\cdot\Phi^A_{z\alpha\beta\gamma}\\ -8505\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\beta\beta\gamma\gamma}\\ -22680\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta}-11340\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta}\\ -45360\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta}-22680\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta}\\ -17010\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\gamma\gamma}\\ -34020\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\beta\beta}\\ -22680\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\alpha\alpha}\\ -11340\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\alpha\alpha}\\ +945\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{\gamma\gamma\delta\delta}\\ +3780\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{\beta\beta\gamma\gamma}\\ +2520\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{\alpha\alpha\gamma\gamma}\\ +1260\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\gamma\gamma}\cdot\Phi^A_{\beta\beta\gamma\gamma}\\ +2520\cdot R_z^8\cdot\Phi^B_{\alpha\beta\gamma\delta}\cdot\Phi^A_{\alpha\beta\gamma\delta}\end{bmatrix} \tag{4b}$$

$$\xRightarrow{\text{added up}} R_z^{-17}\cdot\frac{1}{11025}\cdot\begin{bmatrix} +2027025\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zzzz}-311850\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zz\alpha\alpha}\\ -2162160\cdot R_z^8\cdot\Phi^B_{zzz\alpha}\cdot\Phi^A_{zzz\alpha}-311850\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zzzz}\\ +31185\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{\alpha\alpha\beta\beta}+238140\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\beta\beta}\\ +748440\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\alpha\alpha}\\ +31185\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zzzz}-11340\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\beta\beta\gamma\gamma}\\ -68040\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{\alpha\alpha\beta\beta}\\ -5670\cdot R_z^8\cdot\Phi^B_{zz\beta\beta}\cdot\Phi^A_{\alpha\alpha\gamma\gamma}\\ -90720\cdot R_z^8\cdot\Phi^B_{z\alpha\beta\gamma}\cdot\Phi^A_{z\alpha\beta\gamma}\\ -17010\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\gamma\gamma}\\ -34020\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\beta\beta}\\ -34020\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{zz\alpha\alpha}\\ +945\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{\gamma\gamma\delta\delta}\\ +3780\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{\beta\beta\gamma\gamma}\\ +2520\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\beta\beta}\cdot\Phi^A_{\alpha\alpha\gamma\gamma}\\ +1260\cdot R_z^8\cdot\Phi^B_{\alpha\alpha\gamma\gamma}\cdot\Phi^A_{\beta\beta\gamma\gamma}\\ +2520\cdot R_z^8\cdot\Phi^B_{\alpha\beta\gamma\delta}\cdot\Phi^A_{\alpha\beta\gamma\delta}\end{bmatrix} \tag{4c}$$

Exploit Traceless Conditions:

$$+\frac{1}{11025}\cdot T_{\alpha\beta\gamma\delta\epsilon\zeta\eta\theta}\Phi^B_{\alpha\beta\gamma\delta}\Phi^A_{\epsilon\zeta\eta\theta}=R_z^{-17}\cdot\frac{1}{11025}\cdot\begin{bmatrix} +2027025\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zzzz}-2162160\cdot R_z^8\cdot\Phi^B_{zzz\alpha}\cdot\Phi^A_{zzz\alpha}\\ +748440\cdot R_z^8\cdot\Phi^B_{zz\alpha\alpha}\cdot\Phi^A_{zz\alpha\alpha}\\ -90720\cdot R_z^8\cdot\Phi^B_{z\alpha\beta\gamma}\cdot\Phi^A_{z\alpha\beta\gamma}\\ +2520\cdot R_z^8\cdot\Phi^B_{\alpha\beta\gamma\delta}\cdot\Phi^A_{\alpha\beta\gamma\delta}\end{bmatrix} \tag{5}$$

