



CERTIFICATE NUMBER	20-1995194-PDA
EFFECTIVE DATE	24-Jun-2020
EXPIRY DATE	23-Jun-2025
ABS TECHNICAL OFFICE	Hamburg Engineering Department

## CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

**SAMSON AG**

located at

**WEISSMUELLER STR. 3, D-60314 FRANKFURT, Germany**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

**Product Electropneumatic Positioner**

**Model TROVIS 3730-3**

This Product Design Assessment (PDA) Certificate remains valid until 23/Jun/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Efstratios Maliatsos, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

## **SAMSON AG**

WEISSMUELLER STR. 3

D-60314 FRANKFURT

Germany

Telephone: +49 69 4009 0

Fax: +49 69 4009 1507

Email: samson@samsongroup.com

Web: www.samsongroup.com

**Tier: 2 - PDA Issued**

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**Product:** Electropneumatic Positioner

**Model:** TROVIS 3730-3

**Intended Service:**

Valve attachments for control of linear or rotary actuators, single and double acting.

### **Description:**

1. Reversing Amplifier 3710 to operate a double acting pneumatic actuator with using a single acting pneumatic or electro pneumatic positioner or limit switch.
2. Electro pneumatic Positioner TROVIS 3730-3 for pneumatic controlled valves to assign the valve position to the control signal.
3. Pneumatic Volume Booster 3755 for use together with the positioners to increase the positioning speed of pneumatic actuators.

### **Rating:**

1. Reversing Amplifier 3710

- Permissible supply pressure: Up to 6 bar;
- Degree of protection: IP66;
- Permissible ambient temperature: -25 to +80 °C (-13 to +176 °F);

2. Positioner TROVIS 3730-3

- Current Input: 4 to 20 mA DC
- Supply air: 1.4 to 7 bar;
- Temperature Rating: - 25 to +80 °C (all versions);
- Degree of protection: IP 66;
- Certified Safe Equipment (BVS 18 ATEX E 044 X, IECEx BVS 18.0035X):  
II 2G Ex ia IIC T4/T6 Gb/II 2D Ex ia IIIC T85 °C Db for TROVIS 3730-3-110/111...;  
II 2D Ex tb IIIC T85 °C Db for TROVIS 3730-3-510/511...;  
II 3G Ex nA IIC T4/T6 Gc/ II 2D Ex tb IIIC T85 °C Db for TROVIS 3730-3-810/811...;  
II 3G Ex nA IIC T4/T6 Gc for TROVIS 3730-3-850/851... (BVS 18 ATEX E 045);

3. Pneumatic Volume Booster 3755

- Supply Pressure: Max. Up to 10 bar · Max 145 psi;
- Degree of protection provided by enclosure: IP 66;
- Standard temperature, -25 to +80 °C;

### **Service Restriction:**

1. Unit Certification is not required for this product.
2. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

### **Comments:**

1. The manufacturer has provided a declaration about the control of, or the lack of asbestos in this product.
2. The particular applications of the unit are to be specifically approved in conjunction with the relevant system.

### **Notes/Drawing/Documentation:**

- Drawing No. DE009967-1, DIN EN ISO 9001, Revision: 0, Pages: 1
- Drawing No. E190720E1, EMC Testreport, Phoenix Testlab, 02.04.2020, Revision: 0, Pages: 1
- Drawing No. Product overview, Overview Products for Ship-Certification, Revision: 0, Pages: 1
- Drawing No. T 8392 EN, Data Sheet Type 3710, Revision: 0, Pages: 1
- Drawing No. T 8393 EN, Data Sheet Type 3755, Revision: 0, Pages: 1
- Drawing No. T 8484-3 EN, Data Sheet Trovis 3730-3, Revision: 0, Pages: 1
- Drawing No. Test-Documentation, Pressure Test with 1.5 time of the design pressure, Samson AG, 20.04.2020, Revision: 0, Pages: 1

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Drawing No. U200824E1, Testreport Enclosure, Phoenix Testlab, 15.06.2020, Revision: 0, Pages: 1

Drawing No. U190720E1, Testreport environmental tests, Phoenix Testlab, 08.04.2020, Revision: 0, Pages: 1

Drawing No. e83843en, Mounting and operating Instructions Trovis 3730-3, Revision: 0, Pages: 1

Drawing No. e83920en, Mounting and operating Instructions Type 3710, Revision: 0, Pages: 1

Drawing No. e83930en, Mounting and operating Instructions Type 3755, Revision: 0, Pages: 1

Drawing No. ex\_TROVIS\_3730-3-xx1\_iecex\_en\_rev01, TROVIS 3730-3 IECEX, Revision: 0, Pages: 1

Drawing No. ex\_TROVIS\_3730-3\_bvs\_18\_atex\_e044x\_en\_rev00, TROVIS 3730-3 ATEX, Revision: 0, Pages: 1

Drawing No. ex\_TROVIS\_3730-3\_bvs\_18\_atex\_e045\_en\_rev00, TROVIS 3730-3 ATEX, Revision: 0, Pages: 1

**Terms of Validity:**

This Product Design Assessment (PDA) Certificate remains valid until 23/Jun/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

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**STANDARDS**

**ABS Rules:**

2020 Marine Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-4-1/Table 1, 2 & 3, 4-4-1/7.11, 4-4-A1/21.3, 4-8-3/1.7, 4-8-3/1.11, 4-8-3/1.17.1, 4-8-3/13, 4-9-9/7, 4-9-9/13, 4-9-9 Table 1

**National:**

NA

**International:**

NA

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA