

```

clc
clear all
sympref('FloatingPointOutput',true);
u = symunit;
tf_separate_int

```

Entrada

```

% Enunciado Motor A
eq = subs(eq, P_t9 / P_9, 3.5);
eq = subs(eq, P_t19 / P_19, 2.5);
T_t4 = 1600; % K
pi_c = 20;
pi_f = 1.5;
alpha = 5;

% General
g_c = 1;
pi_fn = 0.99;
M_0 = 0.8;
gamma_c = 1.4;
gamma_t = 1.33;
c_pc = 1005; % J/kg-K
c_pt = 1250; % J/kg-K
h_PR = 41400000; % J/kg
T_0 = 288.15; % K

% Figuras de merito
pi_dmax = 0.98;
e_c = 0.88;
pi_b = 0.94;
eta_b = 0.99;
e_t = 0.89;
pi_n = 0.98;
eta_m = 0.95;
e_f = 0.86;

```

Evaluar

```

debug = 1;
tf_separate_eval;

```

$$R_c = 287.1429$$

$$R_t = 310.1504$$

$$a_0 = 340.3473$$

$$V_0 = 272.2778$$

$$\tau_r = 1.1280$$

$$\pi_r = 1.5243$$

$$\eta_r = 1$$

$$\pi_d = 0.9800$$

$$\tau_\lambda = 6.9063$$

$$\tau_c = 2.6449$$

$$\eta_c = 0.8229$$

$$\tau_f = 1.1442$$

$$\eta_f = 0.8518$$

$$f = 0.0291$$

$$\tau_t = 0.6047$$

$$\pi_t = 0.1025$$

$$\eta_t = 0.9156$$

$$\frac{P_0}{P_9} = 1.2407$$

$$M_9 = 1.4864$$

$$T_9 = 709.0319$$

$$V_9 = 803.8602$$

$$\frac{P_0}{P_{19}} = 1.1270$$

$$M_{19} = 1.2232$$

$$T_{19} = 286.2414$$

$$V_{19} = 414.9318$$

$$\frac{F}{\dot{m}_0} = 179.1195$$

$$S = 2.7077\text{e-}05$$

$$\text{FR} = 4.1465$$

$$\eta_P = 0.6389$$

$$\eta_T = 0.4487$$

$$\eta_O = 0.2867$$