$$
\begin{aligned}
\Omega^{(0)}(\xi) =& 1, \\
\Omega^{(1)}(\xi) =& \frac{(C_A - \mathbf{T}_t)}{2\epsilon} \Big(1 - \xi\Big), \\
\Omega^{(2)}(\xi) =& \frac{(C_A - \mathbf{T}_t)^2}{(2\epsilon)^2} \left\{ 1 - 2\xi + \xi^2 \left[1 - \hat{B}_1(\epsilon) \frac{2C_A - \mathbf{T}_t}{C_A - \mathbf{T}_t} \right] \right\}, \\
\Omega^{(3)}(\xi) =& \frac{(C_A - \mathbf{T}_t)^3}{(2\epsilon)^3} \left\{ 1 - 3\xi + 3\xi^2 \left[1 - \hat{B}_1(\epsilon) \frac{2C_A - \mathbf{T}_t}{C_A - \mathbf{T}_t} \right] \right. \\
& \left. - \xi^3 \left[1 - \hat{B}_1(\epsilon) \frac{2C_A - \mathbf{T}_t}{C_A - \mathbf{T}_t} \right] \left[1 - \hat{B}_2(\epsilon) \frac{2C_A - \mathbf{T}_t}{C_A - \mathbf{T}_t} \right] \right\}
\end{aligned}
$$