$$\mathcal{A}(u,v) = \int_{-i\infty}^{+i\infty} \frac{dtds}{(4\pi i)^2} M(s,t) u^{s/2} v^{-(s+t)/2} \Gamma\left(\frac{\Delta_1+\Delta_2-s}{2}\right) \Gamma\left(\frac{\Delta_3+\Delta_4-s}{2}\right)$$
$$\Gamma\left(\frac{\Delta_{34}-t}{2}\right) \Gamma\left(\frac{-\Delta_{12}-t}{2}\right) \Gamma\left(\frac{t+s}{2}\right) \Gamma\left(\frac{t+s+\Delta_{12}-\Delta_{34}}{2}\right)$$