$$
\begin{aligned}
\varphi_1 \,\mathtt{M}\, \varphi_2 \;&= \varphi_1 \,\mathtt{R}\, \varphi_2 \;\wedge\; \mathtt{F}(\varphi_1 \;\wedge\; \varphi_2) \\
&\underset{=}{\overset{\mathtt{dsc},\mathtt{t}}{}} \; (\boxed{\varphi_1}\,\mathtt{R}\,(\boxed{\varphi_2} \;\vee\; (\boxed{\varphi_1} \;\wedge\; \neg \mathit{sing}) \;\vee\; \neg \mathit{alive})) \wedge \\
&\qquad \mathtt{F}\,(\boxed{\varphi_1} \;\wedge\; \boxed{\varphi_2} \;\wedge\; \mathit{alive})
\end{aligned}
$$