

Target

HAI

Scenario

Description

Controller

Variable

Point

20.07

21.03

22.04

23.05

Decrease or increase SP value of P1-FC.

SP1

P1_B3005

Restore as a form of a trapezoidal profile while
hiding SP changes in HMI

AP10

P1-FC

PV1

P1 FT03

Attempt to maintain previous sensor value.

PV2

P1 LITO1

Attempt to maintain previous sensor value.

Decrease or increase CV value of P1-FC.

AP11

P1-FC

CV1

P1_FCV03D

Restore in form of trapezoidal profile.

Decrease or increase CV value of P1-FC.

CV1

P1_FCV03D

Restore to normal.

AP12

P1-FC

PV1

P1_FT03

Attempt to maintain previous sensor value.

Short-term (ST) attack that decrease or
increase CV value of P1-FC for a few seconds

AP13

P1-FC

CV1-ST

P1_FCV03D

and restores to normal. Repeat several times
while hiding SP changes in HMI.

Decrease or increase SP value of P1-LC.

AP14

P1-LC

SP1

P1_B3004

Restore as a form of a trapezoidal profile while

hiding SP changes in HMI.

Decrease or increase SP value of P1-LC.

SP1

P1_B3004

Restore as a form of a trapezoidal profile while

AP15

P1-LC

hiding SP changes in HMI.

PV1

P1_LIT01

Attempt to repeat previous sensor value.

Decrease or increase CV value of P1-LC.

AP16

P1-LC

CV1

P1_LCV01D

Restore to normal.

Decrease or increase CV value of P1-LC.

CV1

P1_LCV01D

Restore to normal.

AP17

P1-LC

PV1

P1_LIT01

Attempt to repeat previous sensor value.

Short-term (ST) attack that decrease or increase CV value of P1-LC for a few seconds

AP18

P1-LC

CV1-ST

P1_LCV01D

and restores to normal. Repeat several times while hiding SP changes in HMI.

Decrease or increase CV value of P1-TC.

AP19

P1-TC

CV1

P1_FCV01D

Restore to normal.

Decrease or increase CV value of P1-TC.

CV1

P1_FCV01D

Restore to normal.

AP20

P1-TC

PV1

P1_TIT01

Attempt to repeat previous sensor value.

Short-term (ST) attack that decrease or increase CV value of P1-TC for a few seconds

AP21

P1-TC

CV1-ST

P1_FCV01D

and restores to normal. Repeat several times while hiding SP changes in HMI.

Long-term (LT) attack that decrease or

AP22

P1-TC

SP1-LT

P1_B4002

increase SP value of P1-TC continuously for more than 10 minutes and restores to normal.

Decrease or increase CV value of P1-CC.

AP23

P1-CC

CV1

P1_PP04

Restore to normal.

Short-term (ST) attack that decrease or

AP24

P1-CC

CV1-ST

P1_PP04

increase CV value of P1-CC for a few seconds