## NARMAX Model for Cooling Coil

|   | Regressors      | Parameters         |
|---|-----------------|--------------------|
| 0 | y(k-1)          | 0.060416387868053  |
| 1 | x1(k-1)y(k-1)^2 | -0.002108914395983 |
| 2 | 1               | 0.011003649219424  |
| 3 | x1(k-1)^2       | -0.017476075762932 |
| 4 | x1(k-1)^2y(k-1) | -0.000453182644370 |
| 5 | x1(k-1)^3       | 0.000123246323001  |
| 6 | x1(k-1)         | 0.262540349536265  |
| 7 | x1(k-1)y(k-1)   | 0.115367717194303  |
| 8 | y(k-1)^3        | 0.005692483182422  |
| 9 | y(k-1)^2        | -0.152797386727874 |

## NARMAX Model Heat Exchanger (Summer)

|   | Regressors      | Parameters         |
|---|-----------------|--------------------|
| 0 | y(k-1)          | 1.072479073016452  |
| 1 | x1(k-1)         | 4.064059228583353  |
| 2 | 1               | 0.417872044613452  |
| 3 | x1(k-1)^3       | -0.000008478946229 |
| 4 | y(k-1)^3        | -0.000214288744245 |
| 5 | x1(k-1)y(k-1)   | -0.396877311286923 |
| 6 | x1(k-1)^2       | 0.015701707844941  |
| 7 | x1(k-1)y(k-1)^2 | 0.009679096351684  |
| 8 | x1(k-1)^2y(k-1) | -0.000718072484355 |

## NARMAX Model Heat Exchanger (Winter)

|   | Regressors      | Parameters         |
|---|-----------------|--------------------|
| 0 | y(k-1)          | 1.113685677700723  |
| 1 | x1(k-1)         | 0.019625617040416  |
| 2 | 1               | 0.079887204747054  |
| 3 | x1(k-1)^3       | -0.000001860471812 |
| 4 | y(k-1)^3        | -0.000272070362738 |
| 5 | x1(k-1)y(k-1)   | -0.017545541324779 |
| 6 | x1(k-1)^2       | 0.008291520846863  |
| 7 | x1(k-1)y(k-1)^2 | 0.000787245136681  |
| 8 | x1(k-1)^2y(k-1) | -0.000383764508253 |

NARMAX Model for Heater Stage 1

|   | Regressors      | Parameters          |  |
|---|-----------------|---------------------|--|
| 0 | y(k-1)          | 6.171576169244275   |  |
| 1 | x1(k-1)         | -2.716314489738610  |  |
| 2 | x1(k-1)^2y(k-1) | -0.002382013638582  |  |
| 3 | 1               | -49.582207385790525 |  |
| 4 | y(k-1)^2        | -0.140027651808853  |  |
| 5 | y(k-1)^3        | -0.002742798051860  |  |
| 6 | x1(k-1)y(k-1)   | 0.226822183621490   |  |
| 7 | x1(k-1)^3       | 0.000412193566734   |  |