

$$U^{\mathbb{C}}\triangleleft_{\widehat{\mathbb{C}}} \ni {}_T K_{\omega}^{\varkappa}$$

$$(s)_{\varkappa} = \frac{\Gamma_{\varkappa+s}^{\Omega}}{\Gamma_s^{\Omega}} = \prod_j \frac{\Gamma_{\varkappa_j+s-a(j-1)/2}}{\Gamma_{s-a(j-1)/2}}$$

$$\Phi_{\varkappa} \boxtimes_{\mathbb{C}} \Phi_{\varkappa} = \left( \frac{d_X}{r} \right)_{\varkappa} \left( \frac{d}{2r} \right)_{\varkappa} \prod_{1 \leqslant i < j \leqslant r} \frac{\Gamma_{\varkappa_i - \varkappa_j + 1 + a(j-i-1)/2}}{\left( \varkappa_i - \varkappa_j + a(j-i)/2 \right) \Gamma_{\varkappa_i - \varkappa_j + a(j-i+1)/2}}$$

$$\text{LHS} = \prod_j \frac{\Gamma_{\varkappa_j + (c+1)/2 + a(r-j)/2}}{\Gamma_{(c+1)/2 + a(r-j)/2}} \frac{\Gamma_{\varkappa_j + 1 + a(r-j)/2}}{\Gamma_{1 + a(r-j)/2}} \prod_{1 \leqslant i < j \leqslant r} \frac{\Gamma_{\varkappa_i - \varkappa_j + 1 + a(j-i-1)/2}}{\left( \varkappa_i - \varkappa_j + a(j-i)/2 \right) \Gamma_{\varkappa_i - \varkappa_j + a(j-i+1)/2}}$$

$$\left( d_X/r \right)_{\varkappa} = \prod_j \frac{\Gamma_{\varkappa_j + 1 + a(r-1)/2 - a(j-1)/2}}{\Gamma_{1 + a(r-1)/2 - a(j-1)/2}} = \prod_j \frac{\Gamma_{\varkappa_j + 1 + a(r-j)/2}}{\Gamma_{1 + a(r-j)/2}}$$

$$\left( d/2r \right)_{\varkappa} = \prod_j \frac{\Gamma_{\varkappa_j + (1+c)/2 + a(r-1)/2 - a(j-1)/2}}{\Gamma_{(1+c)/2 + a(r-1)/2 - a(j-1)/2}} = \prod_j \frac{\Gamma_{\varkappa_j + (1+c)/2 + a(r-j)/2}}{\Gamma_{(1+c)/2 + a(r-j)/2}}$$

$$d_{\varkappa}^{\text{alg}} = \prod_{1 \leqslant i < j \leqslant r} \frac{\varkappa_i - \varkappa_j + a(j-i)/2}{a(j-i)/2} \frac{\Gamma_{\varkappa_i - \varkappa_j + a(j-i+1)/2}}{\Gamma_{a(j-i+1)/2}} \frac{\Gamma_{1 + a(j-i-1)/2}}{\Gamma_{\varkappa_i - \varkappa_j + 1 + a(j-i-1)/2}}$$

$$d_{\varkappa} \Phi_{\varkappa} \boxtimes_{\mathbb{C}} \Phi_{\varkappa} = \left( \frac{d_X}{r} \right)_{\varkappa} \left( \frac{d}{2r} \right)_{\varkappa} \prod_{1 \leqslant i < j \leqslant r} \frac{\varkappa_i - \varkappa_j + a(j-i)/2}{a(j-i)/2} \frac{\Gamma_{\varkappa_i - \varkappa_j + a(j-i+1)/2}}{\Gamma_{a(j-i+1)/2}}$$

$$\frac{\Gamma_{1 + a(j-i-1)/2}}{\Gamma_{\varkappa_i - \varkappa_j + 1 + a(j-i-1)/2}} \frac{\Gamma_{\varkappa_i - \varkappa_j + 1 + a(j-i-1)/2}}{\left( \varkappa_i - \varkappa_j + a(j-i)/2 \right) \Gamma_{\varkappa_i - \varkappa_j + a(j-i+1)/2}}$$

$$= \left( \frac{d_X}{r} \right)_{\varkappa} \left( \frac{d}{2r} \right)_{\varkappa} \prod_{1 \leqslant i < j \leqslant r} \frac{\Gamma_{1 + a(j-i-1)/2}}{(a(j-i)/2) \Gamma_{a(j-i+1)/2}}$$

$$\varrho_i = (2i - r - 1) a/4$$

$$c(s) = \prod_{i < j} \frac{\Gamma_{(j-i)a/2}}{\Gamma_{s_j - s_i + a/2}} \frac{\Gamma_{(j-i+1)a/2}}{\Gamma_{s_j - s_i}} = \prod_{i < j} \frac{\Gamma_{\varrho_j - \varrho_i}}{\Gamma_{s_j - s_i + a/2}} \frac{\Gamma_{\varrho_j - \varrho_i + a/2}}{\Gamma_{s_j - s_i}} = \prod_{i < j} \frac{\Gamma_{\varrho_j - \varrho_i}}{\Gamma_{s_j - s_i}} \frac{\Gamma_{\varrho_j - \varrho_i + a/2}}{\Gamma_{s_j - s_i + a/2}}$$

$$c(\lambda - \varrho)$$