

## Contents

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```
clear all;close all;clc
```

## Modelos de los motores

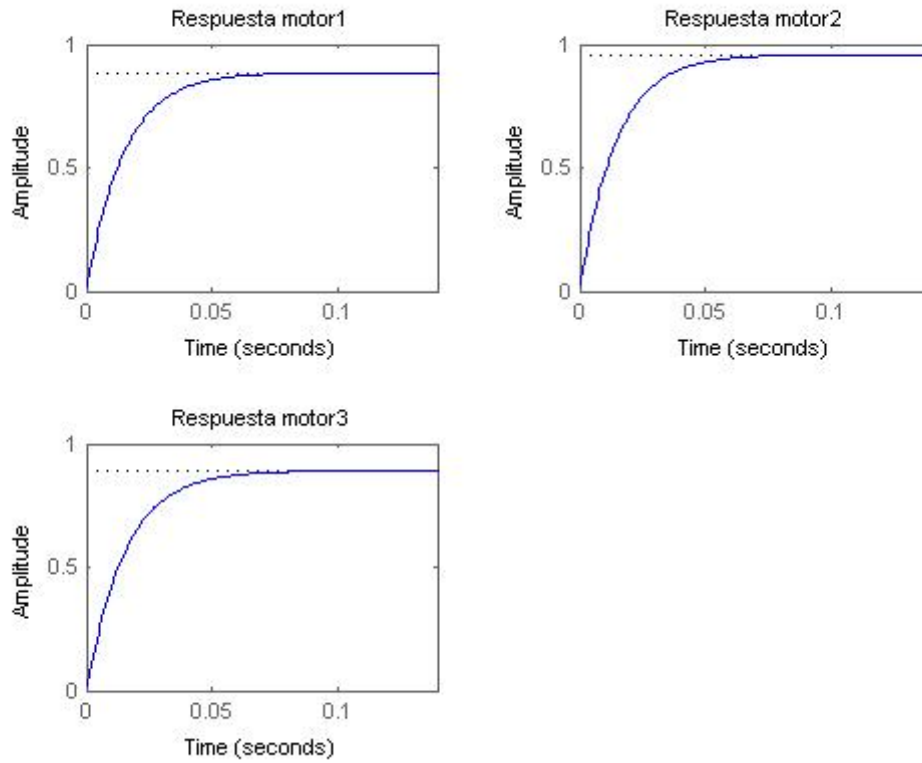
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```
num1 = [0.88548];  
den1 = [0.014752*4.2122e-09 (0.014752+4.2122e-09) 1];  
num2 = [0.95786];  
den2 = [0.014366*1.905e-06 (0.014366+1.905e-06) 1];  
num3 = [0.89041];  
den3 = [0.015126*1.49e-04 (0.015126+1.49e-04) 1];  
  
motor1 = tf(num1,den1);  
motor2 = tf(num2,den2);  
motor3 = tf(num3,den3);
```

