

CERTIFICAT

CERTIFICADO

‘ΕΡΤΙΤΑΤΗ

認証証書

CERTIFICATE

ZERTIFIKAT



Industrie Service

CERTIFICATE

EU-Type Examination -Production Type (Module B) Acc. to Directive 2014/68/EU Pressure Equipment Directive

EG-Baumusterprüfung (Baumuster) (Module B) nach Richtlinie 2014/68/EU

Certificate-No.: USA 18/03/26/001

Zertifikats-Nr

for

ABB Inc. Level Measurement
125 E. County Line Road
Warminster, PA 18974

We hereby certify, that the Type described below meets the provisions of Directive 2014/68/EU and is manufactured in conformity with it.

Description of the Design / Type:

Beschreibung des Entwurfs / Typs

Level Indicators, see Annex I

Drawing #, Rev. see Annex I

Zeichnungs-Nr, Rev.

EU Type Examination Report #: see Annex II

EG Baumusterprüfberichts Nr.

Final Assessment Report #: see Annex II

Abnahmeprüfbericht Nr.

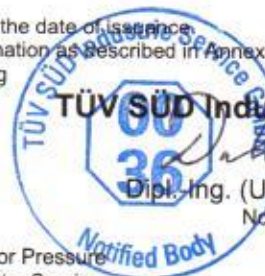
Manufacturing plant:

Fertigungsstätte

Same as above

The validity of this certificate expires 10 years from the date of issuance. It may be extended upon request. A module combination as described in Annex II of Directive 2014/68/EU is required for conformity assessment and CE marking

Schaumburg, IL, March 7, 2018



TÜV SÜD Industrie Service GmbH

Dipl.-Ing. (Univ.) Dirk Schroeter
Notified Body No.: 0036

TÜV SÜD
Industrie Service GmbH
Westendstrasse 199
D-80686 München

Test Laboratory for Pressure
Equipment: Industry Service,
TÜV SÜD America, Inc.
10 Centennial Drive
Peabody, MA 01960

Member of
CONFÉDÉRATION EUROPÉEN



D'ORGANISMES DE CONTROLE



Industrie Service

'Annex I of Certificate-No.: USA 18/03/26/001

Scope of Approval:

| Model | Drawing No. | Material types | Material Specifications | | Temperature Range | |
|--|---------------------|------------------|-------------------------|---------------|-------------------|----------------|
| KM26 MW05 LS ST95/ G5S EC | PEDCERT-PA11 Rev. 0 | Stainless steels | SA-479 | S30403/S30400 | -196°C – 538°C | |
| | PEDCERT-PA12 Rev. 0 | | SA-479 | S31603/S31600 | | |
| | PEDCERT-PA13 Rev. 0 | | SA-479 | S31703/S31700 | | |
| | PEDCERT-PA14 Rev. 0 | | SA-479 | S32100 | | |
| | PEDCERT-PA15 Rev. 0 | | SA-182 | S30403/S30400 | | |
| | | | SA-182 | S31603/S31600 | | |
| | | | SA-182 | S31703/S31700 | | |
| | | | SA-182 | S32100 | | |
| | SA-312 | | S30403/S30400 | | | |
| | SA-312 | | S31603/S31600 | | | |
| | SA-312 | | S31703/S31700 | | | |
| | SA-312 | | S32100 | | | |
| | SA-403 | | S30403/S30400 | | | |
| | SA-403 | | S31603/S31600 | | | |
| | SA-403 | | S31703/S31700 | | | |
| | SA-403 | | S32100 | | | |
| | | | Ni alloys | SB-619 | N10276 | -196°C – 250°C |
| | | | | SB-622 | N10276 | |
| | | | | SB-462 | N10276 | |
| | | | | SB-574 | N10276 | |
| | | | SB-649 | N08904 | | |
| | | | SB-677/SA-312 | N08904 | | |
| | | | SB-366 | N08904 | | |



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Annex II of Certificate-No.: USA 18/03/26/001

Scope of Approval:

| Model | EC Type Examination Report No. | Final Assessment Report No. |
|--------------|---------------------------------------|------------------------------------|
| KM26 | P-USA-18-03-26-001 | P-USA-12-06-26-101 |
| MW05 | P-USA-18-03-26-002 | P-USA-12-06-26-102 |
| LS | P-USA-18-03-26-003 | P-USA-12-06-26-103 |
| ST95 / G5S | P-USA-18-03-26-004 | P-USA-12-06-26-104 |
| EC | P-USA-18-03-26-005 | P-USA-12-06-26-105 |