Multiply Out Sum:

$$+\frac{1}{11025}\cdot T_{\alpha\beta\gamma\delta\epsilon\zeta\eta\theta}\Phi^{B}_{\alpha\beta\gamma\delta}\Phi^{A}_{\epsilon\zeta\eta\theta} = R_z^{-17}\cdot\frac{1}{11025}\cdot\left[\begin{array}{c}
+2027025\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zzzz} - 2162160\cdot R_z^8\cdot\Phi^B_{xzzz}\cdot\Phi^A_{xzzz}\\
-2162160\cdot R_z^8\cdot\Phi^B_{yzzz}\cdot\Phi^A_{yzzz} - 2162160\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zzzz}\\
+748440\cdot R_z^8\cdot\Phi^B_{xxzz}\cdot\Phi^A_{xxzz} + 748440\cdot R_z^8\cdot\Phi^B_{yyzz}\cdot\Phi^A_{yyzz}\\
+748440\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zzzz} - 90720\cdot R_z^8\cdot\Phi^B_{xxxz}\cdot\Phi^A_{xxxz}\\
-90720\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz} - 90720\cdot R_z^8\cdot\Phi^B_{xxzz}\cdot\Phi^A_{xxzz}\\
-90720\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz} - 90720\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz}\\
-90720\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz} - 90720\cdot R_z^8\cdot\Phi^B_{xxzz}\cdot\Phi^A_{xxzz}\\
-90720\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz} - 90720\cdot R_z^8\cdot\Phi^B_{xzzz}\cdot\Phi^A_{xzzz}\\
-90720\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz} - 90720\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz}\\
-90720\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz} - 90720\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz}\\
-90720\cdot R_z^8\cdot\Phi^B_{yyyz}\cdot\Phi^A_{yyyz} - 90720\cdot R_z^8\cdot\Phi^B_{yyzz}\cdot\Phi^A_{yyzz}\\
-90720\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz} - 90720\cdot R_z^8\cdot\Phi^B_{yyzz}\cdot\Phi^A_{yyzz}\\
-90720\cdot R_z^8\cdot\Phi^B_{yzzz}\cdot\Phi^A_{yzzz} - 90720\cdot R_z^8\cdot\Phi^B_{xxzz}\cdot\Phi^A_{xxzz}\\
-90720\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz} - 90720\cdot R_z^8\cdot\Phi^B_{xzzz}\cdot\Phi^A_{xzzz}\\
-90720\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz} - 90720\cdot R_z^8\cdot\Phi^B_{yyzz}\cdot\Phi^A_{yyzz}\\
-90720\cdot R_z^8\cdot\Phi^B_{yzzz}\cdot\Phi^A_{yzzz} - 90720\cdot R_z^8\cdot\Phi^B_{xzzz}\cdot\Phi^A_{xzzz}\\
-90720\cdot R_z^8\cdot\Phi^B_{yzzz}\cdot\Phi^A_{yzzz} - 90720\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zzzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxxx}\cdot\Phi^A_{xxxx} + 2520\cdot R_z^8\cdot\Phi^B_{xxxy}\cdot\Phi^A_{xxxy}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxxz}\cdot\Phi^A_{xxxz} + 2520\cdot R_z^8\cdot\Phi^B_{xxxy}\cdot\Phi^A_{xxxy}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxyy}\cdot\Phi^A_{xxyy} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxxz}\cdot\Phi^A_{xxxz} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxzz}\cdot\Phi^A_{xxzz} + 2520\cdot R_z^8\cdot\Phi^B_{xxxy}\cdot\Phi^A_{xxxy}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxyy}\cdot\Phi^A_{xxyy} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxyy}\cdot\Phi^A_{xxyy} + 2520\cdot R_z^8\cdot\Phi^B_{xyyy}\cdot\Phi^A_{xyyy}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxzz}\cdot\Phi^A_{xxzz} + 2520\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{zzzz}\cdot\Phi^A_{zzzz} + 2520\cdot R_z^8\cdot\Phi^B_{xxxy}\cdot\Phi^A_{xxxy}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxyy}\cdot\Phi^A_{xxyy} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxyy}\cdot\Phi^A_{xxyy} + 2520\cdot R_z^8\cdot\Phi^B_{xyyy}\cdot\Phi^A_{xyyy}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxyy}\cdot\Phi^A_{xxyy} + 2520\cdot R_z^8\cdot\Phi^B_{xyyy}\cdot\Phi^A_{xyyy}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{xyyy}\cdot\Phi^A_{xyyy}\\
+2520\cdot R_z^8\cdot\Phi^B_{yyyy}\cdot\Phi^A_{yyyy} + 2520\cdot R_z^8\cdot\Phi^B_{yyyz}\cdot\Phi^A_{yyyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{yyyz}\cdot\Phi^A_{yyyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{yyzz}\cdot\Phi^A_{yyzz} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{yyyz}\cdot\Phi^A_{yyyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{yyzz}\cdot\Phi^A_{yyzz} + 2520\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{yyzz}\cdot\Phi^A_{yyzz} + 2520\cdot R_z^8\cdot\Phi^B_{yzzz}\cdot\Phi^A_{yzzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxxz}\cdot\Phi^A_{xxxz} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxzz}\cdot\Phi^A_{xxzz} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xxzz}\cdot\Phi^A_{xxzz} + 2520\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xzzz}\cdot\Phi^A_{xzzz} + 2520\cdot R_z^8\cdot\Phi^B_{xxyz}\cdot\Phi^A_{xxyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{xyzz}\cdot\Phi^A_{xyzz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{yyyz}\cdot\Phi^A_{yyyz}\\
+2520\cdot R_z^8\cdot\Phi^B_{xyyz}\cdot\Phi^A_{xyyz} + 2520\cdot R_z^8\cdot\Phi^B_{yyyz}\cdot\Phi^A_{yyyz}
\end{array}\right]$$

