

connex_iff_trichot^{13,42}

$$\begin{aligned} & \forall T:\text{Type}, R:(T \rightarrow T \rightarrow \mathbb{P}). \\ & (\forall a, b:T. \text{Dec}(R(a,b))) \\ \Rightarrow & (\text{Connex}(T;x,y.R(x,y)) \\ \iff & \{ \forall a, b:T. \\ & \text{strict_part}(x,y.R(x,y);a;b) \\ & \vee \text{Symmetrize}(x,y.R(x,y);a;b) \\ & \vee \text{strict_part}(x,y.R(x,y);b;a) \} \end{aligned}$$