Test Plan for EU-Type Examination – Production Type of Pressure Equipment

| | |
|---|--|
| Module: B | Test plan No: P-USA-18-03-26-006 |
| Manufacturer/Person responsible for putting the equipment on the market: ABB Inc. Level Measurement 125 E. County Line Road Warminster, PA 18974 | Manufacturing Site: Same |
| Technical data of type / type family: | |
| Category: | I-IV |
| Description of pressure equipment / type / family: | Models: <u>KM26</u> (Dwg. PEDCERT-PA11, Rev. 0) <u>MW05</u> (Dwg. PEDCERT-PA12, Rev. 0) <u>LS</u> (Dwg. PEDCERT-PA13, Rev. 0) <u>ST95 / G5S</u> (Dwg. PEDCERT-PA14, Rev. 0) <u>EC</u> (Dwg. PEDCERT-PA15, Rev. 0) |
| Intended use: | Level Indicators |
| Type identification: | Serial number |
| Manufacturer logo: | ABB |
| Design pressure (min/max) PS [bar] | see respective Dwg. |
| Design temperature (min/max) TS [°C] | see PMAs |
| Volume [L] | n/a |
| Nominal diameter DN [mm] | see respective Dwg. |
| Test pressure PH [bar] | see respective Dwg. |
| Identification: | Data Plate |



Test Plan for EC Type-Examination of Pressure Equipment

Testing based on:

Directive: Pressure Equipment Directive 2014/68/EU

Standards: ASME Sect VIII, ASME B31.1, or ASME B31.3

Deviations: --

Intended tests and examinations:

- 1. Design examination:
- 2. Final assessment:
- 3. Proof test: Test pressure PT [bar]: Per Dwg. Fluid: Water
- 4. Tests according to checklist test report:

| Measurements/examinations and results (CHECKLISTE) | | provided | To be verified at final assessment |
|--|---|-------------------------------------|-------------------------------------|
| 1. | Qualifications of personnel for permanent joining | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. | Qualifications of procedures | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. | Certificates for base metal and filler materials | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. | Traceability of materials | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. | Certificates / reports for heat treatment | n/a | n/a |
| 6. | Production tests | n/a | n/a |
| 7. | Approvals for NDT personnel | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. | Certificates for non-destructive tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9. | Calibration of measuring and test equipment | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. | Visual inspection | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. | Dimensional inspection | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. | Identification | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 13. | Certificates / reports for repair and deviations | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 14. | Hazard analysis | | |
| 15. | Drawing | <input checked="" type="checkbox"/> | |
| 16. | Operation manual | | |

- 5. Tests of safety devices :
- 6. Validation of measurement criteria, calibration



Test Plan for EC Type-Examination of Pressure Equipment

Previously performed tests:

See the following Reports on the Final Inspection:

P-USA-12-06-26-101 P-USA-12-06-26-103 P-USA-12-06-26-105
 P-USA-12-06-26-102 P-USA-12-06-26-104

Selection of test sample(s):

Quantity: --

type: --

Comments:

The sample(s) is (are) representative for the type (type family). The tests listed above will be performed in compliance with the test requirements of the standards/regulations quoted in this test plan.

The tests will be performed to establish whether the solutions/standards adopted by the manufacturer meet the essential requirements of the Directive.

Inspection Body

| | | |
|----------------|-------|---|
| Location: | Date: | Inspecting laboratory of TÜV SÜD Industrie Service GmbH |
| Schaumburg, IL | | |
| | | <i>Dipl.-Ing. Thomas Reiners</i> |

Manufacturer:

| | | |
|----------------|---------|------------------------------------|
| Location: | Date: | ABB, Inc. Level Measurement |
| Warminster, PA | 3-12-18 | <i>Eric Schubert</i> |
| | | |

Certification Body for Pressure Equipment:

| | | |
|----------------|------------|----------------------------------|
| Location: | Date: | TÜV SÜD Industrie Service GmbH |
| Schaumburg, IL | 2018-03-07 | <i>Dirk Schroeter</i> |
| | | <i>Dipl.-Ing. Dirk Schroeter</i> |