$$\xRightarrow{\text{cleaned up}} R_z^{-17} \cdot \frac{1}{11025} \cdot \begin{bmatrix} +2027025 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} - 2162160 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} \\ +748440 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} + 748440 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} \\ +748440 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} - 90720 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} \\ -90720 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} - 90720 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} \\ -90720 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} - 90720 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} \\ -90720 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} - 90720 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{xxxx} \cdot \Phi^A_{xxxx} + 2520 \cdot R_z^8 \cdot \Phi^B_{xxyy} \cdot \Phi^A_{xxyy} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} + 2520 \cdot R_z^8 \cdot \Phi^B_{xxyy} \cdot \Phi^A_{xxyy} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{xxyy} \cdot \Phi^A_{xxyy} + 2520 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} + 2520 \cdot R_z^8 \cdot \Phi^B_{xxyy} \cdot \Phi^A_{xxyy} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{xxyy} \cdot \Phi^A_{xxyy} + 2520 \cdot R_z^8 \cdot \Phi^B_{xxyy} \cdot \Phi^A_{xxyy} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{yyyy} \cdot \Phi^A_{yyyy} + 2520 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} + 2520 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} + 2520 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} + 2520 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} + 2520 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} \\ +2520 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} \end{bmatrix} \tag{6b}$$

$$\xRightarrow{\text{added up}} R_z^{-17} \cdot \frac{1}{11025} \cdot \begin{bmatrix} +525105 \cdot R_z^8 \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} + 491400 \cdot R_z^8 \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} \\ +491400 \cdot R_z^8 \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} + 2520 \cdot R_z^8 \cdot \Phi^B_{xxxx} \cdot \Phi^A_{xxxx} \\ +15120 \cdot R_z^8 \cdot \Phi^B_{xxyy} \cdot \Phi^A_{xxyy} + 2520 \cdot R_z^8 \cdot \Phi^B_{yyyy} \cdot \Phi^A_{yyyy} \end{bmatrix} \tag{6c}$$

Combining everything:

$$+\frac{1}{11025} \cdot T_{\alpha\beta\gamma\delta\epsilon\zeta\eta\theta} \Phi^B_{\alpha\beta\gamma\delta} \Phi^A_{\epsilon\zeta\eta\theta} = \begin{bmatrix} +\frac{1667}{35} \cdot R_z^{-9} \cdot \Phi^B_{zzzz} \cdot \Phi^A_{zzzz} + \frac{312}{7} \cdot R_z^{-9} \cdot \Phi^B_{xxzz} \cdot \Phi^A_{xxzz} \\ +\frac{312}{7} \cdot R_z^{-9} \cdot \Phi^B_{yyzz} \cdot \Phi^A_{yyzz} + \frac{8}{35} \cdot R_z^{-9} \cdot \Phi^B_{xxxx} \cdot \Phi^A_{xxxx} \\ +\frac{48}{35} \cdot R_z^{-9} \cdot \Phi^B_{xxyy} \cdot \Phi^A_{xxyy} + \frac{8}{35} \cdot R_z^{-9} \cdot \Phi^B_{yyyy} \cdot \Phi^A_{yyyy} \end{bmatrix} \tag{7}$$