Enochs and Jenda’s Gorenstein dimensions are generalized by Holm and Jørgensen to $C$-Gorenstein dimensions, where $C$ is a semidualizing $R$-module, in their study of connections between $C$-Gorenstein dimensions of an $R$-complex and Gorenstein dimensions of the same complex viewed as a complex over the trivial extension $R \ltimes C$. We generalize these connections to a certain type of retract diagram, recovering $R \ltimes C$ as a special case. Furthermore, we simplify the retract diagram into a module finite extension, assuming the existence of a dualizing $R$-complex. We investigate along the way the “local-global property” of some $C$-Gorenstein dimensions and a characterization of semidualizing modules in our generalized setting. (Received September 22, 2015)