DNV·GL

Certificate No:
TAA000004W

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Peripheral Equipment

with type designation(s)
775 THUM Smart Wireless Adapter

Issued to
Rosemount Inc.
Chanhassen, MN, United States

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

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

Location classes:

Temperature	**B**
Humidity	**B**
Vibration	**A**
EMC	**A**
Enclosure	**C**

This Certificate is valid until **2020-10-18**.

Issued at **Høvik** on **2015-10-19**

for **DNV GL**

DNV GL local station: **New York**

Approval Engineer: **Nils Jarem**

Odd Magne Nesvåg
Head of Section

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.

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Job Id: **262.1-020038-1**
Certificate No: **TAA000004W**

Product description

775 THUM Smart Wireless Adapter
The Smart Wireless THUM Adapter is a device that can retrofit on any existing two or four-wire HART device, and it enables wireless transmission of measurement and diagnostic information that was previously not available.

Input: Any 2- or 4-wire HART powered device.
Output: WirelessHART

Place of manufacture

Rosemount Inc.
8200 Market St. Chanhassen
MN 55317, USA

Rosemount Inc.
6021 Innovation Blvd
Shakopee, MN 55379, USA

Emerson Process Management Asia Pacific Pte. Ltd.
(Rosemount Measurement)
1 Pandan Crescent, Singapore 128461, Republic of Singapore

Beijing Rosemount Far East Instrument Co., Ltd.
(Emerson (Beijing) Instrument Co., Ltd.)
No.6 North Street, Hepingli, Dong Cheng District, Beijing 100013, P.R. China

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, 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 GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Application/Limitation

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Use of radio frequency bands
The type approval does not cover the different administrations requirements for use of the radio frequency bands.

The applied frequency band 2402.5-2478.5 MHz is defined by ITU-R Radio Regulations (2008) as an ISM-band. Any use of the radio frequency band has to be in line with the requirements of the administration concerned.

Type Approval documentation

Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2006.
Radio module DN2140 tested for compliance to the IEEE 802.15.4 standard.

Marking of product

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

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 at least every second year and at renewal of this certificate.

END OF CERTIFICATE