

CERTIFICATE

Certificate-ID: C-04-2023-21257047

Certificate for: Audited energy data management system

Certificate holder:



ABB Switzerland Ltd
Brown Boveri Strasse 6
CH-5400 Baden, Switzerland

Test report: B-04-2023-21257047

Products: ABB Ability™ Energy Manager and hardware components as specified in appendix I to the certificate

Basis of certification: Audited energy data management system in accordance with the catalogue of requirements Version 3.0 (as of 03/2018)

Scope of certification: Document and system review of functionalities for use with energy management systems in accordance with ISO 50001 and ISO 50006 as well as energy audits in accordance with ISO 50002

It is herewith confirmed that the functionalities and characteristics of the software and hardware components of ABB Switzerland Ltd described in the test report as well as in the appendix I to the certificate, have been verified within the framework of a document and system review. The components verifiably support compliance with the requirements of the chapters of the standards ISO 50001, ISO 50002 and ISO 50006 as listed in the appendix to the certificate.

This certificate is valid until 30 April 2025.



Energy Data
Management
System
Regular
Surveillance



www.tuv.com
ID 0000075228

Cologne, 3 April 2023

A handwritten signature in blue ink, appearing to read 'N. Heidelberg'.

Norbert Heidelberg
TÜV Rheinland Energy GmbH
Sustainability and Carbon Services

A handwritten signature in blue ink, appearing to read 'F. Griesl'.

Florian Griesl
TÜV Rheinland Energy GmbH
Sustainability and Carbon Services

Appendix I to Certificate No. C-04-2023-21257047

Certification Procedure Audited Energy Data Management System

ABB Switzerland Ltd
Brown Boveri Strasse 6
CH-5400 Baden, Switzerland



The software component as shown below was examined within the framework of the certification:

- ABB Ability™ Energy Manager

The following hardware components were examined within the framework of the certification:

- Low Voltage molded case circuit-breakers and trip units Tmax T4, T5, T6, T7
- Low Voltage molded case circuit-breakers and trip units Tmax XT XT2, XT4, XT5, XT7
- Low voltage Air circuit-breakers SACE New Emax, SACE Emax 2
- External Digital Unit ABB Ekip UP, Ekip UP+
- Low voltage switches and fusegear TruONE ATS, SlimLine XR ITS2.1, ITS2
- Digital inputs interface - Ekip Signalling Modbus TCP E1.2...E6.2
- ABB Energy meters (B21, B23, B24, A41, A43, A44)
- Power Meters M2M network analyzers
- Power Meters M4M Network analyzers (M4M 30 – M4M20)
- Branch monitoring CMS700
- System Pro M compact InSite
- Medium voltage relays REF 542
- Grid feeding monitoring relay CM-UFD
- Arc Guard System TVOC-2
- ABB EQmatic
- E-hub 2.0, ABB Ability™ Edge Industrial Gateway
- UPS systems: PowerLine DPA IEC, ConceptPower DPA IEC 400V, DPA 240 UL 415V, DPA 250 S4 IEC 300 kW UPS, DPA 500 IEC 100 kW UPS, DPA 500 UL 100 kW UPS, DPA Upscale RI IEC 10-20 kW UPS, DPA UPSCALE ST IEC 10-200 kW UPS, PowerScale 33 IEC 400V, PowerWave 33 IEC 400V, SG Series IEC 400V, SG Series UL 480V, TLE Series UL 480V, PowerValue 11 RT G2, PowerValue 11 RT, PowerValue11 / 31 T
- PCS systems: PCS100 AVC-40, PCS100 AVC-40 UL, PCS100 AVC-20, PCS100 ESS, PCS100 SFC (classic, replaced by SureWave), PCS100 UPS-I
- Smart Monitoring Relay CM-TCN.012
- Motor controller UMC 100.3

- Softstarter PSTX, CPX-125
- Panduit Smart Safety Switch
- Feeder Protection Relay REF615, REF620
- PLC for third party E-kit
- Power Meter Insite Pro M/SCU100

Appendix II to Certificate No. C-04-2023-21257047

Certification Procedure Audited Energy Data Management System

ABB Switzerland Ltd
Brown Boveri Strasse 6
CH-5400 Baden, Switzerland



The following characteristics and functionalities of the components as specified in Appendix I to the certificate were verified within the framework of the auditing:

- Determination of customised energy performance indicators (EnPIs)
- Performance of dependency and regression analyses
- Prices can be stored for determination of costs
- The software is compatible with standard communication interfaces and data transfer technology for the import of the measurement data recorded
- Various types of diagrams and depictions of energy consumption can be selected
- Time-controlled and event-controlled reports can be drawn up automatically
- CO₂-balances can be drawn up
- The contents of the automatic reports can be customized
- Report are generated in established, common formats
- Customized threshold values can be specified for an early warning system
- The software is set-up according to the PDCA-cycle or supports implementation thereof
- Access rights can be customized for each user
- The system can be operated intuitively and is user-friendly
- Determination of relevant variables for energy-related performance
- Determination of static factors for energy-related performance
- Management and documentation of measures to improve energy performance

The components as specified in Appendix I to the certificate verifiably support compliance with the requirements of the following chapters of the standard ISO 50001:

- 6.3 a), b), c) Energy review
- 6.4 Energy performance indicators
- 6.5 Energy baseline
- 9.1 Monitoring, measurement, analysis and evaluation of energy performance and the EnMS
- 9.3.2 c) Management review

The components as specified in Appendix I verifiably support compliance with the requirements of the following chapters of the standard ISO 50002:

- 5.4 Data collection
- 5.5 Measurement Plan

- 5.7.2 Analysis of the current energy performance
- 5.8.2 c) 1., 2. Energy audit reporting

The components as specified in Appendix I verifiably support compliance with the requirements of the following chapters of the standard ISO 50006:

- 4.2.4 Defining and quantifying relevant variables
- 4.2.5 Defining and quantifying static factors