

| Simulation test cases | | | | |
|-----------------------|---------------|------------------------------------|--|-------------|
| Phase | Module | Description | Expectation | result |
| Before charging | Web | Incorrect input | Show hint, halt step | As expected |
| | | incompletely filled out | Show hint, halt step | As expected |
| | | EVSE in use/ Not exist/Error | Halt step | As expected |
| | | Shelly not available | Halt step | As expected |
| | | Correctly filled in, device ready | Send request to the optimizer | As expected |
| | | click Start directly | No Reaction | As expected |
| | | click Stop directly | No Reaction | As expected |
| | | | | |
| | Optimizer | Disconnect with the optimizer | Wait for the connection | As expected |
| | | Connect with the Opt. Again | Connect again | As expected |
| | | Error in the optimizer | Halt step | As expected |
| | | Succeeded | Charge-Plan receive | As expected |
| | | | | |
| | Vehicle | No car plugged in | Halt step | As expected |
| | | Car plugged in | Charging ready | As expected |
| | | | | |
| | Button (Web) | Click Start without filling in | No Reaction | As expected |
| | | Click Stop without filling in | No Reaction | As expected |
| | | Click Reset-Error without Error | No Reaction | As expected |
| | | Status error, click Start | No Reaction | As expected |
| | | Status error, click Stop | No Reaction | As expected |
| | | Status error, Click Reset-Error | Error reset, contact the administrator | As expected |
| | | Steps finished, status normal | Charging ready | As expected |
| | | | | |
| Beginning of charging | EVSE | No car plugged in | Not allowed to start charging | As expected |
| | | Error | Not allowed to start charging | As expected |
| | | Status available | Charging ready | As expected |
| | | | | |
| | Shelly | Error | Not allowed to start charging | As expected |
| | | Status available | Charging ready | As expected |
| | | | | |
| | Start | Has not clicked start button | Wait, initialize | As expected |
| | | Start clicked | Adjust schedule, lock, EVSE self-test | As expected |
| | | | | |
| | EVSE Selftest | Succeed in self-test | Charging ready, wait | As expected |
| | | Self-test failed | Error, Halt step | As expected |
| In charging | EVSE | Error | Stop Charging | As expected |
| | | | | |
| | Shelly | Error | Stop Charging | As expected |
| | | | | |
| | User | Click stop button | Stop Charging | As expected |
| | | Do not stop, resend request | Request rejected | As expected |
| | | Stop, Send request again | Start from the top | As expected |
| | | start again | Continue executing, no effect | As expected |
| | | | | |
| | Opt. | Disconnect with the optimizer | Continue executing, no effect | As expected |
| | | Connected with the optimizer again | Continue executing, no effect | As expected |
| | | | | |
| | Calibration | Connected with the optimizer | Periodic calibration | As expected |
| | | Disconnected with the optimizer | Continue executing, no effect | As expected |
| | | | | |
| Finish charging | | Schedule list is empty | Stop Charging | As expected |
| | | Energy fully charged | Stop Charging | As expected |