INDEPENDENT

# Electric Vehicle Battery Certificate

Certificate issued by

Optiledger

**Certificate creation time:** 2026-11-26, 09:58

**Certificate number:** 20261126.86

## Vehicle information

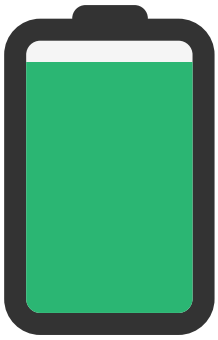
| Registration number / VIN | Brand / Model | Odometer | Battery type | Charging port type |
|---|---|---|---|---|
| RAX162 / YV1XZEHR0R2294998 | Volvo XC40 | 49610 km | NMC | CCS |

## Test results

**Date and time of test:** 2026-11-17, 15:24

**Test performed by:** kvdbil

### State of health (SOH)



92 %

### Battery capacity




### WLTP range




## Diagnostics

| | VALUE |
|---|---|
| SOC | - |
| Pack voltage | 438.7V |

| | MIN | MAX | DELTA |
|---|---|---|---|
| Battery temperature | 6.0°C | 8.0°C | 2.0°C |
| Cell voltage | 4.053V | 4.064V | 11mV |

### Cell voltages

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1–24 | 4.053 | 4.055 | 4.056 | 4.056 | 4.060 | 4.061 | 4.059 | 4.059 | 4.061 | 4.061 | 4.061 | 4.061 | 4.062 | 4.061 | 4.061 | 4.063 | 4.061 | 4.060 | 4.058 | 4.060 | 4.059 | 4.060 | 4.061 | 4.059 |
| 25–48 | 4.063 | 4.063 | 4.062 | 4.063 | 4.058 | 4.055 | 4.059 | 4.058 | 4.056 | 4.059 | 4.060 | 4.059 | 4.059 | 4.061 | 4.061 | 4.061 | 4.064 | 4.061 | 4.064 | 4.064 | 4.063 | 4.063 | 4.063 | 4.064 |
| 49–72 | 4.062 | 4.059 | 4.061 | 4.062 | 4.063 | 4.064 | 4.063 | 4.063 | 4.063 | 4.062 | 4.063 | 4.062 | 4.057 | 4.055 | 4.056 | 4.056 | 4.060 | 4.059 | 4.060 | 4.058 | 4.063 | 4.063 | 4.063 | 4.063 |
| 73–96 | 4.059 | 4.059 | 4.060 | 4.059 | 4.063 | 4.062 | 4.062 | 4.060 | 4.061 | 4.060 | 4.062 | 4.061 | 4.061 | 4.060 | 4.061 | 4.059 | 4.059 | 4.061 | 4.061 | 4.059 | 4.057 | 4.058 | 4.061 | 4.058 |

**Normal:** Cell voltage deviation is within the expected range.

**Method and control**

Battery assessment is based on diagnostic data retrieved from the vehicle's OEM Battery Management System (BMS) and comparative reference data from similar vehicle models.

**Attest**

The test was executed according to the OptiLedger SOH procedure with no known technical issues during data acquisition.

**Disclaimer**

Results represent an estimated assessment of battery condition at the time of testing and do not constitute a warranty or guarantee of battery capacity, performance, or remaining lifetime. The original WLTP range is determined and published by the vehicle manufacturer under standardized laboratory test conditions. The estimated WLTP presented in this report is calculated from diagnostic data and reference parameters and does not represent actual driving range. Real-world range may vary depending on driving conditions, temperature, load, and driving behavior. Full methodology, limitations and liability disclaimer available at: https://optiledger.se/legal/optiledger_battery_test_methodology_and_disclaimer.pdf.

Contact us: contact@optiledger.se