Certificate no.:
TAA00003RA

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Miscellaneous Transmitter

with type designation(s)
PowerTag Energy models Acti9 63 A (M63, P63, F63), Flex 160 A (F160), Monoconnect 250 A & 630 A (M250 3P, M250 3P+N, M630 3P, M630 3P+N), and Rope 200 A to 2000 A (R200, R600, R1000, R2000)

issued to

Schneider Electric Industries SAS

Rueil Malmaison, **France**

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Location classes:

Type	Temp.	Humidity	Vibration	EMC	Enclosure
Acti9 63 A	**C**	**B**	**A**	**A**	**Required protection according to relevant rules shall be provided upon installation on board**
Flex 160 A, Monoconnect 250 A & 630 A, Rope 200 A to 2000 A	**D**	**B**	**A**	**A**	

Issued at **Høvik** on **2025-10-21**

This Certificate is valid until **2030-10-20**.

for **DNV**

DNV local unit: **France CMC**

Approval Engineer: **Ståle Sneen**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Product description

PowerTag Energy is a compact, wireless energy sensor designed for real-time monitoring of electrical parameters. The sensor measures key electrical values, including:
- Power / Energy
- Current (I)
- Voltage (U & V)
- Power Factor (PF)

The measurements are transmitted wirelessly using ZigBee Green Power protocol, only to a concentrator or gateway, enabling centralised data collection and analysis. The concentrator and gateway are not covered by this certificate.

PowerTag Energy Acti9 63 A: M63 (Monoconnect), P63 (PhaseNeutral), F63 (Flex)

Commercial reference number	Type	Mounting	Description
A9MEM1520	M63 1P+wire	Top or bottom	PowerTag Energy M63 1 PW
A9MEM1521	M63 1P+N	Top	PowerTag Energy M63 1 PN T
A9MEM1522		Bottom	PowerTag Energy M63 1 PN B
A9MEM1540	M63 3P	Top or bottom	PowerTag Energy M63 3P
A9MEM1543			PowerTag Energy M63 3P 230V LL
A9MEM1541	M63 3P+N	Top	PowerTag Energy M63 3PN T
A9MEM1542		Bottom	PowerTag Energy M63 3PN B
A9MEM1561	P63 1P+N	Top	PowerTag Energy P63 1PN T
A9MEM1562		Bottom	PowerTag Energy P63 1PN B
A9MEM1563	P63 1P+N RCBO	Bottom	PowerTag Energy P63 1PN B RCBO 18mm
A9MEM1571	P63 3P+N	Top	PowerTag Energy P63 3PN T
A9MEM1572		Bottom	PowerTag Energy P63 3PN B
A9MEM1560	F63 1P+N	Top or bottom	PowerTag Energy F63 1PN
A9MEM1564			PowerTag Energy F63 1PN 110V
A9MEM1573	F63 3P		PowerTag Energy F63 3P
A9MEM1570	F63 3P+N		PowerTag Energy F63 3PN
A9MEM1574			PowerTag Energy F63 3PN 127/220V

PowerTag Energy Flex 160 A: F160

Commercial reference number	Type	Description
A9MEM1580	F160 3P/3P+N	PowerTag Energy Flex 160 A 3P / 3P+N

PowerTag Energy Monoconnect 250 A & 630 A

Commercial reference number	Type	Description
LV434020	M250 3P	PowerTag Energy 250 A 3P
LV434021	M250 3P+N	PowerTag Energy 250 A 3P+N
LV434022	M630 3P	PowerTag Energy 630 A 3P
LV434023	M630 3P+N	PowerTag Energy 630 A 3P+N

PowerTag Energy Rope 200 A to 2000 A

Commercial reference number	Type	Description
A9MEM1590	R200 3P/3P+N	PowerTag Energy Rope 200 A 3P / 3P+N
A9MEM1591	R600 3P/3P+N	PowerTag Energy Rope 600 A 3P / 3P+N
A9MEM1592	R1000 3P/3P+N	PowerTag Energy Rope 1000 A 3P / 3P+N
A9MEM1593	R2000 3P/3P+N	PowerTag Energy Rope 2000 A 3P / 3P+N

Radio transceiver technical data:
- 2.4 GHz ISM band (2400.0 MHz to 2483.5 MHz)
- Channels 11 to 26 (IEEE 802.15.4)
- DSSS modulation
- Max. transmitted RF power: ≤ 10 mW (EIRP)

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Application/Limitation

Use of radio frequency bands

The applied frequency band 2400.0-2483.5 MHz is defined by ITU-R Radio Regulations (2024) as an ISM-band.
The type approval does not cover the different administrations requirements for use of the radio frequency bands. Any use of the radio frequency band shall be in line with the requirements of the administration concerned.

Type Approval documentation

Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021.
The wireless transceiver has been tested for relevant tests according to:
F160, NSX

- ETSI EN 300 328 V2.2.2 (2019-07)
- ETSI EN 301 489-1 V2.1.1 (2017-02)
- ETSI EN 301 489-17 V3.1.1 (2017-02)

Rope

- ETSI EN 300 328 V2.2.2 (2019-07)
- ETSI EN 301 489-1 V2.2.3 (2019-11)
- ETSI EN 301 489-17 V3.2.2 (2019-12)

Acti9 63A

- ETSI EN 300 328 V2.2.2 (2019-07)
- ETSI EN 301 489-1 V2.2.3 (2019-11)
- ETSI EN 301 489-17 V3.2.4 (2020-09)

Marking of product

The products to be marked with:
- manufacturer name
- model name
- serial number
- power supply ratings

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

Manufactured by

Flextronics Romania S.R.L.
Calea Torontalului DN 6, km 5.7
RO-300000 Timisoara
Romania

Lexel Fabrika SIA
Krustpils street 35A
LV-1073 Rīga
Latvia

END OF CERTIFICATE