

$$UEF = \sum_{i=1}^N \frac{M_i C_{pi} (125^\circ\text{F} - 58^\circ\text{F})}{Q_{dm}}$$

OR,

$$UEF = \sum_{i=1}^N \frac{M_i C_{pi} (51.7^\circ\text{C} - 14.4^\circ\text{C})}{Q_{dm}}$$