CERTIFICATE

Certificate-ID:

C-11-2018-21244330

Certificate for:

Audited energy data management system

Certificate holder:

B-11-2018-21244330

Schneider Gelectric



France

Schneider Electric SE 35 rue Joseph Monier 92500 Rueil Malmaison

> Energy Data Management System Regular Surveillance www.tuv.com ID 0000043069



Products:

Test report:

Software and hardware components as specified in appendix I to the certificate

Basis of certification:

Scope of certification:

Document and system review of functionalities for use with energy management systems in accordance with ISO 50001, ISO 50006 and energy audits in accordance with ISO 50002

Audited energy data management system in accordance with the catalogue of requirements Version 3.0 (as of 06/2018)

It is herewith confirmed that the functionalities and characteristics of the software and hardware components of Schneider Electric SE described in the results report B-11-2018-21244330 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 November 2020.

Cologne, 19 October 2018

Peter Maczey TÜV Rheinland Group Energy Services

Florian Grießl TÜV Rheinland Group Energy Services



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Appendix I to Certificate No. C-11-2018-21244330

Certification Procedure Audited Energy Data Management System

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The software components as listed below were examined within the framework of the certification:

- EcoStruxure Power Monitoring Expert (PME)
- EcoStruxure Power SCADA Operation (PSO) with Advanced Reporting and Dashboards module
- EcoStruxure Buildings Operation (EBO) with Energy Expert
- EcoStruxure Power Advisor

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

- Energy meters: iEM2000 (iEM2150, iEM2155), iEM3000 (iEM3150, iEM3155, iEM3250, iEM3255, iEM3350, iEM3355), EM4200 (EM4235, EM4236)
- Power meters: PM9c, PM200 (PM210), PM700 (PM710, PM750), PM800 (PM810, PM820, PM850, PM870), PM1200, PM3000 (PM3250, PM3255), PM5000 (PM5110, PM5111, PM5310, PM5320, PM5330, PM5331, PM5340, PM5341, PM5560, PM5561, PM5563, PM5563RD), ION6200
- Power quality meters: PM8000 (PM8240, PM8243, PM8244), ION7300 (ION7300, ION7330, ION7350), ION7550 (ION7550-A, ION7550-B), ION7650 (ION7650-A, ION7650-B), ION9000 (ION9200)
- Multi circuit meters (BCPM-A, BCPM-B, BCPM-E, BCPMSC-A, BCPMSC-B, BCPMSC-E)
- Utility meters ION8600, ION8650 (ION8650-A, ION8650-B, ION8650-C), ION8800 (ION8800-A, ION8800-B, ION8800-C), ION7400
- Circuit breakers: Compact NSX (Micrologic E, Micrologic M), Compact NS (Micrologic E, Micrologic P, Micrologic H), Masterpact NT (Micrologic E, Micrologic P, Micrologic H), Masterpact NW (Micrologic E, Micrologic P, Micrologic H), Masterpact MTZ (Micrologic X)
- Protection relays: SEPAM (SEPAM40, SEPAM60, SEPAM80)
- Wireless energy meter (Powertag, Powertag NSX)
- Energy servers and gateways: EGX100, EGX300, Com'X 200, Com'X 210, Com'X 510, Link150



Appendix II to Certificate No. C-11-2018-21244330

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

- Determination of customized business key figures (EnPIs)
- Performance of dependency 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, e. g. heat maps and pareto charts
- Time-controlled and event-controlled reports can be drawn up automatically
- CO₂-balances can be drawn up automatically
- 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

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

requiremente el	the following enaptere et the standard f
4.4.3 a), b)	Energy review
4.4.4	Energy baseline
4.4.5	Energy performance indicators
4.6.1	Monitoring, measurement and analysis
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4.7.2 c) Input to management review

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

- 5.4 a), c) Data collection
- 5.5 a) Measurement Plan
- 5.7.2 Analysis
- 5.8.2 c) 1, 2 Energy audit reporting

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

- 4.2 Obtaining relevant energy performance information from the energy review
- 4.3 Identifying energy performance indicators