| MutationOpt | FaultModel | DataItem | Span | Туре | FaultClass | Min | Max | Threshold | Delta | State | Value |
|-------------|-------------|----------|------|------|------------|-----|-----|-----------|-------|-------|-------|
| | TempMessage | 1 | 1 | INT | VAT | NA | NA | 100 | 10 | NA | NA |
| | TempMessage | 1 | 1 | INT | FVAT | NA | NA | 100 | 10 | NA | NA |

| | TestSuite3 | | | | | | | |
|----------|-------------------|-----------|---------|----------------------|--|--|--|--|
| | Description: | | | | | | | |
| | | Test 1 | Test2 | | | | | |
| | | nged data | | | | | | |
| Message1 | temp_1 | 50 | 120 | | | | | |
| | Oracles | | | | | | | |
| | temperature | "==50" | "==120" | | | | | |
| | temperature_alarm | | | | | | | |
| | Mutants | | | | | | | |
| | MUTANT 1 | | | IDS_OF_FAILING_TESTS | | | | |
| | temp_1 | 110 | 120 | | | | | |
| | temperature | 110 | 120 | | | | | |
| | temperature_alarm | | | | | | | |
| | KILLED | | | TRUE | | | | |
| | | | | | | | | |
| | MUTANT 2 | | | IDS_OF_FAILING_TESTS | | | | |
| | temp_1 | 50 | 90 | | | | | |
| | temperature | | | | | | | |
| | temperature_alarm | 0 | 0 | | | | | |
| | KILLED | | | TRUE | | | | |
| · | Mutation analysis | | | | | | | |
| | FMC | 100% | | | | | | |
| | MOC | 100% | | | | | | |
| | MS | 50% | | | | | | |

| | | TestSuite6 | | | | | | | |
|----------|-------------------|------------|-------|----------------------|--|--|--|--|--|
| | Description: | issing ora | cle | | | | | | |
| | | Test 1 | Test2 | | | | | | |
| | Exchanged data | | | | | | | | |
| Message1 | temp_1 | 50 | 120 | | | | | | |
| | Oracles | | | | | | | | |
| | temperature | "==50" | | | | | | | |
| | temperature_alarm | | | | | | | | |
| | Mutants | | | | | | | | |
| | MUTANT 1 | | | IDS_OF_FAILING_TESTS | | | | | |
| | temp_1 | 110 | 120 | 1 | | | | | |
| | temperature | 110 | | | | | | | |
| | temperature_alarm | | | | | | | | |
| | KILLED | | | TRUE | | | | | |
| | | | | | | | | | |
| | MUTANT 2 | | | IDS_OF_FAILING_TESTS | | | | | |
| | temp_1 | 50 | 90 | | | | | | |
| | temperature | 50 | | | | | | | |
| | temperature_alarm | | | | | | | | |
| | KILLED | | | FALSE | | | | | |
| • | Mutation analysis | | | · | | | | | |
| | FMC | 100% | | | | | | | |
| | мос | 100% | | | | | | | |
| | MS | 50% | 1 | | | | | | |

| | | TestSuite8 | | | | | |
|----------|-------------------|----------------------------|-----|--------|-----|-------|----------------------|
| | Description: | issing oracle Test 1 Test2 | | | | | |
| | | | | Test 3 | | Test4 | |
| | Exchanged data | | | | | | |
| Message1 | temp_1 | 50 | 120 | | 0 | 101 | |
| | Oracles | | | | | | |
| | temperature | "==50" | | "==0" | | | |
| | temperature_alarm | | | | | | |
| | Mutants | | | | | | |
| | MUTANT 1 | | | | | | IDS_OF_FAILING_TESTS |
| | temp_1 | 110 | 120 | | 110 | 101 | |
| | temperature | 110 | | | 110 | | 1,3 |
| | temperature_alarm | | | | | | |
| | KILLED | | | | | | TRUE |
| | MUTANT 2 | | | | | | IDS OF FAILING TESTS |
| | temp_1 | 50 | 90 | | 0 | 90 | |
| | temperature | 50 | | | 0 | | |
| | temperature_alarm | | | | | | |
| | KILLED | | | | | | FALSE |
| | | | | | | | |

 Mutation analysis

 FMC
 100%

 MOC
 100%

 MS
 50%