

B. Parameters for the case study

Table B.1. Parameter values (per quarter hour of period length)

Parameter	Value [p.u.]	Parameter	Value [p.u.]
$\lambda_{mn,t}$	0.189,0.236, 0.21,0.21[W/m°C]	$(p_{n,t}^2)^{\min}$	0,25 [kPa²]
η^{GC}	0,85	$(p_{n,t}^2)^{\max}$	4 [kPa²]
η_j^e	0,4	$(p_{n,t}^2)^{\text{reference}}$	1 [kPa²]
η_j^h	0,38	$P_{j,t}^{\text{CHP},\min}$	0
η_k^{P2G}	0,75	$P_{j,t}^{\text{CHP},\max}$	1
τ^a	10 [°C]	P_{nm}^{\max}	0,5 p.u.
$\tau_{mn,t}^{\text{in/out},\min}$	30 [°C]	$Q_g^{\text{GS},\min}$	0
$\tau_{mn,t}^{\text{in/out},\max}$	80 [°C]	$Q_g^{\text{GS},\max}$	7,7
c_p	4,64668e-6 p.u.h/kgK	$Q_k^{\text{P2G},\min}$	0
c_k	1,3	$Q_k^{\text{P2G},\max}$	0,13
CR	1,4	$Q_s^{\text{ST},\text{in/out},\min}$	0
E^{GC}	0,99	$Q_s^{\text{ST},\text{in/out},\max}$	0,13
$H_j^{\text{CHP},\min}$	0	Reactance	0.1577 p.u.
$H_j^{\text{CHP},\max}$	1	RLD_j^{CHP}	9 p.u./h
$H_h^{\text{HS},\text{in/out},\min}$	0	RLU_j^{CHP}	9 p.u./h
$H_h^{\text{HS},\text{in/out},\max}$	0,26	S_{nm}^{\max}	5
HS_h^0	1,3	P_{base}	1 MW
HS_h^{\min}	0,26	ST_s^0	1,95
HS_h^{\max}	2,34	ST_s^{\min}	0,26 [p.u.h]
K^{GC}	0,0854	ST_s^{\max}	3,9 [p.u.h]
$L_{nm} (L_{12}, L_{23}, L_{65}, L_{54})$	271.3,235.4, 177.3, 102.8 [m]	T_s	530 °R
$m_{mn,t}^{\min}$	1 [kg/s]	Z_a	0,95
$m_{mn,t}^{\max}$	3 [kg/s]	$Z_{nm} (Z_{12}, Z_{23}, Z_{34}, Z_{35})$	44.8085;59.7447; 29.8723;44.80 [kPa²/(pu)²]