

$$\begin{aligned}
 & Z \left(\begin{array}{c} \downarrow \uparrow \downarrow \uparrow \\ \uparrow \downarrow \uparrow \downarrow \end{array} \right) = S_4 S_2 \Delta_3 \Phi = 1 - \frac{1}{24} \left(\downarrow \uparrow \downarrow \uparrow + \downarrow \uparrow \downarrow \uparrow \right) + (\text{deg} \geq 4).
 \end{aligned}$$