$$
\mathrm{T(r)} = \begin{cases} T_{ped} + (T_0 - T_{ped}) \left(1 - \left(\frac{r}{r_{ped}}\right)^2\right)^{\alpha T} & \text{if } r \leq r_{ped} \\ mr + b & \text{if } r_{ped} < r \leq a \\ \max\left(T_{sep} \cdot e^{\left(\frac{-(r-a)}{\lambda_{T_1}}\right)}, T_{min}\right) & \text{if } r > a \text{ and } T > T_{min} \\ T_{min} \cdot e^{\left(\frac{-(r-a)}{\lambda_{T_2}}\right)} & \text{other cases} \end{cases}
$$

with

$$
m = \frac{T_{sep} - T_{ped}}{\Delta_{ped}}, \quad b = T_{sep} - ma
$$

$$
\mathrm{n(r)} = \begin{cases} n_{ped} + (n_0 - n_{ped}) \left(1 - \left(\frac{r}{r_{ped}}\right)^2\right)^{\alpha_n} & \text{if } r \leq r_{ped} \\ mr + b & \text{if } r_{ped} < r \leq a \\ n_{sep} \cdot e^{\left(\frac{-(r-a)}{\lambda_n}\right)} & \text{other cases} \end{cases}
$$

with

$$
m = \frac{n_{sep} - n_{ped}}{\Delta_{ped}}, \quad b = n_{sep} - ma
$$