



Marine & Offshore
Division

Certificate number: 03554/H0 BV

File number: AP 0341

Product code: 3812H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

TRAFAG AG

Bubikon - SWITZERLAND

for the type of product

TEMPERATURE SENSORS / PROBES / TRANSDUCERS

Type: NAVISTAT ISN/ISNT 471/472

Temperature switch

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 23 Mar 2020

For BUREAU VERITAS,

At BV HAMBURG, on 23 Mar 2015,

Sandro Schmidt



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarp.com/veristarnb/jsp/viewPublicPdfTypec.jsp?id=ph7diox77r>

BV Mod. Ad.E 530 October 2014

This certificate consists of 2 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

The NAVISTAT ISN/ISNT 471/472 series are temperature controller.

1.1 - Main characteristics:

	ISN/ISNT 471/472
Range:	20 ... 110°C to 40 ... 300°C
Output:	floating change-over contact
Degree of protection:	IP65
Switching differential:	fixed

1.2 - Order code: aaa.aa.bb.ccc.dd.ee.ffff.gg.

aaa = Sensor type: - 471.23; 471.26; 472.12

bb = Range: - 23; 31; 53

ccc = Sensor: - 122; 132; 142; 322; 332; 342

dd = Fixing: - 14; 27

ee = Protection tube: - 1411; 1412; 1414; 1416; 1417; 1419; 8316; 8317; 8319; 8411; 8412; 8414

ffff = Protection tube length: - XXXX

gg = Accessories: - 07; 27; 40; 90

2. DOCUMENTS AND DRAWINGS:

Datasheet: H72111i dated 01/2015

Note: Documents filed in AP0341.

3. TEST REPORTS:

Test reports dated 02/10/1990 and 21/01/1994.

Note: Documents filed in AP0341.

4. APPLICATION/LIMITATION:

4.1 - Bureau Veritas Rules and Regulations for the Classification of Steel Ships.

4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT** and **AUT-IMS**.

4.3 - To be fitted in stem pocket.

4.4 - Pressure proofness of protection tube: maximum 25 bar.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above mentioned products are to be supplied by **TRAFAG AG** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320.

5.3 - **TRAFAG AG** has to make the necessary arrangements to have its works recognized by Bureau Veritas in compliance with the requirements of NR320 for HBV products:

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Vilemowska 2129
34701 Tachov
CZECH REPUBLIC

5.4 - Equipment is to be supplied with manual(s) for installation, use and maintenance.

6. MARKING OF PRODUCT:

- Maker's name or trade mark.

- Equipment type or model identification.

- Date of manufacture and/or serial number.

7. OTHERS:

7.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **TRAFAG AG - SWITZERLAND**, will accept full responsibility for informing shipbuilders, ship owners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 03554/G0 BV issued on 15 Mar 2010 by the Society.

*** END OF CERTIFICATE ***