

$$\mathcal{O}\left(\frac{T_{BC}}{m}d_vq + \frac{T_{BC}}{m}\left(1 - R\right)d_cqm\right)I_{BC} = \mathcal{O}\left(\left(\frac{d_v}{m} + d_v\right)qT_{BC}\right)I_{BC} \quad (1)$$