## Diagramas de respuesta al escalon

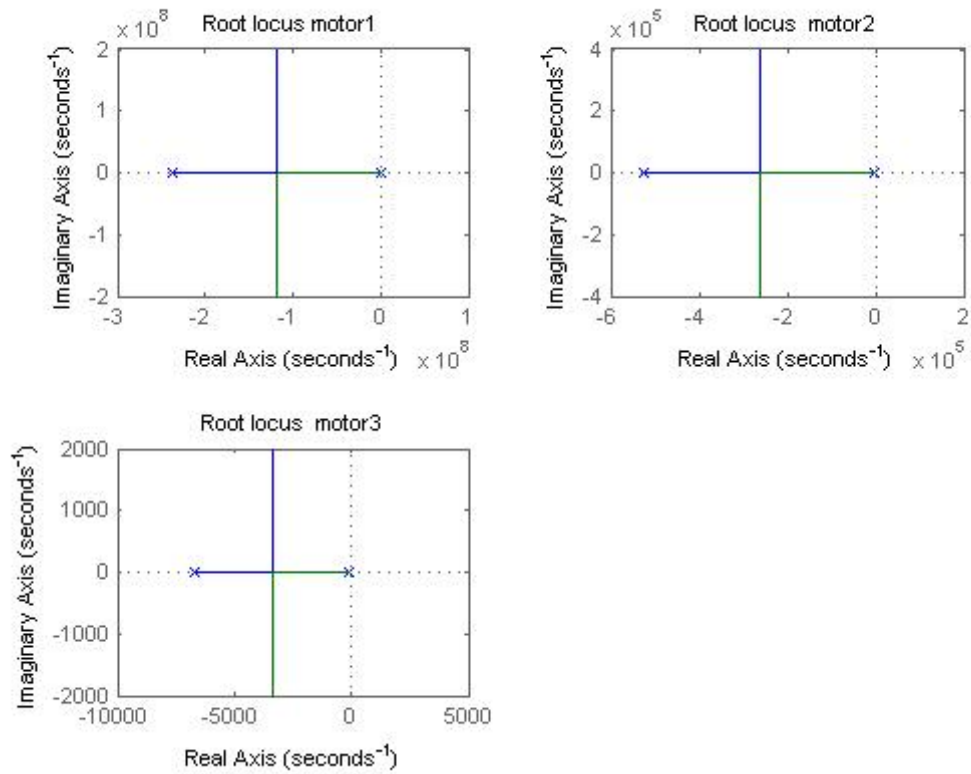
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```
figure(1)  
subplot(221)  
step(motor1)  
title('Respuesta motor1')  
subplot(222)  
step(motor2)  
title('Respuesta motor2')  
subplot(223)  
step(motor3)  
title('Respuesta motor3')
```



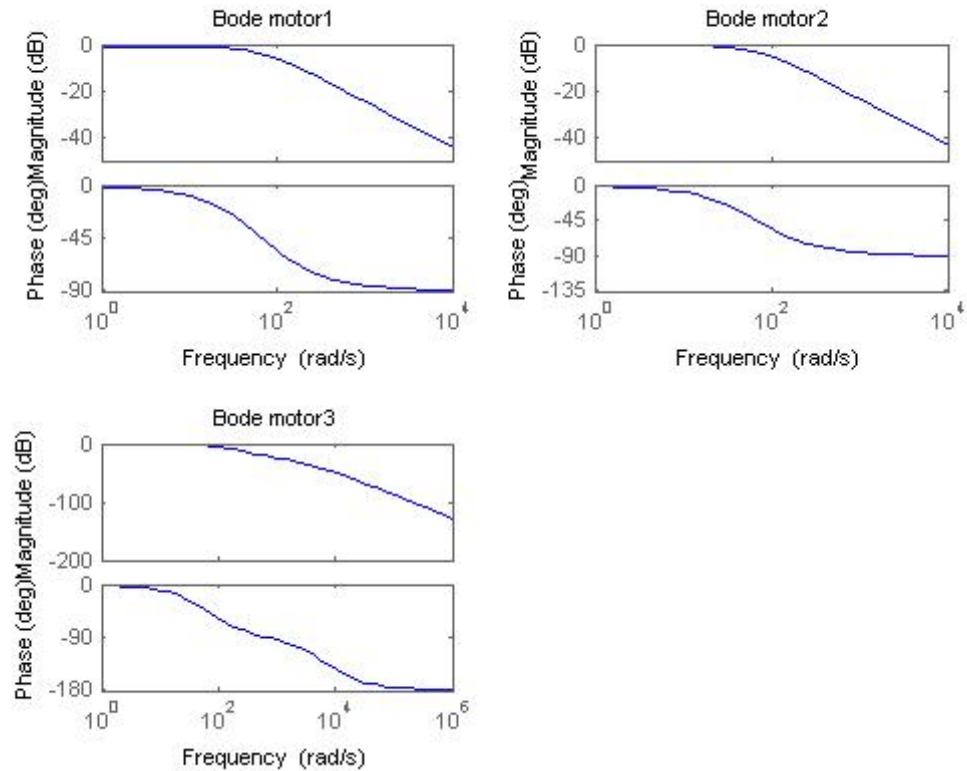
### Diagramas de lugar de las raices

```
figure(2)
subplot(221)
rlocus(motor1)
title('Root locus motor1')
subplot(222)
rlocus(motor2)
title('Root locus motor2')
subplot(223)
rlocus(motor3)
title('Root locus motor3')
```



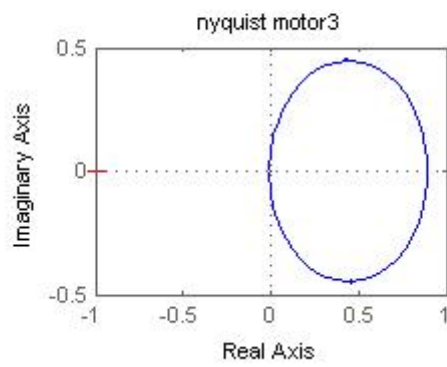
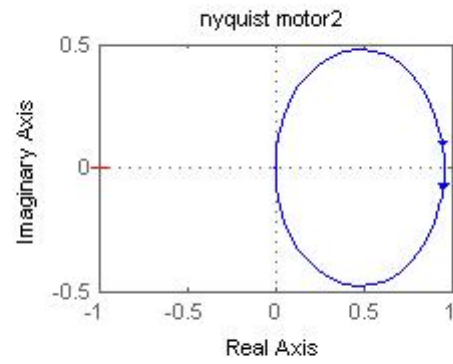
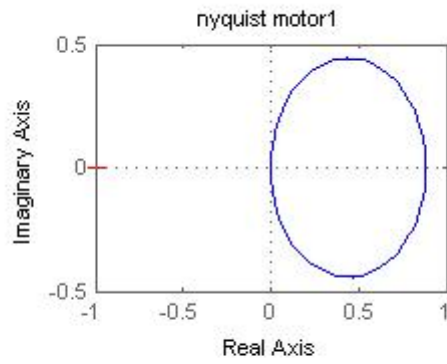
## Diagramas de bode

```
figure(3)
subplot(221)
bode(motor1)
title('Bode motor1')
subplot(222)
bode(motor2)
title('Bode motor2')
subplot(223)
bode(motor3)
title('Bode motor3')
```



## Diagramas de Nyquist

```
figure(4)
subplot(221)
nyquist(motor1)
title('nyquist motor1')
subplot(222)
nyquist(motor2)
title('nyquist motor2')
subplot(223)
nyquist(motor3)
title('nyquist motor3')
```



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